Dependence and Independence in Materials Design for EFL Teachers: An experimental study

Abstract
This paper deals with past and present issues related to materials design and development by Algerian teachers within pre-service and in-service experience of teaching English as a foreign language. The study is carried out among in-service teachers and pre-service (ENS students) teachers through an experimental method. It tests the validity of information processing (through learning styles and strategies) and discourse functions (through communicative language tasks) as independent variables which determine a number of design and development criteria as dependent variables. A pre-test, an experiment, and a post-test are used as research tools.

Introduction
Teachers’ pedagogical actions are always interpreted in terms of their dependence on and/or independence from the available materials. Materials adoption for language teaching, relying on both commercial and educational courses, is always interpreted as a dependent pedagogical act which may not provide the expected results. However, materials adaptation is a step towards partial independence where the teachers bring changes to the available materials in order to suit learning and learners’ expected outcomes. Materials design, as a risk-taking experience, is stage of independence which requires awareness of multiple reasons, processes and constraints, and may lead to teachers’ autonomy.

On one hand, the study is motivated by some research findings which illustrate the Algerian teachers’ limitations to feed their classes with authentic materials, relying mostly on post-independence national course books, and producing only language tests at
school. It is, on the other hand, inspired by academic research relevant to principles and practices of developing language teaching materials like information and discourse processing strategies to enhance teachers’ potentials in providing their English language learners with generous and strategically diversified language tasks. It focuses on the development of teachers’ collaborative action to create their own materials in post-independence English courses which rely on national materials production.

1. Materials dependence, analysis and evaluation

It is commonly mentioned that materials make the body of a language course and that they are commonly called ‘content’ either in syllabus or curriculum design and development (Nunan, 1988: 4-7, and Celce-Murcia and Olshtain, 2000: 187-195). Hence, they are said to represent the implementation of a designed course. Graves (2000: 149) gives more dimensions to the term, comments on the ambiguous use of the term ‘materials’ to mean ‘techniques’ and ‘activities’ and underlines the fact that ‘boundaries between these three terms are always blurred. Other scholars attempted to clarify the role of ‘instructional materials’, ‘commercial materials’, and media but did not bring enough clear cut distinction. For example, Richards (2001: 251) interchangeably uses the terms ‘materials’, ‘sources’ and ‘form’ to identify containers of scripted, non-scripted, and a combination of both, sources (written, oral, and audiovisual language) of information. However, the author identifies the mass media of communication as ‘materials’ and not sources from which a course designer can select some authentic materials.

According to the distinctions above, we can define materials as all aspects of language usage and language use. All what the learners are exposed to inside or outside the classroom, in terms of speech, writing and visual –paralinguistic– meaning, represent materials that the learners work on, in order to improve their proficiency level in that language. This distinction in the definition of both terms may seem too atomistic and somehow discourse biased (Olshtain and Celce-Murcia 2001: 214-215) but it is valid as far as it is comprehensive because it cannot isolate the learning of grammar and vocabulary from their contexts of language use. In all cases, a foreign language teacher is always dependent on the availability of materials and media to teach a language course.

Analysis and evaluation of language teaching textbooks and commercial materials are complex critical attitudes teachers adopt towards what they use every day as pedagogical tools. If the textbooks are somehow compulsory course-books designed and developed within ministry programme frameworks, commercial materials are designed and edited for a wide audience. Nevertheless, a teacher who is involved in the teaching profession has always a critical stance towards these tools. Informal analysis and evaluation of the materials contained in these tools become daily responses of the teachers who care about whether to use the materials as they are or bring some modifications to achieve pedagogical goals and learners’ objectives.

Teachers who take the job for the first time are almost always in front of confusing situations where there are already designed textbooks that contain the required teaching materials, or where the materials are not available at all. In the latter, they will have to design and develop their own materials. In the former situation where the materials are
provided in the textbooks, the teachers need at least to have a strategy of analysing and evaluating the material at hand, in order to use it more appropriately. This is what most researchers would call materials adopting and/or adapting. Materials evaluation is defined by Tomlinson (1998: 11) as:

‘(...) the systematic appraisal of the value of materials in relation to their objectives and to the objectives of the learners using them. Evaluation can be pre-use and therefore focused on predictions of potential value. It can be whilst-use and therefore focused on awareness and description of what the learners are actually doing whilst the materials are being used. And it can also be post-use and therefore focused on analysis of what happened as a result of using the materials.’ (Tomlinson, 1998: 11)

The consequences of materials analysis and evaluation lead teachers to adopt language teaching materials, i.e. use them in their lessons, or reject them. In the case of ministry educational programmes, the use of a given school textbook represents its adoption as the basic teaching material (Hutchinson and Torres, 1994: 315-317) which represents teachers’ total dependence. However, if the teacher wants to use commercial materials (textbooks written outside ministry education programmes, for a wide audience), he/she is at least supposed to analyse and evaluate those materials by using some “external and internal evaluation criteria” to reduce their dependence (McDonough and Shaw, 2003: 59-72).

External evaluation criteria are those that take into account the intended audience, proficiency level, context, organisation of units/lessons according to the author’s view about language and methodology. Internal evaluation criteria, however, take into account the internal constructs of the materials such as sequencing, discourse skills, real interaction and the relevance of exercises to learners’ needs, learning styles and strategies. McDonough and Shaw (2003) conclude that this evaluation helps teachers adapt language teaching materials if they fit the criteria mentioned above and hence reach partial independence which leads to adapting materials by bringing some changes to the already designed materials. This presumes that the teacher can adopt materials (ministry educational programmes or commercial materials), and then bring some changes through the teaching/learning process.

The reasons of materials adaptation may vary from one context to another, depending on how much freedom teachers are allowed, the availability of time and means to bring some changes to the materials, and the professional qualifications (knowledge and experience) which would help a teacher consider the quality of the materials at hand. McDonough and Shaw (2003: 77) express some reasons of materials adaptation which coincide with their internal evaluation criteria – mentioned above – and that can be summarized in the following:

- unsystematic and insufficient grammar coverage and practice;
- reading passages contain too much unknown vocabulary;
- comprehension questions are too easy, the answers can be copied from the text without real understanding;
- listening passages are inauthentic and sound like reading aloud, without guidance for pronunciation
- subject matter not appropriate to learners’ age and interest
- the material is too much or too little in comparison to allocated time;
- too much or too little variety in the activities

The arguments for materials adaptation may also vary according to teachers’ knowledge and awareness of learners’ needs, expectations and achievements. Therefore materials adaptation is not a prescription every teacher has to apply to the adopted materials. It is a set of relative measures (principles and procedures) teachers bring to bear on the materials in order to suit their teaching/learning contexts (Nunan, 1991: 219 and Hutchinson and Torres, 1994: 324-327).

2. Materials design principles and practices

Course and textbook developers never start writing, designing and developing, materials from scratch. Designing and developing materials for language teaching has always relied on long experience in teaching and either wide or limited audience for whom the materials are designed. Pre-service and in-service teachers have more or less been involved in this process either as informants or as partners who contribute in the design and development of courses and materials. In most cases where teachers are involved, they develop autonomy of selecting, grading, and developing their own materials. This autonomy is to be understood as an ability of conceiving and writing materials according to a number of principles.

If one considers general, wide scope studies that deal with course and materials design for language teaching, Dubin and Olshtain (1986: 88-105) pave the way to the language teacher by providing an ‘expansion of the language content dimension’ which implements a communicative syllabus. Their model –as a set of principles or guidelines- relies on the definition of ‘general goals’ which determine three areas of expansion:
- the content area includes the semantic grammatical categories, the functional categories, and the themes for meaningful and appropriate communication;
- the process area includes the cognitive, creative, and global workouts; and
- the product area which includes the skills emphasis, learner needs, and learner autonomy

In this model, the content and the product areas are the two extremes of the general communicative course implementation. When course designers identify the grammatical, functional and thematic content of a language course, they try to satisfy learners’ needs by putting emphasis on skill getting. Bridging the gap between the two extremes –content and product- cannot take place unless there is a cognitive process of learning. This is the most interesting feature of Dubin and Olshtain’s contribution which they call ‘workouts.’

‘Workouts are language learning and language using activities which enhance the learner’s overall acquisition process, providing planners and teachers with a variety of ways through which to make this process engaging and rewarding’ (Dubin and Olshtain, 1986: 95-96)
These workouts are presented under ten categories of learning activities; operations/transformations, warm-ups/relaxers, information-centred tasks, theatre games, mediations/interventions, group dynamics, problem-solving tasks, information transfer and reconstruction, and skill getting strategies (ibid: 96). Although these categories are exhaustive to some extent, and each one is illustrated with examples, there is no comprehensive and methodological procedure of how they should be used when a teacher is trying to apply them in materials design. Whatever the advantages and/or drawbacks, these categories of activities are valid as far as they involve only their authors in their own design and development of materials and represent thus a wide scope since they do not target any specific teacher or learner population.

Materials designed and developed for a limited scope of audience target the learners who will use the designed materials for some specific needs. At the same time, they are practical implication of teachers and/or teacher-trainees in the process of design and development. Such case studies and experiments emerged in the 1970’s and are still practised in many countries where English is taught as a foreign language and/or for specific purposes. They represent a long process of partial or total independence in materials design (Mead and Lilley, 1975- Harvey and Horzella, 1977- Johns and Davies, 1983- Scott etal, 1984- Moore, 1977-Lautamatti, 1978- Bramki and Williams, 1984- and Dwyer, 1984). These studies followed relevant steps to the teaching/learning environment and expected outcomes (cited in Hamada 2007).

Exemplification of these steps is better provided in Graves (2000: 2-3) who relies on her experience with teaching and teacher-training in course design and suggests a comprehensive framework for course development processes. According to her framework, the general scope of course design should start at the level of defining the context of language teaching, articulating the psycho-linguistic and pedagogical beliefs and conceptualizing the content, leading to a definition of goals and objectives. The specific scope is a ‘systematic’ process which takes into account needs assessment, formulating goals and objectives, developing materials, design and assessment, and organising the course. For Graves (1996: 12-35 and 2000: 97-121), materials design remains the core feature of course design because it is the evidence of course implementation. From her informants’ suggestions -teacher-trainees, Graves’ (2000: 156) draws a list of principles for developing materials:
- learners (experience and level, target and affective needs);
- learning (discovery, problem solving, analysing and developing specific skills and strategies)
- language (target relevant aspects of grammar, functions, vocabulary, the four skills, and the use and understanding of authentic texts)
- social context (provide intellectual focus and develop critical social awareness)
- activity/task type (to aim for authentic tasks, vary roles and groupings, and vary activities and purposes)
- materials (authentic texts, realia and varied printed, visual and audio materials).

These principles are determined by the exploitation of specific teachers’ context as a limited audience or scope and are not so different from those determined in wide
scope contexts. When materials developers take them into account, they apply them with a relative focus for a wide audience or determine their importance during the process of developing materials for a limited audience.

Richards (2001) and McGrath (2002), claim that materials design is not only a matter of applying and/or determining a number of principles but rather an experiential systematic process. It is hence, a risk-taking experience towards teachers’ independence if it is not based on knowledge, awareness and expertise. Richards (2001:261-262) draws attention to the advantages and disadvantages of involving teachers into the experience of developing materials, and (ibid: 263-271) sets forth the steps of an experiential materials development project. He considers that the advantages of materials development can be:

- the relevance of the materials to the learners’ and the institutional needs;
- the development of expertise among staff;
- the reputation of the institution may be boosted by demonstrating its commitment to develop materials specially designed for its students; and
- the flexibility of the materials to be revised or adapted according to the growing needs of the institution and its learners.

However, Richards (ibid) considers that the materials development experience may have some disadvantages as:

- Resources allocated to such an experience may be counter productive if teachers are not provided with enough time and financial resources;
- The teacher-developed materials will always have less quality of presentation if they are compared to commercial materials. The former are to be used for free by the learners while the latter have to care for marketing reasons;
- Training teachers to develop their own materials is a necessary and crucial experience. If workshops are neglected, the whole experience will be a failure.

Richards (ibid) positive features stress the importance of the materials development for both teachers’ career and experience, and the institution’s academic reputation in the educational context. We do not consider, however, the disadvantages as consecutive drawbacks but rather as warnings to the educational community who sometimes deprive the teachers from the basic requirements of a successful experience.

According to Richards (ibid), materials design and development performed by teachers always take into account the syllabus objectives, content, structure and sequencing of the units. The teachers’ contribution lies in two major tasks: the choice of input and the selection of exercise types (ibid: 264-267). The choice of input ‘refers to anything that initiates the learning process’ as speaking, listening, reading, writing and grammar materials undertaken by the teachers, and the selection of exercise types which involve the learners’ work and practice on the selected input.


The teaching of EFL during the post independence period depended to a large extent on donated British course books till the late 70’s. These commercial textbooks were designed for general learners without any focus on a particular educational programme. Their main target is a particular proficiency level in English as a foreign
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Therefore, their input consisted of artificial situations, illustrated basically with stick-drawing figures (Broughton, E.G 1965 *Success With English. Coursebooks 1 and 2. Penguin Books*) and was overloaded with foreign language culture and a complete neglect of the mother tongue/first language culture (Altan, 1995). The language input consisted mainly of artificial texts that presented the language aspects and grammatical features of English which were characterized by imaginary characters, involved in Proper names, places, activities; roles and environmental settings were stereo-types of the English speaking community. Rote learning, pattern drills and habit formation were adopted as a learning procedure at Algerian Middle School Level. At Secondary School Level, the learning process and language input were neither much worse, nor much better. The *New Concept English* Series of L.G. Alexander (1967, four course books and only two of them were used: *Practice and Progress* and *Developing Skills*) focused on proficiency development in language patterns, sentence structure and paragraph writing. All texts in *Practice and progress* introduced language items, again, in non-authentic reading extracts.

Even though the introduction of the books mentioned the existence of tapes, for the presentation of the texts in their oral form, the Algerian teaching environment did not provide—or rather did have the media equipment— for the aural-oral activities to take place. Not only did the practice of English language teaching deprive the learner of exposure to sociolinguistic contexts—as it was limited to English speaking culture—but it also imputed the materials from the cultural features of speech, let alone to say, that no activities of cultural processing were provided. This general dependence of the English course, nevertheless, represented the language teaching materials that the Algerian teachers relied on during that era.


The 1980’s saw the emergence of the first Algerian textbooks which introduced some national cultural elements and a few pedagogical reforms. The Notional/Functional and communicative trends in language teaching had an important impact on textbook design by adapting a functional and communicative purpose and a culturally biased content (Hutchinson and Torres, 1994). The effects of the notional-functional approach and the “common core syllabus” on the newly designed Algerian textbooks were obvious in the titles, content, and methodology. *Madjid in England* and *Andy in Algeria* are both representative titles of the overseas student’s and the foreign person’s functional common learning needs. The content of both textbooks focused on describing objects, people and places, mail and pen friendship, invitations and exchanging visits. The methodology proceeded through interpersonal interaction, repeating, copying and writing activities. Within the same scope, and still at middle school level, two other textbooks were edited—*Spring 1* and *Spring 2*; both followed the same notional-functional design and methodology with additional language functions of requesting, inquiring, instructing, describing, defining, comparing and contrasting, etc... Communication practice is to be considered here as a major sociolinguistic contribution; the language functions do not only pretend to teach English but also to establish a communicative value of information exchange among
members of the same community. Hence, information gap, reasoning gap, and information transfer activities gave the English language classroom its dynamic features. Language transfer from the target language to the mother tongue, and vice-versa, was also given importance. For example, ‘a carpenter’ was named ‘Mr Nedjar’, and a ‘butcher’ was named ‘Mr Djezzar’ or ‘Mr Leham’.

Within the same notional/functional and communicative trends, the secondary school level was also invested with newly designed textbooks in the early 1980’s. The three grades– according to their streams (literature, science and math, and technology) had, each, an Algerian course of English. They were namely ‘New lines, Midlines, The New Midlines, New Skills; Think it Over, and Comet. Bias of input selection and activity type was prominent in all these textbooks because of two major preoccupations: the first one was the combination of both English speaking culture with the Algerian culture, and the second was the inclusion of educational programme goals and content in the English course for some long term objectives to be achieved. As the initiator of these secondary school textbooks, Kisserli –head of project of ‘New Lines’ (1981:5) indicates, the search for diversity, identity and local culture inside the English textbook continued, and increased, in the secondary school level textbooks which were characterized by functional purposes, topic/type input, and adapted/authentic texts and language tasks.

The major criticism of the communicative (notional functional) trends was the lack of correctness which was noticed in learners’ performance. Despite the appropriate communicative achievements, the learners persisted in producing incorrect, mispronounced or ill-constructed utterances. The need for correctness and accuracy was so obvious that most syllabus designers had to focus on grammar tasks as essential elements in communicative performance (Skehan 1996). The Algerian syllabus designers were also sensitive to the issue and this was reflected in the 1990’s Algerian textbooks –as a second generation- which tried to remedy to the structural/grammatical shortage by adopting the textbook content to language needs and educational requirement of passing written exams. A series of English textbooks (from N°1 to N°9) entitled ‘My Book of English’ and ‘My New Book of English’ were published -under the leadership of Mr. Bereksi as the head of project. These textbooks were not designed for teaching and learning purposes as they represented a collection of tests. The unsuitability of activities to the cultural (information) input is due to the fact that those tests contain sampling activities of previous language knowledge, and consequently they are unfit to the input (Hamada 2007). There is only one successful achievement that can be attributed to this second-generation textbook series: making learners get better marks, passing exams, and increasing the PASS rates in the educational system.

Whatever the attempts to move from dependence to independence in materials and textbook design, the Algerian courses of English as a foreign language had the merits of updating their content and methodology to modern linguistic and pedagogical trends. However, some of them give the impression that they are just remedial courses which lacked determination in selecting appropriate sociolinguistic input and learning procedure, in addition to complete reliance on teachers’ probable potential to implement the course. The lack of resources, experience, and freedom of initiative, in addition to the shortage of media at schools, worsened the educational and cultural
context. The drastic reforms which have been undertaken since the end of the twentieth century represent a rebellion against this established state of affairs. The recent reforms introduced competency based teaching/learning favouring skill integrations, learning strategies and learner autonomy despite the latent social, economic and cultural environment.

In quest of independence in materials design, the Algerian teachers turned to private schools and personal initiative. Private education relied basically on proficiency development according to standardized test while personal initiatives tuned out into publications of corrected test series (general examinations: baccalaureate and college tests). The former are worldwide courses and examinations which may not be our concern. However, during the last 20 years, the latter became a flourishing income for some teachers and a preparatory measure of pen and pencil tests for the majority of learners. They established a national tradition of test writing that all teachers practice and consider wrongly as materials design. Within this context, Dwyer (1984: 9) warns all teachers at Algerian schools against the confusion they tend to make between writing tests and writing learning materials on one hand, and the erroneous trial/error process they may adopt while developing their own materials on the other hand. Despite these warnings the personal and independently test-driven designed materials were put on the bookshop shelves to satisfy learners’ ambitions to pass both college (BEM) and secondary school (Baccalaureate) examinations. Writers of such materials accumulated the test-driven materials from their own experiential tasks of dependence on teaching materials and independence in writing tests. In order to remedy to such a failure, Dwyer (1984) provides a checklist of ten (10) steps teachers have to follow when developing their own teaching materials. Dwyer’s checklist (ibid: 9-10) of materials development steps covers all aspects of pedagogical planning and writing of materials which range from the distinction of learners’ level, purposes and objectives, to realistic language, clear instructions, consistency of items, diversity and generosity of tasks, and complementarities of team-work. Although Dwyer’s contribution does not provide any examples to illustrate the ten steps, it can be used as general guidelines for teachers and teacher-trainees who are likely to be involved in developing their own materials.

By the end of the 1980’s teacher training schools stopped their activities in Algeria, despite a few academic research in the field (mainly Magistere and Doctorate theses), a shortage of materials production characterized the design of Algerian teaching materials for the English course. The materials production phenomenon in Algeria witnessed a decrease in the process of independence in comparison to other areas of the world like Southeast Asia and Latin America where the British Council services in collaboration with Regional English language Centres (RELC) brought major contributions. During the 1990’s, and due to political and social instability, most of ESP centres staff left Algeria and many Algerian professionals in the field moved abroad. By the end of the 1990’s the Ministry of Educational established an updated framework for a teacher training programme and hence gave us the opportunity to implement materials design with a workshop for the purpose of improving teachers’ experience in analysis, evaluation and design of language teaching materials. This
study came to satisfy the requirements of the recent educational reforms in general and the teacher training programme particularly concerning materials design and development workshop which was elaborated in 2004 and revised in 2007 under our supervision at the ENS Constantine. The aim of both contributions was, and still is, to improve teachers’ professional qualifications, autonomy, and action research.

5. The experimental study

5.1. Objectives: The implementation of materials design workshop targeted the following objectives to be gradually achieved by the participants:

- analyse and evaluate the teaching materials at hand
- adapt and develop their own language teaching materials whenever needed (in cases where textbooks are not provided or when teachers are not satisfied with the material at hand)
- provide the foreign language teachers with the ability of autonomy in selection, design and production of materials most relevant to learners’ needs and objectives and hence reach awareness of teaching situation requirements, responsibility and independence in decision making.

5.2. Population: The population involved in the experiment is set into two groups of participants. The control group and the experimental group took part in the pretest and the posttest. Hence this choice helps us compare the background knowledge and abilities of the two groups before the experiment, and also compare their achievements –after the experiment. The participants of the control group are part time teachers who can improve their own abilities through their own experience but are not associated to any aspect of the experiment.

- Control group: A group of ten EAP teachers at the five departments of the humanities and social sciences were asked to take part in the pre-test and post-test. Their age varied from 23 to 27 years. All of them had a B.A in English, received a general TEFL course during the forth year, and had an average experience of 1 to 3 years of teaching EAP.

- Experimental group: A group of 20 undergraduates attending a teacher-training course at the ENS –Constantine, participated in the experiment during their undergraduate teacher-training program. All of them received the same general TEFL course during the third year program. Their age varied from 20 to 24 years; they had no experience of teaching whatsoever.

5.3. Content of the experiment

The materials analysis, design and development principles, criteria and procedures served as an implementation of the experiment with both experimental groups. They include a number of relevant issues which have been taught and illustrated in workshops: defining and exemplifying language teaching materials, learning objectives and strategies, task and competency based learning according to information processing strategies, materials analysis and evaluation, and materials design and development.
Almost all issues were used as evaluation criteria to measure the experiment results in terms of materials production by the participants.

5.4. Measurement tools

- **Pretest:** The pre-test consisted of the participants’ elaboration by design and development of a teaching material, relying on an authentic text. All three groups were given a short newspaper article to read, analyze and develop into a teaching material. Very short instructions were given to them as guidelines which would help us evaluate their abilities in materials design and development. This newspaper article was extracted from Land (1983: 20) which, according to him, was intended to intermediate learners of English. The choice of this newspaper article was motivated primarily by its authenticity, reality, and appropriateness to secondary school learners and first year university students whose proficiency in English varied from pre-intermediate to intermediate levels. The genre type of this newspaper article can be classified as ‘news in brief’ among the mass media communication nomenclature that would use ‘narrating’ and ‘reporting’ functions to describe strange, outstanding, distinctive social events and stories.

- **Posttest:** After the treatment, at the end of the experiment, the control group and the experimental group of participants were involved in a materials design and development projects. The 10 participants of the control group were asked to complete this task either individually or with any one of their colleagues and submitted 10 projects. The participants of the experimental group were asked to work in pairs to complete their task and submit it at the end of the second term; 20 participants of the experimental group submitted 10 projects. The free choice given to control group participants and the pair work assigned to the participants of the experimental group was founded on the principle that materials design and development was always a collaborative task among teaching staff whatever their qualifications.

A wide range of newspaper articles were suggested to all participants who selected the article they wanted to develop as a teaching/learning material. Fifteen newspaper articles were selected by all the participants of the three groups. These articles were of the same genre type and approximate length as the pre-test, above. They dealt with a variety of topics (accidents, racism, social solidarity, justice, illness and miracles, social behavior, history) that could be of interest to learners of approximately pre-intermediate and intermediate levels. They presented authentic language which could help learners rely on their background proficiency level to face academic terms and expressions in the future.

- **Instructions:** In order to avoid any confusion in the participants’ role and performance in the pre-test and the post-test, we preferred to focus their attention on three major tasks. First, they had to read the newspaper article with the purpose of using it as a material for foreign language learners. This stage appeals to the participants’ cognitive and meta-cognitive awareness of their role as designers who will manipulate the learners’ learning process. Second, they had to analyse the organisation of information structure, the discourse functions and notions of the newspaper article. This draws their attention to ‘new’ information items and ‘language practice’ which
correspond to their learners’ level and achievement objectives. And third, they had to develop learning activities according to a general lesson plan of ‘presentation, comprehension, practice, and production activities’. This instruction, at least, would remind the participants of the general background knowledge they received in the TEFL course.

5.5. Evaluation criteria and grading

The evaluation has to be comprehensive in the sense that it covers aspects related to ‘information processing, discourse functions and notions’ together with pedagogical aspects of purposeful, procedural, and productive learning. These selected ten (10) criteria represent the major principles of materials analysis and evaluation which served as a basis for the implementation of the experimental study; each criterion is scored from 0 to 3, according to the answers provided by the participants. If the answer does not give any consideration to the criterion, it is graded 0; if the answer is inappropriate or false, it is graded 1 (for at least, the participants have targeted a given quality of materials design and development and have, hence, attempted to deal with it); if the answer is stated but wrongly expressed (lack of concision and precision, leading to ambiguity or misinterpretation, and hence needs qualitative improvement), it is graded 2; finally if the answer is stated in exact terms that clearly determine the expected quality of the material and/or the learners’ task, it is graded 3. This type of evaluation provides possibilities of quantitative (statistics) and qualitative (arguments) interpretation of results in such a field as language teaching (cf. Saadi, 2005: 20-21).

5.5.1. Content topic and information structure

Expected answers of the participants should at least mention –in the case of the pretest- ‘medical treatment’, ‘acupuncture’, ‘court case’ or ‘hearing problems’ when analyzing the material. If the participants are aware of the importance of such information, this will certainly lead them to design activities that deal with information processing and, hence, comprehension (vocabulary, sentence relations, conjunctions, sentence structure, etc…).

5.5.2. Language functions

This criterion evaluates the participants’ knowledge and application of discourse analysis to authentic texts as to determine the intention of the author. The participants are expected to provide expressions like for example ‘narrating a story’, ‘reporting a judicial case’ or ‘an event’, ‘describing past events’, or ‘explaining/defining a medical treatment/acupuncture.’

5.5.3. Language notions

This criterion evaluates the participants’ knowledge and application of rhetorical notions used by the author to express his/her ideas and intentions. Grammatical notions, structural combinations and relations, and specific vocabulary items are important markers of discourse. The participants are expected to mention at least ‘time and time relations’ ‘direct and reported speech’, ‘age’, ‘jobs’, ‘hearing-aids/acupuncture, etc…
5.5.4. Proficiency level

This criterion reveals the participants’ knowledge of, and ability to determine, the proficiency level of the text in question and its suitability to audience-learners. Their answers are expected to provide proficiency levels like for example ‘pre-intermediate’ or ‘intermediate’ and also class or school grade levels ‘first, second, third year secondary school / first year at university’, etc…

5.5.5. Achievement objectives

This is a crucial criterion which relies on the successful answers in the previous criteria. The participants are, here, required to express the expected outcome of the learners according to their further answers to the other criteria –below. They are expected to write a statement which defines clearly what the learners are able to do at the end of the teaching material with regard to what they have learnt throughout. Examples of such statements can be ‘learners will (be able to) narrate a story, report past events and experience, describe an illness and its medical treatment’ and represent an expected productive outcome in speech and/or writing that will be observed and measured.

5.5.6. Lesson plan

This criterion evaluates the participants’ organization of the material into steps of a lesson plan which leads the learners progressively from familiarization with the topic towards the production stage. The informants’ answers are expected to include the following steps: ‘warm-up/pre-reading, reading comprehension/post reading, communication/language practice, and follow-up/outcome, production.’

5.5.7. Number and appropriateness of activities

The participants are expected to supply each lesson step with an appropriate number of activities which in turn depends to a great extent on their analysis of information, discourse functions and markers, and pedagogical measures they are to undertake throughout the lesson plan in view of making the learners achieve the defined objectives. We presume that approximately three activities are, at least, necessary for each lesson step.

5.5.8. Explicit instructions

Directions, examples and sentence starters are written by teachers in order to make the learners carry out a given task. Imperative directions are generally used to lead the learners to distinguish a given model or to focus attention on an example which is extracted from the input material. Sentence starters are provided by the teacher who takes part in the task, as a classroom interaction support, to initiate learners’ participation. The purposive, clear, and exemplified instruction is a very successful quality of a language teaching material. Exemplification is almost always necessary when learners are performing a given task for the first time.
5.5.9. Number and appropriateness of items

The number of items provided in any activity determines how generous the material is; it shows to what extent learners are given opportunities of learning through extensive practice of the items. The appropriateness of the suggested items to the purpose of the activity determines the relevance of the participants’ choices and decisions about the relationship of the items with the activity type as being either ‘information processing’, ‘discourse functions’, ‘language practice’ and/or a ‘production task’. Hence, a minimum number of four appropriate items is required in each activity.

5.5.10. Production outcome

The expected achievements of the learners must correspond to the defined objective; this may be described as a functional outcome where the learners apply what they have learnt and practiced to perform the same function used in the input material. It may also be described as a communicative outcome where the learners are asked to react/respond to the input material by giving their own perception of, or opinions about, events, facts, etc… Here, the participants are supposed to instruct the learners to produce an observable and measurable outcome; a follow up activity -in their plan- which serves as an evaluation of the materials’ efficiency in relation to the lesson plan. Learners may even be asked to perform orally, first- and sometimes in pairs or in groups, and then express their ideas in writing.

6. Results and comments

The pretest and the posttest are evaluated according to the ten criteria and the same grading (from 0 to 3) – above. Each participants’ project is evaluated separately first (best score would be 30), and its score is added to all other participants’ scores to make the total score of the group. Every participant’s mean is calculated through percentage achievement, and all participants means are then calculated through the total means divided by the number of participants in the group. Every criterion mean is calculated through dividing the total scores of the participants in one criterion by the number of participants (to obtain an achievement rate), and then all criteria mean is obtained through the total criteria means divided by the number of criteria. A quantitative/comparative evaluation of some produced materials will provide us with a qualitative analysis of results.

6.1. Quantitative analysis

The quantitative evaluation of results and achievements is presented in the table below for the three groups in both pretest and posttest achievements. We will proceed through a comparison of the two groups’ results in terms of pretest, posttest, and difference of increase or decrease for each group.
Table 1: comparative evaluation of pre-test and posttest achievements

As we can notice in the table above, both groups achieved nearly the same means of task completion of all criteria by all participants in the pretest: the control group got 33% and the experimental group got 32.14%. The means of the pretest tell us quite clearly that whatever the status of the participants (undergraduate students and teacher-trainees, or even teachers of EAP with a short experience), their background knowledge and their previous practical experience did not help them satisfy the requirements of the ten criteria. Even if we focus the comparison on particular average achievements of the two groups in three criteria we find again a lot of similarity. For example, in the identification of ‘proficiency level’, the control group had 53.33%, and the experimental group had 42.86. The second example concerns the writing of an ‘achievement objective’ where the control group obtained 40%, and the experimental group obtained 42.86%. The third example is about the ‘number of appropriate activities’ where the control group obtained 56.67% and the experimental group obtained 50%.

When we compare the low means of achievements in some other criteria, we find that both groups got also approximately the same low results. For example, in ‘content and information structure’ the control group had 13.33% and the experimental group had 21.43%. The second example of low results concerns ‘lesson plan’ where the control group obtained 20% and the experimental group obtained 21.43%. Even if the difference between the results in average scores and low scores is small, approximately
10%, some differences range from 02% to more than 20%. However the big differences do not affect our interpretation of the results as far as the achievement means of both groups are low: between 33% and 37.33%. The results of the pretest rather confirm our assumption that most teachers have a general knowledge about lesson plans, achievement objectives, and learning outcomes –in both aspects of materials use and materials development– but lack a lot of practical implication in dealing with real materials instruction and development.

The posttest means, in the table above, show that the control group obtained 39.67% for both participants’ and criteria means while the experimental group obtained 85.71% for both. These results in the posttest show clearly that there is a noticeable, distinctive increase in the achievements of the experimental group while the control group remained at its low level of achievement. So, in view of these achievements in the pretest and posttest results, we present –below- the positive qualities of the experimental group.

6.2. Qualitative analysis

In a qualitative analysis of four examples of materials development (four newspaper articles were common to both groups), we can make some comments about the positive effects -of topic and information structure, language functions and notions, and learning procedures- on the content and form of the materials produced by the experimental group.
- There is a positive correlation between the defined objectives and the learning outcomes
- the functional analysis provided better communicative activities
- the notional analysis provided thorough analysis and practice of the language items
- the learning procedure respected norms of lesson progression and provided a diversity of strategic activities for the learners.
- generosity of materials production increased the number of learning activities and items, not for testing purposes.

Conclusion

The quantitative evaluation of the whole experiment shows to a great extent the successful achievements of the experimental group in comparison to the control group. The qualitative evaluation and comparison of participants’ achievements - by overall description and comparative evaluation, with reference to specific examples from both groups, reinforces the idea that sophisticated efficiency, independence or autonomy is an experiential skill which develops through time and collaboration. Achieving independence and autonomy in materials design and development relies on teachers’ awareness of the required knowledge and expertise which may lead to efficient sophisticated teaching. We attempted to put into practice what we believed in as academic achievements in the field of materials design and development by following a collaborative action research in the implementation of all the experiment. The method consisted mainly of introducing a number of principles on information structure and
organisation, discourse function and notions in authentic texts which can serve as a basis for materials design and development.

Pedagogical implementation required the examination of the interrelated and interdependent performance objectives, learning strategies and production outcomes together in the process of materials development. The collaborative action relied on exemplification and participants’ contribution by first practising materials analysis and evaluation, and last by developing their own materials. The conclusion we come to at the end of this experience is that the task was huge and time consuming because individual tracking of the participants and correction-feedback-alternatives, were very frequent. As the stages of the experiment progressed, the participants were much more involved, and hence much more demanding, in terms of discussions, criticism and collaboration. This experiment is actually used as a quasi-experimental process undertaken by teacher trainees in a workshop of materials design and development at the ENS Constantine of. We hope that this experience will be a life-long one for every teacher.

References