TEACHING THE STUDY OF RAPTORS: CONTENT-BASED LEARNING
ENVIRONMENTAL EDUCATION SCHOOL CURRICULUM

A paper submitted in
partial fulfillment of the requirements for the degree
Master of Arts in Teaching English as a Foreign Language

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September 03, 2012

We hereby approve that this paper
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Entitled
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Be accepted in partial fulfillment for the requirements of the degree
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“I've always thought that people need to feel good about themselves and I see my role as offering support to them, to provide some light along the way.” - Leo Buscaglia

I would like to acknowledge my gratitude to my professors who inspired and served as role models for me. They gave me the pleasure to be an autonomous MA TEFL student and later on to become a reflective teacher.

Special appreciation to my MA Paper supervisor, Dr. Catherine Buon, for giving me the confidence and encouragement to design a curriculum, her invaluable feedback on the work I have done and her readiness to always help. Also, I would like to express my gratitude to my MA Paper readers, Ms. Rubina Gasparyan, for her pieces of advice so to the point and effective. She gave me the chance to pilot my curriculum in English Experimental Classes (EEC) in order to get insights about its overall structure; and Dr. Karen Aghababyan, for motivating me as a student to take interest in Ornithology, for sharing very useful insights related to that field of study and providing materials for the curriculum. For the end, I would like to thank my family and friends. In particular, Rozita Aghamalyan, the co-author of my curriculum for cooperating and developing materials for the program; Siranush Tumanyan, the coordinator of our student exchange team in BRC 2011, for sharing her experience in environmental education and helping me to set the content of the program. Last but not least, I want to thank Wouter Vansteelant, the BRC secretary and the coordinator of BRC Education 2012 with whom we have been collaborating throughout the whole period of carrying out the school curriculum. My sincere gratitude and appreciation to all the aforementioned individuals for standing by me.

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The present curriculum is designed for Batumi Raptor Count Education 2012. Batumi Raptor Count (hereinafter referred to as BRC) is an international conservation and research project running since 2008 near Batumi. BRC Education Program was introduced in the year of 2012. “The Study of Raptors” course is designed based on the approach of Content-Based Instruction (CBI). It pursues two visions: subject matter and language learning. From the perspective of subject focus, the program pursues to raise the Georgian schoolchildren’s awareness and sensitivity about the environment; birds, particularly raptors, their ecology and migration. The students will familiarize themselves with raptor species, acquire skills to identify them.

The ultimate aim of the curriculum is to get the students understand/realize the importance of raptors in the environment, their vulnerability and acquire general knowledge about birds. From the language teaching/learning perspective, the program pursues the delivery of English language, thus, aiming to provide the students with language input regarding raptor migration and ecology. Students will familiarize themselves with certain concepts in the target language related to specific contexts and settings in the field of environmental study.

Originally developed for: Grades 7, 8 for the local schools in the region of Ajaria, Batumi
CHAPTER ONE: SCOPE AND BACKGROUND

1.1. Introduction

The present curriculum is designed for Batumi Raptor Count 2012 Education Program. Batumi Raptor Count (hereinafter referred to as BRC) is an international conservation and research project running since 2008 near Batumi. Every year from August to October, more than sixty international volunteers with professional and/or amateur experience in biology and bird-watching visit Batumi to help BRC in counting migrating raptors.

Students working in environmental sciences from regional countries in the Caucasus are hosted in a student exchange program to learn about effective and efficient field research methods. In September 2011 together with Rozita Aghamalyan, a graduate student in the MA TEFL program, I joined BRC as an exchange student from Armenia. As an educator I made the first steps to launch a school education program within BRC’s framework of activities. We conducted two experimental classes. The lessons were conducted in English covering the topics about the importance of Batumi for raptor migration and the conservation of raptor species at international level. The students were very responsive, enthusiastic and this led the whole team to the idea of expanding the education aspect in BRC.

Since October 2011, after participating in the student exchange program I became a member of BRC 2012 Education Working Group. I have been collaborating with the BRC Board in designing a school curriculum for environmental education. Rozita Aghamalyan commenced the work in determining the material design for the school curriculum. Designing a curriculum was a good chance for me to explore new horizons and to demonstrate my knowledge obtained as an MA TEFL student at American University of Armenia. I believed having adequate input from my professors that will help me realize the project. Therefore, as a teacher and a future professional in education, I decided to take the opportunity of designing a school curriculum for content-based learning. I have always held interest in content-based learning, as it is a combination of a particular subject-matter and language. Consequently, I took up writing my Master’s Paper on this project.
1.2. Purpose of the Study

The purpose of this MA Paper is to design an environmental education school curriculum in English with the vision to teach ornithology and to get the students closer not only to the subject but to the English language respectively. It is designed for seventh and eighth graders of Batumi local secondary schools.

The curriculum is based on Content-Based Instruction (CBI) comprising two forms: strong and weak. In the curriculum the strong form of CBI emphasizes the delivery of subject-matter aiming to raise the Georgian schoolchildren’s awareness and sensitivity about the environment; birds, in particular raptors, their ecology and migration. The students will familiarize themselves with raptor species, acquire skills to identify them. The weak form of CBI emphasizes the delivery of English language aiming to provide the students with language input regarding raptor migration and conservation. Students will familiarize themselves with certain topics related to specific contexts and settings in the field of the study of raptors.
In the literature review, I will discuss recent scholarship related to my project. I will elaborate on environmental education, language teaching and material design. As the main point of my study I will then make a reference to content-based instruction, curriculum development, and assessment. As a whole, I will explore effective insights regarding the aforementioned concepts that formulate the indispensible aspect of my project.

2.1. Environmental education

The exact definition of environmental education is still pursued by its scholars, made difficult in part by its interdisciplinary and diverse nature both in content, pedagogy and language (Steele, 2010 & Greunewald, 2004). For environmental education to be fully included in school curricula, particular care must be taken to properly incorporate it. And the teachers' awareness of the goals and active participation is crucial to the entire process of curricular integration (Mellado, Ruiz, Bermejo, & Jiménez, 2006). According to Korshuk (2003), in order to help students use the English language when communicating on environmental topics, active development and aptness of students’ linguistic, communicative and professional competence is needed.

2.1.2. Understanding the need for environmental education

When educational institutions—from elementary schools to university-based English language programs—recognize the value of environmental education, language teachers will be in a unique position to promote environmental awareness while teaching English (Sanchez, 2010 as cited in Hauschild, Poltavchenko & Stoller, 2012). According to Hauschild, Poltavchenko & Stoller (2012), English language professionals have seen how English contributes to their students’ education and competitiveness. In order to promote learners with understanding of environmental topics and maximize the benefits of CBI, language educators need to familiarize themselves with the environmental issues
that become the focus of their classrooms and examine available instructional materials that can be used to achieve content- and language – learning goals.

2.2. Curriculum development

The term curriculum is open to a variety of definitions; in its narrowest sense it is identical with the term syllabus, as in requirement of the content and the ordering of what should be taught; in the wider sense it refers to all aspects of the planning, implementation and evaluation of an educational program (Richards & Renandya, 2002).

According to Lunenburg (2011), curriculum developers should always be concerned about what should be included in the curriculum and how to present and arrange the selected components. In other words, they should start with content or subject matter and then proceed to learning experiences. These tasks are accordingly preceded by framing behavioral objectives, which act as a map giving directions for the curriculum development and the implementation process.

Richards (2001) assumes that decisions about course content also need to address the distribution of content throughout the course. This is known as “planning the scope and sequence of the course”. According to the author, “selecting a syllabus framework” and “developing instructional blocks” are the two main aspects of course planning (p.152). According to Ur (2000) and Richards (2001), a syllabus framework describes the major elements that will be used in planning a language course and provides the basis for instructional focus and content. Course content often puts across a “hidden curriculum”: underlying significance that goes beyond factual information (p.152 and p.199). Dubin and Olshtain (1994) suggest that since the curriculum is concerned with a “general rationale for formulating policy decisions”, it merges “educational - cultural goals with language goals” (p. 36). McKenney (2005) implies that a very useful approach to helping teachers overcome “the large-scale curriculum reform, is the design and sharing of teaching materials among regional or national colleagues” (p. 170).
2.2.1. Language teaching and curriculum structure

According to Richards and Renandya (2002), language is communication, and teachers must develop in the learners the ability “to communicate effectively in a wide range of professional and social contexts” (p. 69).

Kelly (1989) claims that any definition of curriculum design must include the following:

“the intentions of the planners, the procedures adopted for the implementation of those intentions, the actual experiences of the students resulting from the teachers' direct attempts to carry out their or the planner's intention and the "hidden learning" that is presented in the curriculum” (p. 14).

Clark (1987) and White (1988) refer to the framework developed by Skilbeck (1982) to elaborate on the "value systems" underlying educational traditions, and relate it to language teaching. The three traditions are identified as Classical Humanism, Reconstructionism and Progressiveness. The framework most applicable to ELT is an integrated approach which is essentially learner – centered and is an attempted “synthesis of the product – oriented ends – means and the process – oriented approach” (Nunan, 1988, p. 20). Johnson (1989) proposes a framework for “integrated approach” comprising of three dimensions: that of policy, the aims of the curriculum, or what is seems desirable to achieve; pragmatics, the constraints on what it is possible to achieve; and finally the participants in the decision - making process (p. xii).

2.3. Content – Based Instruction

Content-Based Instruction (CBI) refers to an approach to second language teaching in which teaching organized around the content or information that students will acquire. Although content is used with variety of different meanings in language teaching, it most frequently refers to the substance or subject matter that we learn or communicate through language rather than the language used to convey it
Richards & Rodgers, 2001; Richards & Renandya, 2002). Richards (2001) assumes that decisions about course content also need to take into consideration the distribution of content throughout the course. This is known as “planning the scope and sequence of the course” (p. 149).

The starting aim in course development is the description of the course rationale describing the values and goals and beliefs that underlie the course (Richards, 2001; Richards & Rodgers, 2001 & Hadley, 2003). In order to ensure that language is provided in a meaningful context and that language learning and teaching “go beyond the level of the isolated sentence”, instructional model with the combination of language and content should be developed (Hadley, 2003, p. 153). As stated by Richards (2001), the question of course content is probably the most basic issue in course design. Decisions about the course content reflects the curriculum designer’s assumptions about the nature of language use, and language learning, what the most significant units of language are, and how these can be organized as an efficient basis for language learning” (p. 148).

2.4. Material design

According to Jolly and Bolitho (1998), the starting point for material design should be derived from particular steps. In order to employ authentic language or texts the material designer or the teacher should identify a need for materials, explore the functional area of more informative materials, address the problem of contextual and pedagogical realization for materials, put stress on the physical appearance and production of materials for motivation and classroom effectiveness, use those materials in the classroom and subsequently evaluate the whole package (as cited in Tomlinson, 1998). Willis and Willis suggest keeping in mind the language focus. It involves thinking about language in the context of meaning-focused materials. Learners are thinking about language in general terms, not about specific forms identified and presented by the teacher. Central to the framework outlined for language focus in material design is a task circle called task → planning → report (Willis & Willis, 2007).
2.5. Curriculum assessment

According to Porter (2004), curriculum assessment is taken to mean measuring the academic content of the curriculum as well as the content similarities and differences among its different components. Pedagogy is important in order to elaborate on the process of student learning. In what follows attention is first given to defining content. Having defined content, attention is given to assessing the content of the intended, enacted, and assessed curricula. Where alternative approaches exist, attention is given to each. Having assessments of the content of the intended, enacted and assessed curricula, consideration is given to defining and measuring alignments that exist in the aforementioned components.
CHAPTER THREE: METHODOLOGY

Participants

The present school curriculum is developed for seven and eight grade students studying at Batumi’s local schools. The age of the target participants varies from 11 to 13. The proficiency level of the students in English is pre-intermediate. Four local schools are included in the program: Chaisubani, Makhinjauri, Dagva and Sakhalvasho.

Stakeholders

The present study includes the following stakeholders: The two teachers, the students, the administration of the schools, the BRC Board, the BRC Project and the Acopian Center for the Environment.

Time

“The Study of Raptors” course is scheduled to last three weeks; two hours per week in each grade. The course will start on September 17, 2012 and end on October 05, 2012. The preparation of the study for course development and curriculum design started from October 2011 to present. One week preparation visit took place April 16-April 22 in Georgia, Batumi.

Instrumentation

For thorough development of the course, observations at local schools in Batumi served as main instruments. The English language classes of seventh and eighth grades were the target groups of observations. During the week of preparation visit (April 17-22) two observations per each grade were conducted. The purpose of those observations was to find out the students level of proficiency in English, the teaching methodology, the activities the students were engaged in, and the interaction: student-student; teacher-student or whole class. (See appendix 1).
Procedure

During the study several significant steps were carried out in terms of meetings and video-conferencing. The main steps included the meetings with the co-author of the school curriculum Rozita Aghamalyan, in order to discuss, correspond and confirm the materials to be included in the school curriculum. Several meetings and video-conferences were also scheduled with the staff of Acopian Center of the Environment, in particular with the director of ACE, Karen Aghababyan, and a researcher at the center, Siranush Tumanyan, and the BRC Board Secretary, Wouter Vansteelant. The meetings regarded the selection of the content to be included in the course and overall program goals. The researcher also paid a preparation visit to Georgia, Batumi in order to make the final arrangements with the school administration regarding the course, to do observations in the target classes and have meetings with the BRC Board.

In order to get insights about the curriculum and the materials designed the present curriculum the researcher also piloted it. The program was piloted in Experimental English Classes held by the Department of English Programs, American University of Armenia. The target group was Communication 4A. The age of students ranges from 12-17. The students’ proficiency level of English corresponds to B1 level according to the Common European Framework of Reference (CEFR) scale. The piloting included theory and practice about the study of raptors. During the last lesson the students were given the evaluation checklists and the final reflection task.

Assessment

In order to get insights about the curriculum and the overall effectiveness of the course, an evaluation checklist was developed (See appendix 2). The aim of the checklist is to assess the curriculum for further development and long-term vision. The checklist will be given to all students, school administration, teaching assistants, and the BRC Board. After analyzing the data collected through the evaluation checklists, new perspective will arise with the present environmental education school curriculum. Students’ achievements in the course will be assessed by their final reflection. The task of
the final reflection will get the students to elaborate on their experience and knowledge obtained during the course (See appendix 3).

CHAPTER FOUR: DELIVERABLES

The final outcome of the development of the present school curriculum will include materials in English on the following topics: bird migration and ecology; introduction to raptors groups and species; principles of identification; bird ringing. The teaching materials aim to focus on the comprehension of the reading texts, presentations and vocabulary included in the information provided to the students during the lessons. The teaching materials will also include visuals, videos, crafting which will serve as effective prerequisites for the combination of content and language. Besides, they will keep the students engaged in the lessons and promote making connections between language and content.

The ultimate and key deliverable of the present MA project will be the Environmental Education School Curriculum for BRC Education 2012.
References


Appendices

Appendix 1. Observation checklist for the preparation visit to schools

<table>
<thead>
<tr>
<th>School</th>
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<tbody>
<tr>
<td>Grade</td>
<td></td>
</tr>
<tr>
<td>Methodology</td>
<td></td>
</tr>
<tr>
<td>Macro –skills</td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
</tr>
<tr>
<td>Interaction:</td>
<td></td>
</tr>
<tr>
<td>✓ student-student</td>
<td></td>
</tr>
<tr>
<td>✓ teacher-student</td>
<td></td>
</tr>
<tr>
<td>✓ whole class</td>
<td></td>
</tr>
<tr>
<td>Task type and activities</td>
<td></td>
</tr>
<tr>
<td>Visuals</td>
<td></td>
</tr>
<tr>
<td>Student engagement</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2. Evaluation checklist of BRC Education 2012

BRC EDUCATION 2012 EVALUATION

Course name: Study of Raptors

Course duration: 3 weeks (September 17 - October 05)

Trainers: Meri Nasilyan & Rozita Aghamalyan

Teaching assistants: Elza Makharadze & Natia Shotadze

Please fill out the evaluation checklist below. Your input will help us plan and develop further steps related to this program.

1. The classes were well-organized.
2. The content was delivered in a comprehensible manner.
3. The materials were comprehensible.
4. The activities were engaging.
5. The language was appropriate to the students' level of proficiency.
6. The teacher used class time effectively.
7. The program was relevant to the needs of the school.
8. Rate the overall effectiveness of the program.

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Disagree</th>
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How would you rate the following aspects of the program?

<table>
<thead>
<tr>
<th>Materials used during the lessons (PPT presentations, activities, trainings)</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excursions to Botanical Garden and Count Stations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall program organization</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How would you rate your overall satisfaction with the course "The Study of Raptors"?
<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Disagree</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Would you take another course related to this subject-matter? Please specify why?

Yes ☐

___________________________________________________________________________________
___________________________________________________________________________________

No ☐

___________________________________________________________________________________
___________________________________________________________________________________

Additional comments

___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

~ Thank you for your feedback ~
Appendix 3. Sample of the final reflection task

Name: _____________________________________________

Tell about your impressions of the course:

- What did you like most? What didn’t you like very much?
- What was the most interesting aspect of the course? If so why? or why not?
- Would you like to take another course related to birds/raptors?
- What did you learn about birds and raptors?
- What is your favorite raptor? Describe it. If you saw your favorite raptor flying in the sky what would you do?

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