“SOS Studenti”:
an example of digital learning in the Italian school curriculum

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Abstract

This paper aims at showing the potential of e-learning and distance learning within the Italian school curriculum. In particular, a project carried out by the national educational Agency, called ANSAS (EX INDIRE) will be shown. It's an educational initiative aimed at supporting the directions of MIUR (The Italian Ministry of Education, University and Research) as far as the weaknesses in the learning path of the students are concerned, especially at the end of the school year.

The project deals with the implementing of digital contents planned and conceived in order to help secondary school students recuperate their deficiencies in some curricular subjects (English, Italian, Physics, Math) especially during the summer holidays. The project is named SOS STUDENTI and consists of a virtual learning environment, where the digital contents have been implemented according to a particular learning path and a virtual community made of teachers and students.

The paper will particularly focus on the “English zone”, depicting the most important features of the digital contents that aim at fostering the communicative skills in the English language.

The objective of these learning objects is to promote the different skills through different strategies and digital tools.

The digital contents will be depicted through an authorial perspective, specifying the guidelines that are in the frame of the format conceived to plan and implement the learning objects.

In particular the presentation will try to explain “why”, “what” and “how” of the project, focusing then, on the evaluation phase, which is a crucial step in the learning path.

In SOS STUDENTI will be also integrated the website “smartenglish”, produced by Eni S.p.A. and approved by the Italian Ministry of Education as an e-learning approach to scientific contents through the English language (CLIL methodology).

1. “SOS Studenti” Introduction

In the Italian educational system, a very important role is played by the research of strategies and methodologies aimed at helping students recuperate their educational deficiencies in the curricular subjects through specific and individualized remedial work.

It is evident that online work is very effective, as it can meet individual learning needs. The idea of developing multimedia education materials, incorporating current insights from instructional design theory is aimed at meeting the need for a self-conscious learning path through effective educational experiences and strategies.
The most common model used for creating instructional materials is the ADDIE Process. This acronym stands for the 5 phases contained in the model:

- **Analyze** – analyze learner characteristics
  
  Identify Instructional Goals, Analyze Learners and Contexts

- **Design** – develop learning objectives, choose an instructional approach
  
  Write Performance Objectives, Develop Assessment Instruments, Develop Instructional Strategy

- **Develop** – create instructional or training materials
  
  Design and selection of materials appropriate for learning activity

- **Implement** – deliver or distribute the instructional materials
  
  **Evaluate** – make sure the materials achieved the desired goals

This represents the background and the frame of the project named SOS STUDENTI, a project carried out by the national educational Agency, called ANSAS (EX INDIRE). It’s an educational initiative aimed at supporting the directions of MIUR (The Italian Ministry of Education, University and Research) as far as the weaknesses in the learning path of the students are concerned. The remedial work takes place through a virtual learning environment, where a syllabus made up of a series of digital contents has been implemented. The teacher can assign each single student the activities to perform within the platform, following the progress made in the remedial work, through an automatic track, which registers exercises, activities and their outcomes.

The following paragraphs will be devoted to the description of the main features of the virtual learning environment and to the definition of “Why” “What” and “How” relating to the project.

### 2. SOS STUDENTI: main features of the project

#### 2.1. Why

Quite often teachers reflect about the difficulties of their weak students, try to investigate about their learning styles, study skills and think of the possibility to provide diversified tasks, that may better respond to their needs, challenge their motivation, curiosity, better their approach to the language, so that their learning can become more effective.

Difficulties are mostly related to:

1. communicative competence: acquisition of the structures and functions of the language
2. metalinguistic competence: understanding of the language system and reflection on how it works
3. metacognitive competence: use of an inappropriate learning method (study skills, learning strategies)

The three domains are interconnected, but when we want to pay more attention to a particular aspect, it is better to look at them separately. Each one of these domains are interconnected and interacting with two more categories of difficulties:

- intralinguistic
- interlinguistic

When tackling with these difficulties, the teacher can offer tailor made learning pathways using more appropriate tools such as reinforcement and remedial activities. On line resources can play an important role in this attempt.
2.2. What
SOSStudenti is an online learning environment addressed to lower secondary school students (14-16) and it has been devised to make them aware of their learning difficulties, develop their learning strategies and acquire learner autonomy.

It is the teachers that decide who should accede to this online learning facilities. They design the learning pathway and coach the students when performing their tasks.

It is a platform that offers more than 300 learning activities, plus a forum to exchange ideas with peers and experts, a chat to ask for support and clarification just on the spot, a community to socialise experiences.

Physics, Math, English and Italian are the subject matters selected for this experimentation because these are the areas where failure rates are higher.

2.3. How
All of the different “zones”, related to the different subjects, are structured in the same way that include:

1. Self-study activities: they imply the use of techniques such as: drill and practice, simulation, problem solving, webquest, games etc. For each activity or task there are:
   - Self-assessment grids
   - Self-correction tools
   - Reference tables both for theory and grammar
   - Guides (practical)
   - Links to internet resources
   - Working tools: dictionaries, calculators

2. Discussion and comparison to socialise problems and difficulties in a forum moderated by experts and teachers.

3. The learning process and the evaluation of the outcomes
As far as the students’ learning process is concerned, the following items are considered:

- Level
- Progression
- Achievement

Interactions plays a key role in the learning experience, through the virtual community: tracking forum and chat activities, are conceived as an effective support to the learning experience.

The evaluation takes several forms:

- **Informal evaluation by the teacher.** This is partly based on the optional face-to-face support meetings. Teachers observe the interaction that is taking place online.
- **Immediate feedback from participants using e-mail.** This may involve comments, requests and suggestions
- **Evaluation contained within the ‘activities’ which the participants undertake (assessment tests).**
• A conventional end-of-programme questionnaire.

• A special students’ ‘portfolio’, as a means of self-assessment.

• Evaluation of data: evaluative data collected within the virtual learning environment (VLE). Accessing to the VLE, it is possible to collect a large amount of numerical data recorded about the use made of the VLE. These data include:
  - Pattern of access to the website by programme participants. This includes information on the number of visits, date and time of use of the VLE, frequency of postings to the discussion board etc.
  - The use made of each page of materials. This includes the number of hits sustained by any one page, the time spent reading the page etc.
  - Information about other temporal aspects of design. This includes the use made of the VLE during curricular or extra-curricular sessions.

4. The “English zone”

The English area is made up of digital contents aiming at promoting the different skills through the use of different digital tools.

A specific format has been conceived by the authors, in order to follow the natural steps in a communicative approach to the second language acquisition.

These are the main features of a digital object:

1. HOME PAGE, with a menu that provides information on the:
   - macro area of reference
   - learning outcomes (knowledge and competences)
   - grammar references

2. second page, with an explanation of the activities
   - context, contents
   - level of language competence required
   - cross-curricular links

3. warm-up activities: images with tasks

4. activities in a sequence (sometimes linked one to the other, other times self-consistent) with:
   - completion tasks (titles, sentences or paragraphs etc.)
   - multiple choice tests
   - matching words or sentences
   - true/false exercises

   directions for the students on the activities:
   - exercise keys
   - assessment criteria and procedures
   - explanation of the feedback messages

   directions for the teacher on the aim and purpose of the activities:
   - suggestions on what kind type of support to provide the student

The format of the digital contents is also aimed at fostering the Reading Literacy, according to the data connected to OCSE PISA.
5. Smartenglish

“smartenglish”, integrated in “SOS Studenti” is a project produced by Eni S.p.A. and approved by the Italian Ministry of Education as an e-learning approach to scientific contents through the English language (CLIL methodology).

This linguistic, didactic and methodological programme consists in a “motivational approach” to be developed in class and via the web (blended mode) within school autonomy, to integrate the curriculum and support the recovery of missing credits in the English language. It is a best practice model based on the guidelines of the Common European Frame of Reference for Languages and the Recommendations of the High Level Group in Multilingualism – European Commission – which consider interdisciplinary approach and motivation as the key factors for effective learning/teaching. Since the English language is a “means for learning and not a means to be learnt”, it’s important the autonomous reflection on the language being studied (learning to learn and learning by doing). The educational programme mainly addresses the first two years of secondary school but, thanks to the range and levels of the resources made available, “smartenglish” proves an effective language support also for the following years. Meaningfully, in all school cycles “edutainment” activities prove more interesting, stimulating and fruitful than traditional learning methods, often less innovative and involving.

Educational Model (key phases)

“smartenglish” Internet Portal

A web site is structured like a community where students can learn the language not by studying texts but in a dynamic, stimulating, interactive way, by benefiting from different resources.

→ STUDENTS AND TEACHERS’ SECTION OF THE SMARTENGLISH WEBSITE

Webquest:

Webquest is a learning mode enabling students to learn and collect information via the internet according to a procedure developed, guided and validated by teachers. In general, through this method, the linguistic approach is facilitated thanks to the student’s active and autonomous role, the implementation of a problem-solving approach, the use of the internet also to learn to enhance and process language functions in a critical, creative and logical way. In this case, it is a blended English course (virtual classroom / real classroom), with an “avatar” introducing scientific topics (also in edutainment mode), complemented by different types of self-correction exercises combining language functions and grammar rules with the following 8 subjects/units:

<table>
<thead>
<tr>
<th>SUBJECT: NATURE</th>
<th>GRAMMAR RULES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUN - Level B1/B2</td>
<td>Adjectives - Adverbs</td>
</tr>
<tr>
<td>VOLCANOES - Level A2/B1</td>
<td>Past simple - Past continuous</td>
</tr>
<tr>
<td>RENEWABLE ENERGY - Level A2/B1</td>
<td>Countable-Uncountable nouns Quantifiers</td>
</tr>
<tr>
<td>OIL – Level B1</td>
<td>Modals - Conditionals</td>
</tr>
<tr>
<td>TECHNOLOGY - Level B2</td>
<td>Future - Will - Going to</td>
</tr>
<tr>
<td>RECYCLING - Level A2/B1</td>
<td>Present perfect / Continuous</td>
</tr>
<tr>
<td>SUBJECT: MEDIA</td>
<td>GRAMMAR RULES</td>
</tr>
<tr>
<td>CINEMA - Level B2</td>
<td>Passive – Wish</td>
</tr>
<tr>
<td>MUSIC - Level B1/B2</td>
<td>Phrasal verbs - Verb + ing</td>
</tr>
</tbody>
</table>
a) **Avatar speech (online)** with scrolling text and pdf text plus web-based insight

b) **Avatar speech** with the following online self-correction exercises:
   1. True or false (comprehension)
   2. Glossary test / matching (lexical)
   3. Multiple choice (grammar)
   4. Drag and drop (grammar)
   5. Complete sentence (grammar)

c) **Summary** (online and paper text with questionnaire to be printed out)

d) **Games** (paper texts to be printed out)

e) **Web References** (online and paper webliography on the “teachers’ notes”)

**Learnonline:**
This section is structured according to various types of activities and self-teaching drills to review and strengthen language and communication skills in an edutainment environment.

- The main drill types include:
  - Self-correction grammar tests
  - Lexical tests
  - Listening-speaking tests
  - Audiovisual conversation courses
  - Quizzes and games

**Toolsonline:**
This auxiliary section is composed of terminological and thematic supports in text, video and audio formats. They provide a very useful tool to work, consult, gain insight, gather information based on a critical webliography subdivided in the following categories:

- Dictionaries / Thesauruses / Encyclopaedias
- Corpora / Data banks
- Libraries / Bookshops
- Magazines / Newspapers
- Multimedia libraries / Video / TV / Radio / Cinema

**FAQ:**
This webpage is open to all users who need information on the most frequent problems / criticalities relating to the operation of the web platform and educational approach.

**Technical Instructions:**
This map illustrates the procedures to access both activities and all functions requiring an interactive procedure.

→ **TEACHER’S SECTION OF THE SMARTENGLISH WEBSITE**

**Training Instructions:**
These are basic guidelines on all language-didactic-methodological supports, the educational approach, teachers’ notes and complementary resources.
Teachers’ Notes:
They include consultation supports, materials to be used to obtain further information (thematic webliography) and work in class or in the language lab or via interactive multimedia boards. Games (edutainment) and written / spoken tests to be held in class are proposed to assess the language learning progress of students according to the Webquest approach.

My Classrooms:
All teachers can create their virtual classrooms, including how many students they want and giving them the access to each content. During the Webquest course, the teachers follow the progress of their students thanks to a learning tracker.

Forumonline:
This forum mirrors the main subjects:
- Nature
- Science
- Society
- Media

It has a twofold objective: firstly forming the community of teachers as if it were a social network; secondly, providing a discussion area in which topics are dealt with to exchange views /methodologies relating to the educational goals. Asynchronous moderation provides a friendly support for contributions and suggestions.

Smartenglish Assistant:
This asynchronous didactic assistance system (personal tutor) supports teachers with reference to all the approaches and didactic supports provided.

Thanks to it creative contribution to the improvement of the quality of language teaching, the motivation of learners and exploitation of the available resources, “smartenglish” was awarded the European Language Label devoted to innovative language - learning projects.

6. Conclusions
The project is very successful and has been just promoted by the Ministry of Education, University and Research, through a specific communication to the teachers, especially in the perspective of the upcoming summer holidays.

7. References