

LESSON PLAN

Subject: ICT

Topic: Database

Age of students: 16

Language level: B1

Time: 45/ 60 minutes

Content aims:

After completing the lesson, the student will be able to:

Recognize a database.

Explain the structure of a database.

Discriminate commercial and free databases.

Distinguish between database and database management system.

Choose the tables that compose a database

Choose the record fields of the table.

Create a query in an existing database.

Language aims:

After completing the lesson, the student will be able to:

Use correctly new vocabulary about a databases.

Orally introduce information about the lesson.

Follow directions to create a database.

CLIL MultiKey lesson plan

Topic vocabulary	General vocabulary
technorecordy - magnetic tape - hard drive - table - items - records - field - value - query - views - design - run	organize - store - structure - commercial software - free software - open source - create – open - save - modify -

Materials:

- Presentation of the Unit and database (available online <https://sites.google.com/a/xtec.cat/database/>). It is necessary to use computers and Internet.
- If this is not possible, the exercises can be solved in the notebook.

Procedure:

Learners must answer some initial questions.

INITIAL QUESTIONS – DATABASE

1. Do you know what a database is?
2. Why we need to use databases?
3. Could a phone book be a database? Put some example if you know any.
4. Do you know any program that manages databases?
5. What do you think can be done with a database?
6. Where do you think the information is stored?
7. It can be accessed from anywhere?
8. You can access more than one person at the same time?
9. When we started to use databases?
10. Do you think databases are useful and necessary?

STEPS

1. Students watch the presentation and listen to the explanation. The teacher made contributions those deemed necessary as well as interactions with students as deemed necessary.
2. Working Group. Resolution of proposed activities. After listening the explanation of the lesson, students are placed in pairs and begin to work. The exercises must be performed in the worksheet.
3. Activities are performed with the computer and have to save the results. The answers can be answered in the same file the statements, making screenshots of the steps and results. The document will be sent by email to the address indicated by the teacher.
4. Students can write down any improvement in learning consider.

1) EXERCISES (in this sheet)

a) What do you understand by a database?

b) Match each word with their definition.

DBMS •	• Each record item
database •	• A Boolean, chart, Integer,...
table •	• Each record item
record •	• Set of tables
field •	• Record field that must be unique
identifier •	• Composed by different records with the same structure (*)
type •	• Manage the database connections

(*) suppose that all record are equals (no null fields or similar)

c) Fill the gaps with the words bellow:

TYPE - SUBJECTS – FIELD – RECORDS – SUBJECTS - QUERY

We want to know all _____ which are compulsory in English.

Therefore choose _____ table of our database and select the table containing all _____ field equals "OB" (compulsory) and have the language _____ equals "ANG" (English). Display all fields because it does not indicate anything special.

d) Fill the gaps with the words bellow:

SELECT –DATABASE – NAME – SURNAME – STUDENTS - AGE - 18

We want to make a query to find all _____ 18 years old of our school. But we just want to know the name and surname.

Thus we _____ "students" table from our _____.

We choose _____ and _____ fields and mark as "visible."

Finally, we choose the _____ field and we mark as not visible (not marked). Force age equals _____ years.

3) ACTIVITIES (with computer)

Create select queries.

You can download the database from:

<https://sites.google.com/a/xtec.cat/database/>

- a) QUERY 1: all the students that are 17 years old.
- b) QUERY 2: all the subjects teach in the third term
- c) QUERY 3: all the student girls
- d) QUERY 4: all the optional subjects thought in English