



# CallDysc Games Review

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By

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Disclaimer

The review is a product of CallDysc project:  
Collaborative Additional Language Learning for Dyslexics.

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The content of this material is the responsibility of the editors and does not  
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## Overview

These language-teaching games are designed as supplementary materials to traditional methods, as part of a blended learning methodology, and not to substitute traditional language teaching neither the teacher itself. They are designed to help the dyslexic individual (re)engage in a second language learning environment.

The specific target group is the dyslexic pupil, whose learning preferences are defined by both his age, special needs and earlier experiences. The teaching material reflects these needs by being:

- Multisensory
- Non-competitive (or at least not “high stakes” competitive)
- Game –like
- Positive feedback focused
- Built up from the passive listening level towards the more demanding active (written and spoken) language production.

The activities are designed to include the most popular aspects of everyday web and mobile activity of the target group (social networking, editing and sharing personal data, playing on-line games).

The games are rendered in a sequence, based on difficulty level, but they can be played in any order. The principle for the project was to concentrate on integrating the multimedia using appropriate pedagogy and data management systems rather than develop new technology.

The games can be played on various platforms, such as mobile phones, pda, mda, sub-notebooks and PSP game consoles, and are designed to work both offline and online, depending on the game and the connection limitations.

## **Detailed description of teaching materials**

- C01 Vocabulary game
- C02 Opposites
- C03 Spell the word!
- C04 Spell the sound!
- C05 Memory game
- C06 Dressing game
- C07 Paint me!
- C08 Hangman
- C09 Wordchain
- C10 Numbers game
- C11 The Celeb game
- C12 True or False?
- C13 Personal Profile
- C14 Calldysc community
- C15 Guess who!

## **Other activities**

Game authoring tool for teachers

## **Vocabulary (C01)**

**Language teaching perspective:** Vocabulary building: nouns, verbs

**Brief principle:** The user chooses one of 10 vocabulary categories (e.g. Animals, Numbers). Items of that category are shown as a 3 by 3 matrix in random order. Each item is highlighted as the word is spoken.

Once the first series of three items have been successfully learned (identified correctly three times), they move on to the next three items. There is a final test with all the words of the category at the end. Presentation of words means that the relationship between all the three components (sound, written and illustrating picture) is developed, even though there is no stress on the written word.

This is a single user game. At the end of the activity, software has an ability to send the results to the server.

Pilot testing made it clear, that no matter how explicit we intend to make the illustrating pictures of the words, they still might be ambiguous. Since teaching incorrect meaning is by all means to avoid, we decided to implement an auxiliary speak-up dictionary in the native languages of the user groups. When a new word is presented for the first time, it is not only the target language sound that will be heard, but the meaning of it in the learners' native language as well. That should be enough to cement the semantic component.

**Programming details:** The program contains a series of files that control the sound and pictures. Selection of the picture is random as is the order in which they are presented. This ensures that each time the game is visited, the order is different. Therefore the words cannot be remembered by a simple auditory sequence. A simple feedback is provided after each response. Pictures are numbered 1,2 or 3. Answering means to enter the corresponding number on the keyboard. Navigation is through the \*, # and 0 keys.

**Target language variants:** English, Welsh, Romanian, Hungarian

**Language of instructions** (spoken): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## Screen shots

Figure 1: Ten vocabulary sets



Figure 2: Reward for completion



Figure 3: Login for data transmission



## C02 Opposites

### Language teaching perspective:

The purpose is to teach adjectives as new vocabulary and show how basic adjective + noun compounds are created.

**Brief principle:** 9 pairs of words are taught together. These pairs are taught one by one individually, presenting them 3 times automatically. Each item is highlighted as the word is spoken and can be also heard in the learner's native language for the first time the new word is presented. After presenting 3 pairs (6 new words) there is a first level testing phase. The learner has to match the new word with its opposite from a row of 3 words. Once the first series of three pairs have been successfully learnt (identified correctly three times), they move on to the next three pairs. There is a final test with all the words of the category at the end.



### Scoring

Results and scoring follow a similar format to that of the vocabulary game.

**Target language variants:** English

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

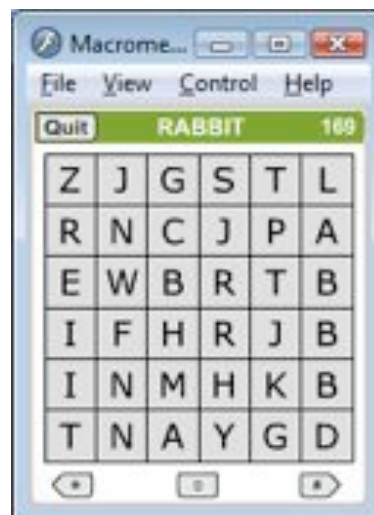
## C03 Spell the word!

### Language teaching perspective:

The principle purpose is to test sound discrimination, phonological analysis, sound to letter correspondence and copying ability.

### Pedagogy

The purpose is for the user to recognise simple sound structures, and to practice the spelling. The sounds are from a native English speaker. The player only has to find the letters in the matrix and click on them in the right order. This game is very useful for dyslexic learners as well as for those non-dyslexics with a mother tongue where the script is not Roman, such as in Bulgaria.



### Technical

An additional "Replay word" function is included when 0 is pressed. Navigation on keyboard and mobile phones uses 2/8, 4/6. Button 0 is for Replay.

**Scoring:** Total number of words and letters identified within a given time (3 minutes) is recorded.

**Target language variants:** English, Welsh, Romanian, Hungarian

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian



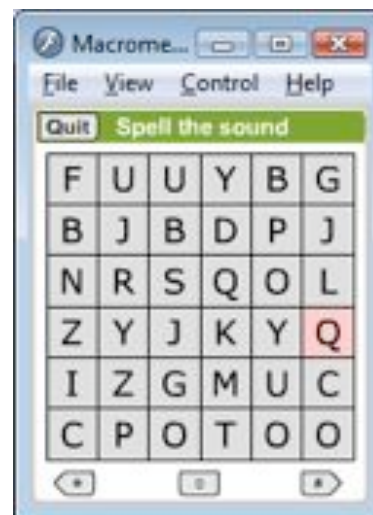
## C04 Spell the sound!

### Language teaching perspective:

The principle purpose is to test sound discrimination, phonological analysis and sound to letter correspondence.

### Technical

An additional “Replay word” function is included when 0 is pressed. Navigation on keyboard and mobile phones uses 2/8, 4/6. Button 0 is for Replay.



### Pedagogy

This is based upon C03, but without the written word being shown. It has been adapted to provide just the sound, and therefore is a true spelling test. At the end you have a number of words completed. It only includes the words that are in the project vocabulary. The purpose is for the user to recognise simple sound structures, and to practice the spelling. New vocabulary is not taught in this game previously learnt words are consolidated. The sounds are from a native English speaker.



**Target language variants:** English, Welsh, Romanian, Hungarian

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## **C05 Memory game**

### **Language teaching perspective:**

Consolidation of vocabulary. The game is played against the computer.

### **Brief principle:**

The player sees a 4x4 matrix of “cards” with their reverse side shown. Try to match the written word with the picture. Where an image is shown the sound file can be heard. The aim is to find the matching cards. When 2 matching cards are picked, they are removed from the set and replaced with smilies. At the end of the game the player can quit or ask for another set of cards. The next game matrix is put together from those (already learnt) words that was not implied in the first session.

### **Programming details:**

This is a Flash game that can be operated through different interfaces. It can be used by clicking with a mouse, using arrow keys on a keyboard or mobile phone or on PDA's and computers with sensitive screen with a stylus.

**Target language variants:** English, Welsh, Romanian, Hungarian

**Language of instructions** (spoken): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C06 Dressing game

**Language teaching perspective:** The purpose is to teach and test combinations of nouns and adjectives. Previously learnt vocabulary (colours) is consolidated, while new word (clothes) is introduced.



### Pedagogy

This game is designed to follow popular 'paper doll' games available on the net, where fashionable clothes can be put on famous characters. Along with the same gaming principle different pieces of clothes have to be chosen following the sound and written instructions to dress up a male and a female character. Like in all previous vocabulary teaching games, there is a teaching phase, where new vocabulary is introduced, and a game phase, where knowledge is tested.

### Technical

An additional "Replay word" function is included when 0 is pressed. Navigation on keyboard and mobile phones uses 2/8, 4/6. Button 0 is for Replay.

**Target language variants:** English

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C07 Paint Me!

**Language teaching perspective:** The purpose is to learn adjective + noun compound with vocabulary previously learnt, i.e. colours, food, house. New vocabulary (face) is also added.

### Pedagogy

The target adjective and noun are shown written in the bottom as well as heard pronounced by a native speaker. The learner has to click on the target colour on the palette, and then click on the picture of the target noun. The object becomes coloured if the solution was correct. If not, the player can try it again.



### Technical

This is a Flash game that can be operated through different interfaces. It can be used by clicking with a mouse, using arrow keys on a keyboard or mobile phone or on PDA's and computers with sensitive screen with a stylus.

**Target language variants:** English

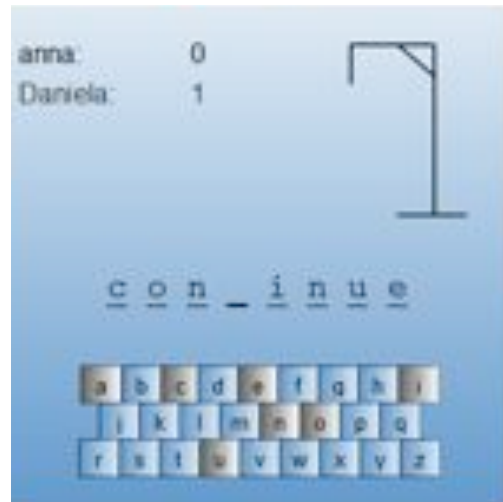
**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C08 Hangman

**Language teaching perspective:** The principle purpose of this game is to foster written language production on a single word level in a peer-to-peer combative game.

### Pedagogy

As opposed to traditional Hangman games that can be found on the internet, this game does not use a fixed set of words that is given presented by the computer in a single player fashion. Instead this is a combative game between two learners who give each other words – or even whole sentences - to guess. The advantage is the flexibility of vocabulary and complexity of grammar used. The challenge is that learners might not be sure of spelling, so either they have to use a dictionary (an online dictionary is linked to the Calldysc site) or the teacher has to supervise learners activity in a blended learning setting. The game also can be played between a student and their teacher.



### Technical

This is a peer-to-peer game that can be played not only on computers linked to the web, but also on mobile phones with 3G connections. Information between the two remote mobile devices is mediated through a server side 'media server' programme. Results of the game are recorded and logged in the LMS.

A screenshot of the game's ID entry screen. It has a light blue background. At the top, it says 'Enter your ID:' followed by a white rectangular input field. Below that, it says 'Enter your partner's ID:' followed by another white rectangular input field. At the bottom, there is a small line of text: 'If you do not have a partner, wait for someone!'.

**Target language variants:** English, Welsh, Romanian, Hungarian

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C09 Wordchain

**Language teaching perspective:** reading and writing, creation of meaningful word combinations. Collaborative activity fostering communication.

### **Brief principle:**

Creative and cooperative practicing of vocabulary and expressions (word combinations) learnt, exploiting smart phones' multimedia applications and user friendly web 2.0 solutions.

### **Pedagogy:**

The game's aim is to create word chains illustrated by a set of pictures taken by the learners with their mobile telephones.

The player take a picture of an object (e. g. a "red dress", or a "small dog"), which is published on the website and the players tag them by using appropriate vocabulary learnt in previous phases: e.g. adjective + noun (small, dog) or colour + noun (red dress) referring to the picture. Other players can reply to this picture with another picture keeping one part of the previous description and adding a new word (e. g. a "yellow dress", a "small apple"). Players are free to complete any word chains or start their own ones. They can also comment each others' pictures.

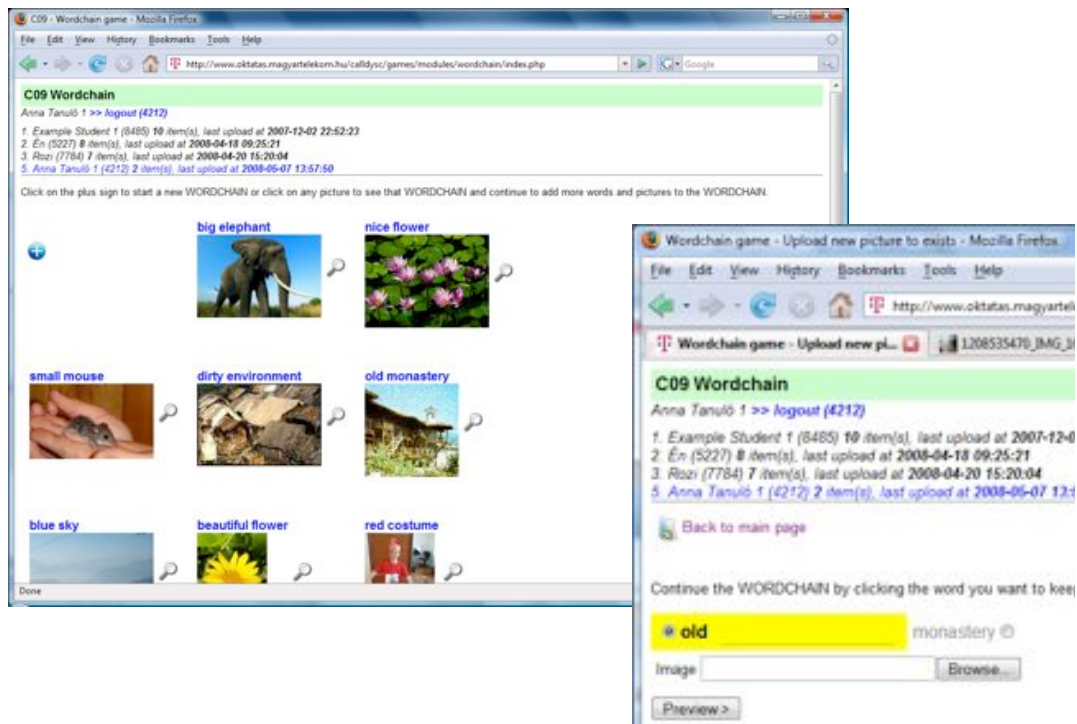
**Programming details:** This game is based on user generated content by encouraging learners to take photos and upload them into this learning activity. Photo upload can be done in a traditional way by browsing someone's hard disk and attaching photo, or in a more advanced way, by using the mobile phone for taking and sending pictures. Therefore a photo sharing application is embedded to the site using Opera Mini's "Point, snap and instantly publish photos" feature, in which the "add photo" button switches the phone to camera mode instantly. A description field is provided. After logging in users can see new additions, select them for completion, or can start a new chain.

**Scoring:** none, activity (number of photos published/replied) of each player is stored.

**Target language variants:** not fixed, can be used with any language that fits characters available in the game

**Language of instructions** (written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

# Wordchain screen shots



## C10 Numbers Game

### Language teaching perspective:

The purpose of this game is to provide an opportunity to combine numbers with nouns, practicing the way that plurals are formed. Words with non-regular plural forms were not presented to the learners at this stage.

### Pedagogy

The game is about practicing syntax in a non-threatening environment. The logic behind this is similar to that of the vocabulary game. It uses the same learning objectives as the vocabulary game, choosing two items to show together, a number and objects.

### Technical

This is a fixed content Flash game, that can be played both offline or through the web.

**Target language variants:** English

**Language of instructions** (spoken and written): English, Romanian, Hungarian, Swedish, Polish, Bulgarian



## C11 The Celeb game

### Language teaching perspective

Introducing basic syntactic structures (simple present tense affirmative and negation) and new vocabulary. Accidental learning is enhanced by visual illustration.

### Pedagogy

The principle is that the person is presented with a picture about a well known person, and a series of statements that are true or false. All the person has to do is click true or false, and at the end of the series of questions, the score is given. Therefore the student has to read the question (vocabulary, syntax and grammar practices) and understand the meaning (comprehension). They compare the sentence with the picture and decide if the statement is true or false. This can be downloaded to the users phone, or played online.



### Technical

This is an open ended Flash application, where new pictures and sentences can easily added to the already existing game, and also thematic versions can be created and shared by (teacher) users.

**Target language variants:** English

**Language of instructions** (spoken): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C12 True or False?

### Language teaching

**perspective:** The purpose of this game is to strengthen basic syntax and practice reading comprehension by providing sentences matched to visual illustration.

### Pedagogy

This activity uses whole sentences, and allow practice of grammar and syntax, as well as allowing the vocabulary to be

expanded. Learners have to decide if the sentence they read contain valid information or not with respect to the picture.



### Technical

This is an open ended Flash application, where new pictures and sentences can easily added to the already existing game, and also thematic versions can be created and shared by (teacher) users. (This is achieved by an online authoring tool, to be described later.) It can be played through the web or downloaded as a stand alone offline Flash application to the mobile phone.



**Scoring:** Yes, but non-competitive

**Target language variants:** English

**Language of instructions** (spoken): English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C13 Personal Profile

**Language teaching perspective:** Reading and writing at length. Proactive use of vocabulary in real life situations. Collaborative learning.

**Brief principle:** Using the principle of social networks, the activity was designed for students to provide profiles of themselves, with all the basic personal information a language learner needs to know at an elementary level. We made this activity dyslexia friendly by providing pre-formulated sentences, drop down menus with words to choose from and the opportunity to submit pictures using mobile phones. This way students could present themselves and participate in social networking without the concern of a lack of active language skills.

A screenshot of a web browser showing a form titled "C13 - Making friends - Mozilla Firefox". The form is for creating a profile and includes fields for "My name is:", "Email:", "Age:", "I haven't got a brother", "I have 2 cats", "I like", "I don't like", and "I usually wear". There are also dropdown menus for "nationality" and "gender".

**Programming details:** Photo uploading method is the same as described in C09. The tool of profile creation is a multiple choice questionnaire. A field for free text for publishing other information about themselves, and a commenting solution is also provided.



**Scoring:** none, community building social activity

**Target language variants:** English

**Language of instructions (written):** English, Romanian, Hungarian, Swedish, Polish, Bulgarian

## C14 Calldysc Community

**Language teaching perspective:** Reading at length. Collaborative learning of additional vocabulary on personal data.

**Brief principle:** After creating their own personal profiles, learners can browse others' profiles and connect to each other. The logic is similar to popular social software applications and web communities. The participants can search among the profiles and learn about other language learners all around Europe.

**Scoring:** none, community building social activity

**Target language variants:** English

**Language of instructions (written):** English, Romanian, Hungarian, Swedish, Polish, Bulgarian



## C15 Guess who?

**Language teaching perspective:** Active speech production and listening comprehension. Collaborative learning of additional vocabulary on personal data.

**Brief principle:** After creating their own personal profiles, learners are asked to record this brief chapter of personal information as a video podcast. In game Guess who? the learner has to listen to the information about a fellow student in sound format and has to match it with the corresponding picture.






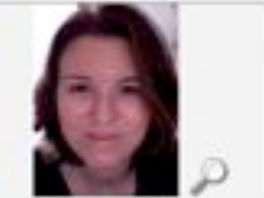


**Programming details:** An inbuilt video recording programme is available through the website that enables students to record and upload a short video using their webcam. The preview function ensures that students have opportunity to experiment with their own film and only share a version that they are satisfied with. This function also ensures adult supporters have a tool to supervise any content before edition to the web.

**Scoring:** none, but feedback about results is given.

**Target language variants:** English

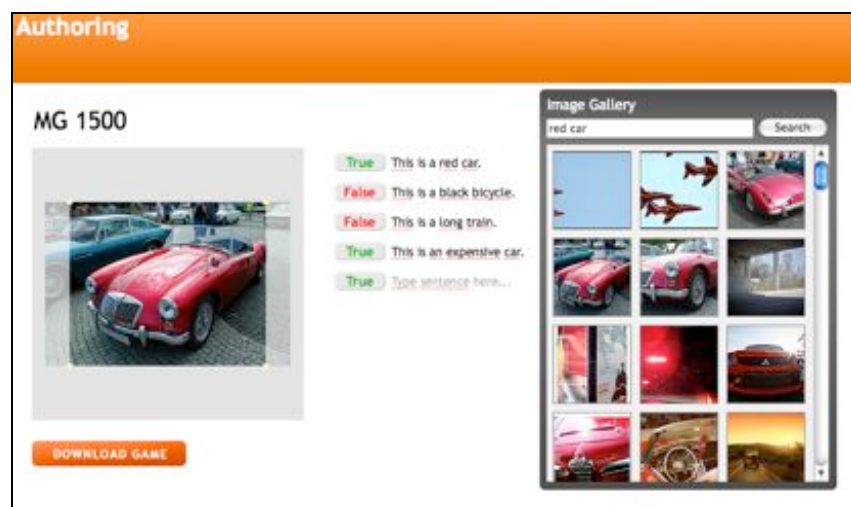
**Language of instructions (written):** English, Romanian, Hungarian, Swedish, Polish, Bulgarian

**C15 Guess who**  
Györfi Anna >> Logout (anna)  
Try to guess who is speaking!  
Click on the play button and listen to the introduction. If you know who is speaking click on the right picture!  
Restart game with new random selection

## Game authoring tool

### Additional feature



The purpose of this tool is to encourage teachers to develop their own activities, tailored to the needs of their SEN students.

This is a truly collaborative content creation tool, where user generated educational content can be stored and shared through the Calldysc LMS. Teachers can use their own photos or search Flickr freeware photo library for appropriate visual illustration to the vocabulary and grammar they wish to teach by a True or false game version to be created. They can then set the questions, and share the results with others by downloading it. These individual thematic game versions then can be stored and shared with other teachers to help each other's work.

### Games

magyar példasor	Anna	[download]	[play]
Famous people	Anna Györfi	[download]	[play]
Countries and nationalities. Which flag?	Anna	[download]	[play]
Basic	Anna Györfi	[download]	[play]
Cats and dogs	We	[download]	[play]
Kitty	Zosia	[download]	[play]
Animals	Marianne	[download]	[play]
True/False Game Authoring	Kasia	[download]	[play]
Cows	Unknown	[download]	[play]
About a frog	Kasia	[download]	[play]
cars, bikes, buses	Anna	[download]	[play]
Nature	Marianne	[download]	[play]