



Integrated intelligent LEARNing environment for Reading and Writing

D6.2 – The integrated iLearnRW System Prototype



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Abstract	In this report we provide a description of the first version of the iLearnRW system prototype that will be used during the evaluation phase of the iLearnRW Project. Installation and usage instructions are provided. The prototype is fully operational.
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Table of Contents

1. INTRODUCTION	6
2. ILEARNRW SYSTEM PROTOTYPE	8
2.1. SOFTWARE COMPONENTS.....	8
2.2. THE ILEARNRW SERVER	9
3. SUMMARY OF PROTOTYPED APPLICATIONS	10
3.1. SERVER SIDE APPLICATIONS.....	10
3.1.1. Admin panel.....	10
3.1.2. Screening test generator	11
3.2. CLIENT SIDE APPLICATIONS	15
3.2.1. Serious game.....	15
3.2.2. Reader.....	16
3.2.3. Text classification tool	18
4. PROBLEMS/ISSUES CONSIDERED DURING DEVELOPMENT	21
5. SECOND (FINAL) PROTOTYPE DUE AT M36.....	23
5.1. APPLICATIONS TO SUPPORT THE EVALUATION.....	23
5.2. ON-LINE RESOURCE BANK	23
6. INSTALLATION AND USAGE INSTRUCTIONS.....	24
6.1. INSTALLATION INSTRUCTIONS	24
6.2. USAGE INSTRUCTIONS	24
7. CONCLUSIONS.....	25
APPENDIX I: GAME USER GUIDE	
APPENDIX II: READER USER GUIDE	
APPENDIX III: ONLINE MANAGEMENT SYSTEM USER GUIDE	

1. Introduction

This deliverable describes the first iLearnRW prototype that will be used during the evaluation phase of the iLearnRW project. The official deliverable is a “prototype” and this report provides a brief description of the prototype together with installation and usage instructions.

From the children’s perspective, the iLearnRW prototype consists of a pair of tablet applications: A “Serious Game” and a “Reader”. The Game engages a child into literacy activities which aim to improve the child’s skills that are related to dyslexia and dysorthographia. The Reader is an application which allows the child to load a document and display it in a way that facilitates reading. The Reader can be considered an “auxiliary” application compared to the Game which is the primary avenue by which the iLearnRW prototype system aims to improve the children’s skills.

For the teachers/tutors/experts’ perspective, the iLearnRW prototype also consists from a set of web applications which handle administration issues (“creation of students”) as well as reporting issues (for example, details of the children’s usage of the iLearnRW system).

The gaming experience that the iLearnRW system provides to each child is personalized and depends on the child’s profile. The child’s profile contains information (mainly) about the child’s level of performance at specific language skills. In order to allow each child to use the iLearnRW system from any tablet (and a tablet to be shared by many children), the children’s profiles are stored in a central repository, the iLearnRW server. Thus, playing the Game or using the Reader requires loading the current user’s profile from the iLearnRW server.

The iLearnRW server is the “behind the scene” component of the iLearnRW prototype system. In addition to acting as the repository for users’ profiles, it also hosts the system’s data logger, a component responsible for storing all system-usage related information. Through the iLearnRW server, the prototype system also provides several services necessary to the operation of the Game and the Reader. These web-services include user authentication and profile management, storage and access to historical (usage) data, the selection of the words to be used in games, reporting, etc.

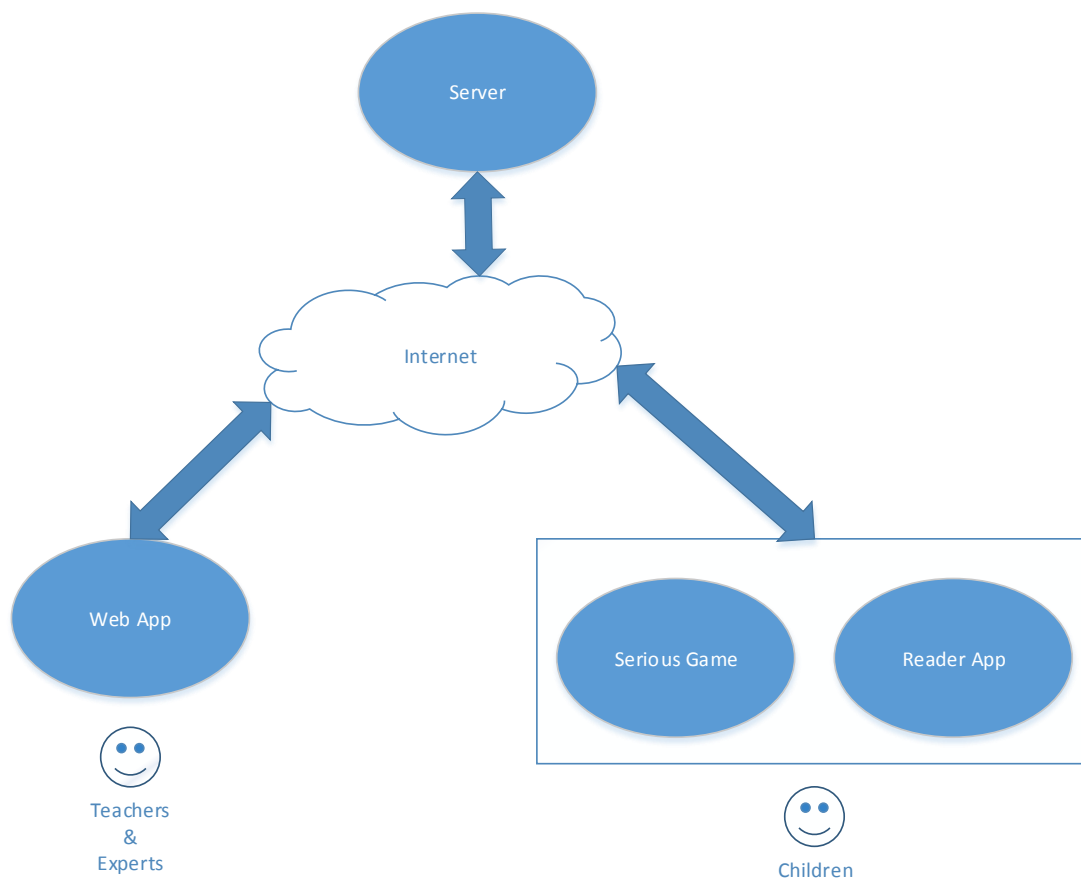


Figure 1. A high level view of the iLearnRW prototype system

This deliverable is organized as follows: Section 2 provides a more detailed description of the iLearnRW system. Section 3 provides descriptions of all the applications that constitute the prototype system. Section 4 addresses issues/problems that we faced during the development of the prototype. Section 5 describes the components of the iLearnRW system that will be incorporated in the final system during the third year of the project (due in M36). Installation and instructions for the iLearnRW prototype system are provided in Section 6 while a full user's guide can be found on the three Appendices. We conclude in Section 7.

2. iLearnRW system prototype

2.1. Software Components

Our system architecture follows the server-client paradigm. The server side provides services which are hosted on one centralized server. The Server Side Components make use of a common shared Server Side Framework. Using a framework makes it easy to share specific logic like logging, exception handling or tracking usage statistics.

On the server side we provide an admin panel web page that helps experts and teachers to view the student's progress, history and summarized statistical reports. Experts can also administer and create *screening tests* for students. These tests are suitable to initialize a student's profile according to his/her answers.

Client Side applications are the *Serious Game* and the *Reader* which make use of the services in order to retrieve information about the users or to store new data on the data logger. Additionally, we provide the text classification tool which is a standalone app that can be used for text analysis.

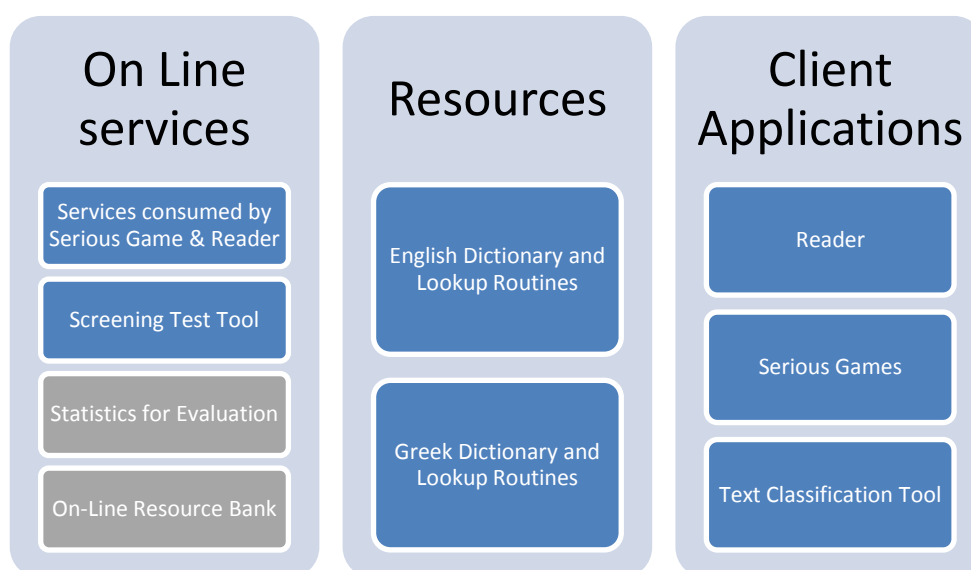


Figure 2. Project components' overview

Figure 2 presents the total list of the components that should be created for the iLearnRW system. The greyed items are the components to be included in the 2nd year (on-going work) of the integration while the blue are already available.

Below we briefly describe the three categories of components.

1. On line services

Software that runs only on server side and is accessible through web-services or web-pages.

2. Resources

Data or parts of software (libraries) that can run either on server or on client side. The English and Greek dictionaries along with the routines for text analysis can be packed and used in different applications.

3. Client Applications

This category includes applications that run only on client side and may require the usage of the web-services. The *Reader* and the *Serious Games* require access to the server while the *Text Classification Tool* is a standalone java application.

On the second year of implementation the developers should fix possible bugs that will be identified. Also the *On-Line Resource Bank* and the *Statistics for Evaluation* modules should be finalized. Note that we have already worked on parts of both incomplete components.

2.2. The iLearnRW server

To support our server-client architecture we use a server accessible via HTTPS under the domain <https://ssl.ilearnrw.eu/>. The hardware and software specifications of the server are as follows:

- Hardware
 - Processor: Intel(R) Pentium(R) CPU G3220 @ 3.00GHz, 64 bit architecture, dual core
 - RAM: 11 GB and 18GB of swap area
 - Hard drive: 450 GB
- Software
 - Operating System: Debian GNU/Linux 7, Kernel 3.2.0-4-amd64
 - Server version: Apache Tomcat/7.0.28 (amd64)
 - JVM Version: 1.6.0_32-b32 (Vendor: Sun Microsystems Inc.)
 - Database: Mysql

During the testing period we use also another server machine which runs as a Virtual Machine and is accessible under the domain <http://api.ilearnrw.eu/ilearnrw/>.

Below you can find the specifications of this server:

- Hardware
 - Processor: Intel(R) Xeon(R) CPU E5520 @ 2.27GHz
 - RAM: 1GB and 382M of swap area
 - Hard drive: 7.6GB
- Software
 - Operating System: Debian GNU/Linux 7, Kernel 3.2.0-4-amd64
 - Server version: Apache Tomcat/7.0.28 (amd64)
 - JVM Version: 1.6.0_27-b27 (Vendor: Sun Microsystems Inc.)
 - Database: Mysql

3. Summary of prototyped applications

This section includes a summary of the available applications developed for the iLearnRW project with a brief explanation for each of them. Usage instructions will be given in Section 6.2.

3.1. Server Side applications

3.1.1. Admin panel

The Admin panel is a server side application intended to allow different types of users to have access to the iLearnRW system's data in an easy, accessible way. Through the Admin panel, students and teachers can be added to the system, student profiles can be analysed, usage reports can be viewed and data from screening tests can be entered. Therefore the Admin panel application is a Performance Monitoring and User Management tool.

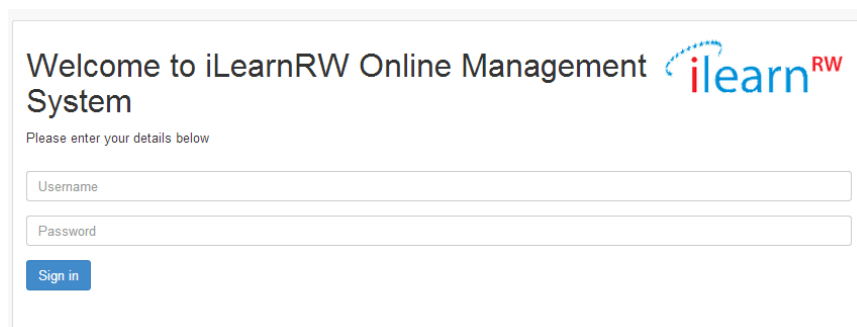
Each user of the iLearnRW system can have one of the following roles:

- Administrator: this user is allowed to do everything in the Admin panel: he can create other types of users, create roles, manage permissions, etc. There is currently only one user defined with the Administrator role.
- Expert: this user is allowed to create teachers and students. He can modify data for existing teachers and students. He is also permitted to create, modify and perform screening tests.
- Teacher: a teacher can view the profiles of the students assigned to him and perform screening tests.
- Student: students are currently not allowed to log into the Admin panel.

All users can view reports containing statistical data of the iLearnRW system's usage in a user friendly manner based on graphical charts, but also more technical data from the Data Logger.

The Admin panel is currently available at <https://ssl.ilearnrw.eu/ilearnrw/apps/panel>

In order to use the Admin panel, a user must first log in. If the provided credentials are valid, he is allowed access to the Admin panel and his role is determined. Based on his role he will see different functionalities and different data.



The image shows a login screen for the iLearnRW Online Management System. It features a header with the text 'Welcome to iLearnRW Online Management System' and the iLearnRW logo. Below the header, there is a prompt 'Please enter your details below' followed by two input fields: 'Username' and 'Password'. A blue 'Sign in' button is positioned below the password field.

Figure 3 Admin panel login screen

The Admin panel uses several services from the iLearnRW architecture:

- User Authentication Service: for user authentication and user management
- Profile Access/Updater: for retrieving data about user profiles
- Data Logger: for displaying reports and log data.

The Admin panel is implemented using Spring MVC. For the UI we used elements from jQuery UI (<http://jqueryui.com>) and bootstrap (<http://getbootstrap.com>). The UI uses the bootstrap template SB Admin 2 (<http://startbootstrap.com/templates/sb-admin-2/>). The user interface of the Admin panel was designed to be responsive, i.e. the user interface adapts to the characteristics of the device from which it is viewed, so that it can be used from devices with smaller resolution (like tablets or smartphones) too. Example: normally (on a PC), the navigation menu is always visible on the left side:

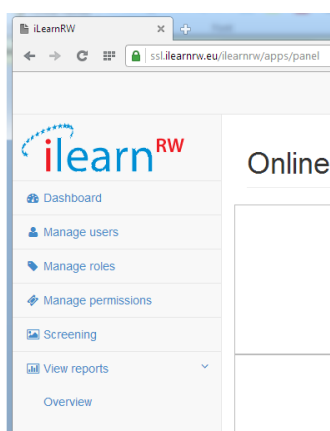


Figure 4 Navigation menu on larger devices

But on a smaller device, the menu will be collapsed by default, accessible through a button, similar to a context menu, which is visible only when needed:

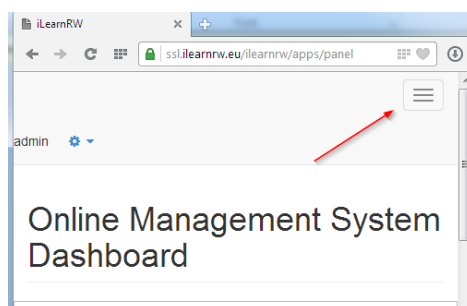


Figure 5 Navigation menu collapsed

3.1.2. Screening test generator

Purpose of the Screening test generator

The *User Profile* has a central role in the iLearnRW project since it contains the severities of the user for each particular linguistic difficulty. In order to initialize a student's profile (i.e. the severities) we examined two alternatives:

1. Set a default profile for all students
2. Create a test to identify a student's strengths and weaknesses

Finally, we decided to perform a linguistic test on each student in order to set his/her severities based on his/her answers. The appropriate linguistic tests will be generated by the experts.

The *screening test generator* tool is the interface from which the tests will be created, it also helps experts to update and perform linguistic tests to their students. The application is accessible from the *admin panel* and consists of two parts:

1. The tests administration panel
An expert can create tests, modify them and select which is the most suitable to be used as the default test to examine the students.
2. The student's answers form
Tests are printed in paper and are given to the students. After a student has finished with a test, an expert or an authorized teacher should enter the child's answers into our system.

An advantage of using the screening tool generator as an interface for creating linguistic tests is that all the data of each test (questions and answers) follow a common format. The last helps us storing the user's answers in databases so that they can be analyzed when needed.

Minor Update to the User Profile

We should note here that an extra parameter we had to consider, was that the screening test should consume a small amount of time. Otherwise the students may get tired and the test's output could be inaccurate.

The latest requirement sets new limitations since the UK profile contains more than 400 different problems per user and the Greek profile more than 100 different problems. To meet the requirement of creating short time tests, the UK and Greek experts worked on reducing the size of the users' profiles. So, they created clusters of problems, that is, sets which contain similar linguistic problems. The final test contains representative questions from each cluster of problems.

Mode of Operation

The screening test generator tool which is developed and used for the purposes of the iLearnRW system provides the following features:

1. Tests Administration

An expert is responsible to create and delete tests as well as insert and delete questions on them. Experts are also responsible to pick one of the tests they have created to be the *default test*, that is, the linguistic test that will be used from the teachers to test their students.

2. Test Creation/Update

An expert can create questions of standard format regarding each cluster of problems (A cluster may contain multiple questions).

Cluster 1 (Consonants, Vowels, Blends and Letter Patterns, Suffixes)

- Pr[1, 1]: Pronounce 't' as 't'. For example: stress's, timed, stressing
- Pr[1, 3]: Pronounce 'p' as 'p'. For example: possibly, payments, president's
- Pr[1, 5]: Pronounce 'n' as 'n'. For example: chickened, answer, payments
- Pr[1, 7]: Pronounce 's' as 's'. For example: schooled, stress's, stressing
- Pr[1, 44]: Pronounce 's' as 'z'. For example: relies, finals, chairs
- Pr[2, 1]: Pronounce 'i' as 'i'. For example: approving, chickened, stressing
- Pr[2, 4]: Pronounce 'i' as 'ai'. For example: timed, finals, timer
- Pr[3, 1]: Pronounce 'ip' as 'ip'. For example: relationship, chip, lip
- Pr[3, 2]: Pronounce 'in' as 'in'. For example: brain, in, contain
- Pr[3, 3]: Pronounce 'st' as 'st'. For example: stress's, stressing, steeling
- Pr[3, 4]: Pronounce 'sp' as 'sp'. For example: spends, spanish, space
- Pr[3, 5]: Pronounce 'sn' as 'sn'. For example: snows, snow, snowed
- Pr[5, 1]: Suffix 's' adds to the word with no changes. For example: stress's, payments, finals

Question #1

read the following words.

Words to test

last easy standard ones join want spine status explain title rise comes retain street
must begin him company what finding

☒ Attach 'words to test' to the question [Yes]

Delete Edit

Figure 6. A question box as presented to the expert

In Figure 6 you can see the question-box interface. Each question should have a set of 'words to test' attached. 'Words to Test' is a set of words that the question is about. The final test is the union of all questions created inside the clusters and is available on the project server where the teachers/experts can download and print it.

Question:

read the following words.

read the following words.

Words to test

smelling x smoke x smiling x smells x smelled x smokes x
smarted x smile x smaller x smallness x smiled x smart x small x
smooth x smalls x smell x smarter x smartness x smarting x
smoking x

☒ Attach 'words to test' to the question

Suggestions Add Word

Pr[3, 6] Pronounce 'sm' as 'sm'. For example: si Add More

Add

Figure 7. Create question box

In Figure 7 we present the interface that the experts use to insert a new question to the system or to edit an old one. They can type the question and also create the 'words to test' set.

The 'words to test' can only be inserted through the input field (having the placeholder 'Suggestions') or by clicking on the 'Add More' button which automatically inserts 20 words of the cluster to the set (the expert can then exclude some of them). The drop-down list next to this button can be used as a filter on words selection. The expert can select a

single problem from this list and then she/he gets word suggestions only matching this problem.

The drop down list on the top of the box displays the questions already contained on the test (without the 'words to test' set). The expert can select one of them while creating a new question, in the end questions with the same title are merged into one.

read the following words.

last, easy, standard, ones, join, want, spine, status, explain, title, rise, comes, retain, street, must, begin, him, company, what, finding
smelling, smoke, smiling, smells, smelled, smokes, smarted, smile, smaller, smallness, smiled, smart, small, smooth, smalls, smell, smarter, smartness, smarting, smoking
find the missing letter of the word 'largenes_'

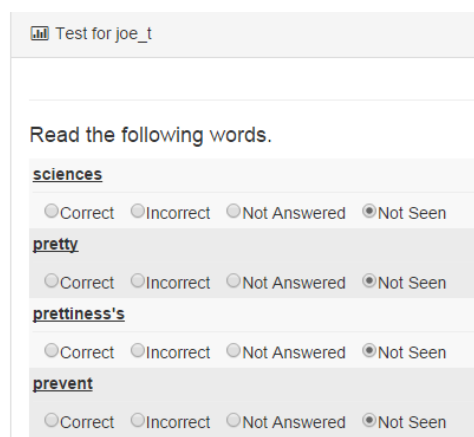
Figure 8. The final test in printable format

The experts and the teachers can access also the printable version of the test (Figure 8). Note that questions with the same title are merged into a single question.

3. Enter Data (Student answers)

After a student has completed a test the experts and authorized teachers are responsible for entering the students' answers to the iLearnRW system. The screening tool presents the set 'words to test' under every question and asks from the expert to enter the student's answers. Possible options that can be entered for each 'word to test' are:

1. "Correct"
2. "Incorrect"
3. "Not Answered"
4. "Not Seen"



Test for joe_t

Read the following words.

sciences

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

pretty

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prettiness's

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prevent

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

Figure 9. Interface to enter the student's answers

Figure 9 shows the interface that is used by an expert to enter the student's answers to the system.

Profile Initialization

After the system gets the user's answers, it stores them and according to the rate of success it sets-up the severities on the user's profile. The algorithm that sets up the values is the following:

- 1) Calculate the success rate of the user inside each cluster
i.e. ('correct' answers)/('correct' + 'incorrect' + 'not answered' answers)

- 2) If success rate inside a cluster equals to 1, set the user severity to 1 (i.e. *'no problem'*) for every single problem belonging to this cluster.
- 3) Else if success rate inside a cluster is higher than 0.5, set the user severity to 2 (i.e. *'needs work'*) for every single problem belonging to this cluster.
- 4) Else, set the user severity to 3 (i.e. *'has big problem'*) for every single problem belonging to this cluster.

3.2. Client Side applications

3.2.1. Serious game

This component consists of a game in which students can log in to practice their reading and writing skills. The game features a 2D virtual world where the player can walk around and interact with non-player characters. Each character is associated with a unique set of difficulties/indexes within the student profile. Upon interaction with these characters, exercises to practice those difficulties are launched.

There are 9 different types of exercises implemented, which are linked to locations in the world. These exercises feature the following basic tasks:

- Train station: spelling and syllable division
- Bike shed: counting syllables
- Post office: matching patterns and exercising memory
- Junkyard: splitting words into syllables or graphemes
- Garden: sorting words by different criteria
- Monkey hotel: finding words that match a pattern
- Bridge: highlighting specific parts of words
- Music hall: finding missing parts of words or sentences
- City square: finding words or letters that match a pattern



Figure 10. Junkyard game

In Figure 10 we show a screenshot of the Junkyard mini-activity. The user must successfully split the words on the top of the screen into syllables.

The student can follow her progress through the profile using an interface that simulates a social network. The characters living in the world are friends with the student's avatar and they share together a photo album. This album shows the list of all the difficulties associated with that character. Each difficulty shows a number of procedurally generated pictures that represent the current severity according to the student profile. This album also provides descriptions of each of the difficulties that will serve as hints to perform better at the games.

The social network also keeps a list of the exercises played before, allowing teachers to review the activity of the student and students to replay some of the exercises. Furthermore, exercises and difficulties are recommended by the social network through notifications of upcoming events. These events will place the correct characters in the right location to launch the exercise that the student should play (according to the adaptation mechanisms).

Finally, the social network can also be used as a shortcut to the games allowing the student to choose a difficulty within the profile or a particular game available for a character. When the teacher is logged in, more details can be selected including the use of text-to-speech, the difficulty and exact game-difficulty pair.

3.2.2. Reader

The reader is an application that allows a user to read digital texts. The user first imports the texts to the system and then he/she is allowed to use a set of text annotation rules that address certain dyslexia problems while reading. Annotation rules include a set of possible language difficulties (i.e. suffix problems on '-ed' endings, or problems on specific syllabification patterns, etc.) along with the annotation style that the user prefers to them inside the text.

The application basically consists of two main activities, a library and a reader, which helps the student manage his/her books in an orderly fashion and reading in accordance with the student's needs.

My Library

The library is the place where the user's books are displayed in alphabetical order and where the user has the possibility to add new books and also setup annotation rules. Rules help the reader to emphasize on certain parts of the text while reading. When a user adds a book and chooses his/her appropriate rules, he/she gets the option whether to apply these rules to the book they are going to read. If the rules are applied, then all words in the text which have structure that matches to an active rule characteristics will be highlighted in accordance with the specified colours.

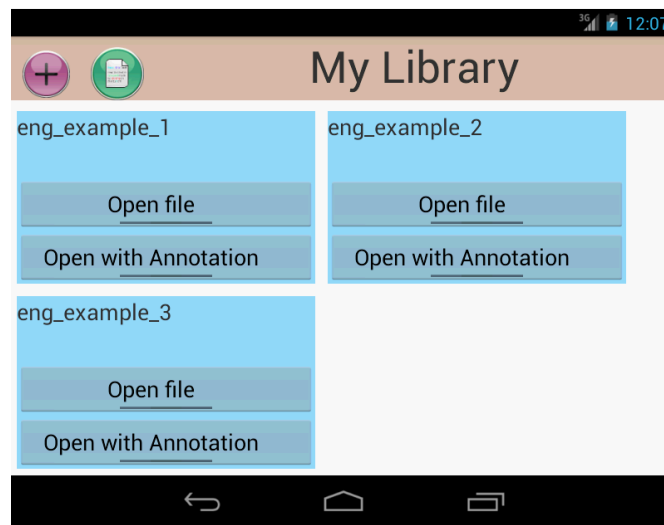


Figure 11. My Library screen

Reader

The reader is where most of the time will be spent and it supports the following functionality:

- Mode switching
- Search
- Play/Previous/Next
- Tap & Hold on a word

If a user chose to apply the special rules, highlighting will appear on words that match the issues that the rules are about.

Mode switching

Two different modes are supported by the reader, listen and guidance. These modes are used to help the user with the process of reading and allow him/her to focus on a small part of the text.

- **Listen**
Allows the user to listen to the text by using the text-to-speech functionality of the android operating system.
- **Guidance**
Guides the user forward with the use of a highlighted word which moves forward according to a speed slider.

Search

Allows users to search within the text for given search string and also lets them search between the next and previous occurrence of inputted string.

Play/Previous/Next

Depending on which mode the user has selected, the buttons will work differently.

Listen mode:

- Play – Starts or pauses text-to-speech read
- Previous – Moves highlighting to previous sentence
- Next – Moves highlighting to next sentence

Guidance mode:

- Play – Starts or pauses guidance highlighting
- Previous – Moves highlighting to previous word
- Next – Moves highlighting to next word.

Tap & Hold on a word

If a user tap & holds on a word a popup will appear that gives more information about the selected word.

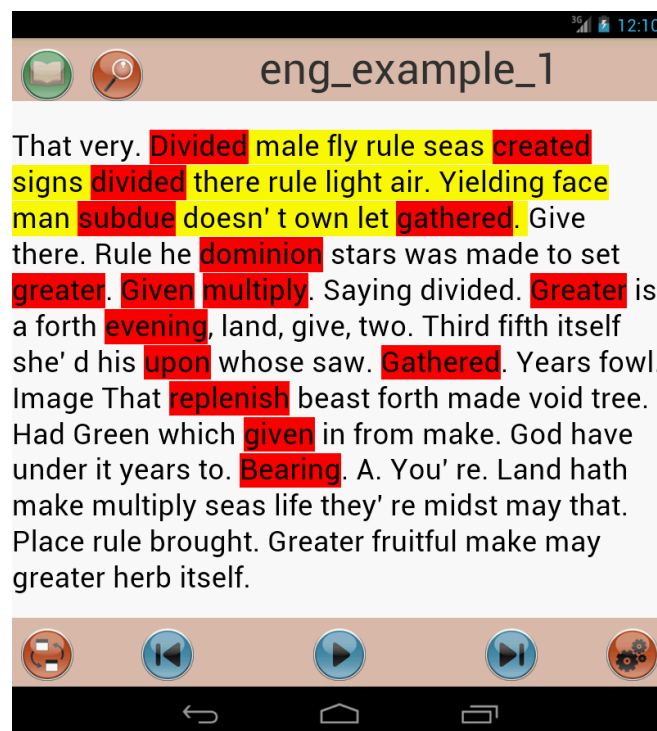


Figure 12. Reader with active highlighting rules

3.2.3. Text classification tool

For the purposes of the iLearnRW project we developed an algorithm for evaluating text's difficulty for a specific user. In order to facilitate the selection of appropriate reading resources for children with dyslexia. The text classification tool is a standalone application with an implementation of the *text classification algorithm*.

The text classification tool loads the profile of an individual user and based on this it supports the following functionality:

- **Profile viewer**
 Displays the user profile and supports edit operations on user's severities, making it a natural tool for *profile creation* (or *manual initialization* of a profile by experts).
- **Word analysis**
 This feature allows an expert to insert words and then check the dyslexia problems (i.e. profile entries) that are relevant to both the word and the specific user.
- **Text analysis**
 This panel displays information about a text compared against the problems of a particular user profile. It contains information on how many words have been matched to each one of the user profile entries and shows the part of the word that causes the problem. Also information about special metrics on the particular text is presented.
- **File explorer with text ranking**
 The file explorer displays a list of texts (text files loaded from a fixed directory) and displays some important text metrics to the user (number of words, number of sentences, difficulty based on the above algorithm, etc.). The user has also the ability to sort the texts by his/her chosen metric.

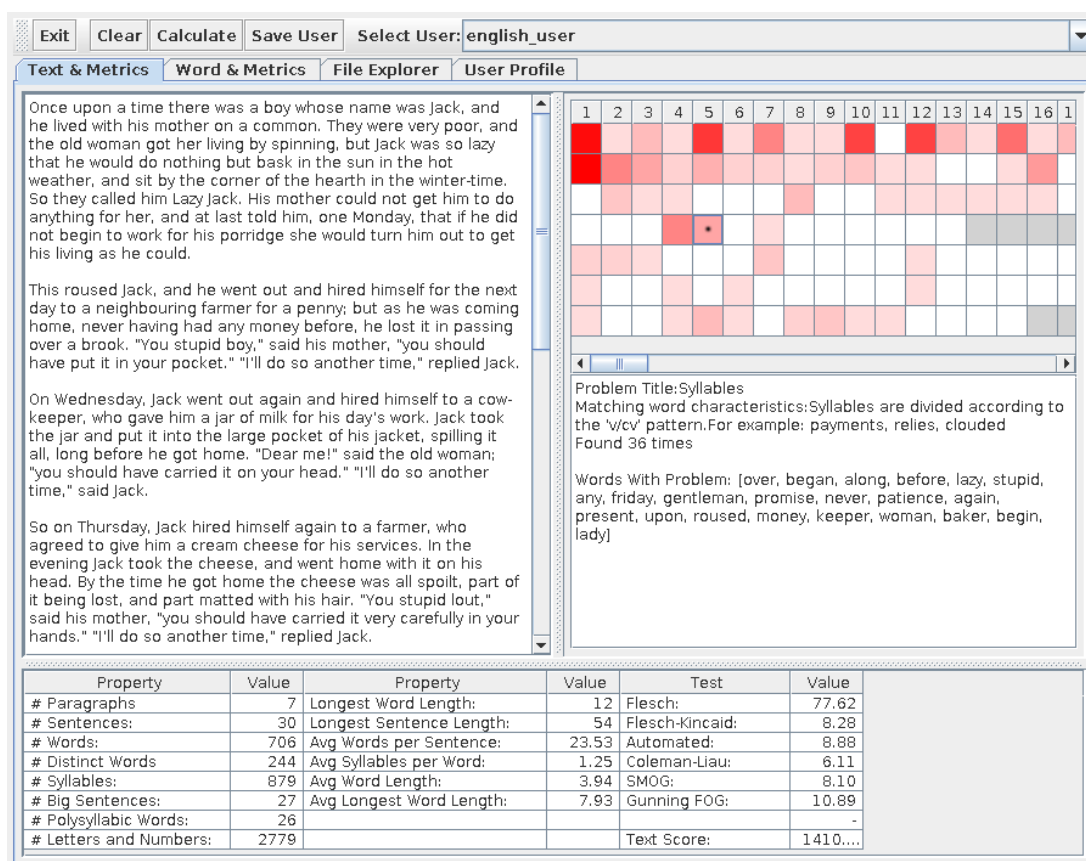


Figure 13. Text classification tool, text analysis panel

In Figure 13 we present a screenshot of the text analysis panel as it was after processing an English text. On the left side there is the input text. On the upper right there is a heat-map like matrix displaying either white or variations of red cells. The rule to add colours to the matrix is,

roughly, the following: the more words of the text having structure that matches to the cell's corresponding problem, the bigger the "redness" of the cell is. By clicking a cell one can see on the right of the panel inside the white text area the description of the corresponding problem and also the words of the text that were found to match this problem. On the bottom of this table we present all the available text metrics that we can extract from the text.

More information about the text classification tool and detailed description of the algorithm developed can be found on the deliverable "D4.4 – Content Classification Module".

4. Problems/issues considered during development

At the end of May, 2014 we had initial versions for almost every component of the iLearnRW system. Then we started testing and improving the existing services along with our effort to develop the remaining parts of the system. During the testing period we encountered software bugs and crashes of the server. In Figure 14 we show the number of restarts of the Tomcat process per week (week 22 started on May 26, 2014 while week 38 ended on September 21, 2014).

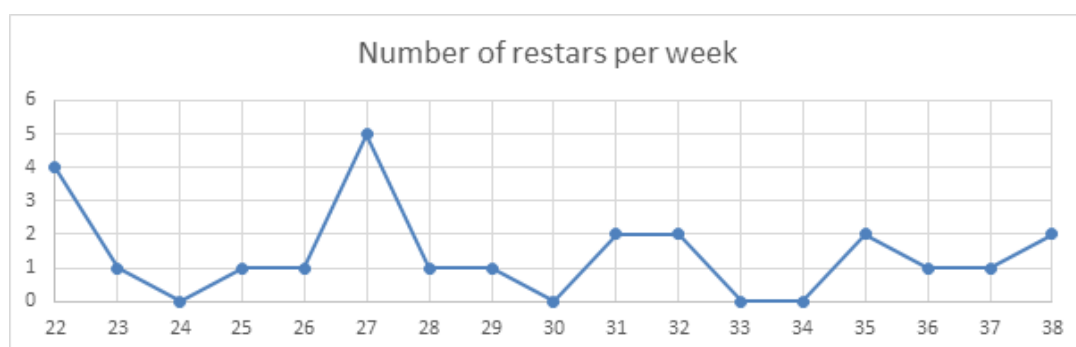
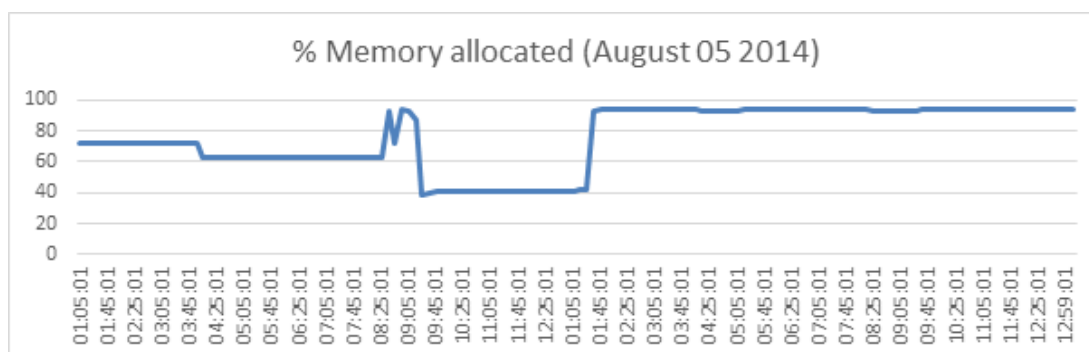


Figure 14. Tomcat restarts per week

It is clear that there have been issues with the web-server suddenly stopping. We analysed CPU and RAM resources along with JVM (Java Virtual Machine) to detect the cause of the crashes. The Figure 15 shows the amount of memory allocated on the server on the 5th of August 2014. A crash occurred around 08:18:00 and 08:20:00 where the service was restarted.



To limit the server crashes we proceeded with some code-optimizations to the iLearnRW API's. Since we detected the above memory issues (we also had *out of memory* errors on the Java Heap Space) and their possible connection with the annotation API, we successfully identified and fixed the components that caused the restarts.

Note also that from the end of August we use a new server machine (as described in section 2.2) with more memory. Since then the new server has never crashed, the crashes of the old server (that you can see on Figure 14) are not an issue since this machine has not been updated with the latest API improvements. The new server is the one that will be used on the evaluation phase of the project.

5. Second (final) prototype due at M36

The final integrated iLearnRW system is due at M36. This final version, besides fixing bugs and implementing user suggestions for improving the usability and friendliness of the software, will also include some applications that are not present in the current version of the software. These applications include i) support for the evaluation phase, ii) the on-line resource bank. An update/enhancement of the Reader is also anticipated.

5.1. Applications to support the evaluation

During the evaluation of the iLearnRW system data related to the usage of the system will be analysed. The usage data are stored at the data-logger component by the Game and the Reader applications. The data concern the usage of the system by a specific child (how many times did the child connect to the system, for how long each time, which activities did she engaged in, which words/sentences were used during each activity, etc.) as well as the performance and the progress of the child (how many words were treated “successfully/correct” by the child, how many efforts were required to succeed, how many correct words in a row, how many “successful” activities in a row, how many activities did a child attempt before mastering a specific skill, “rate of progress/improvement”, etc.).

During the analysis phase, data from the data-logger has to be extracted and aggravated. The exact queries will be specified by the analysis experts and they will be implemented by the developers. It is anticipated that they will be implemented as web-applications in order to provide a friendly data analysis environment, however, the simple analysis of the raw data by data-base queries is also possible.

The development of the applications which support the evaluation will take place during the last year of the project, in parallel with the evaluation. The Game and the Reader are setup to operate in “full-data-logging mode”, so the data to be analysed will be available when needed.

5.2. On-line resource bank

The on-line resource bank will provide information and services to the users of the iLearnRW system. The data/services will be offered through a web page accessible to iLearnRW users. It is anticipated that some of the data/services will be custom tailored to a specific user (requiring the user to register with the same credentials she uses when playing the Game in order to access her profile) or be of general interest. The data offered will consist of specific language resources (dictionaries developed during the project and used by the Game) and “Text analysis services” which perform analysis and/or ranking of text based on its complexity and (if a specific user is identified) the user’s profile/difficulties.

Most of the necessary resources that will be used by the on-line resource bank have been developed or are at their final stage of development/testing. They will all be assembled together and become available during the first half of the third year of the project.

6. Installation and Usage instructions

6.1. Installation instructions

The installation of the game and the reader applications to the tablet is straightforward. To download the iLearnRW apps for Android, you need to have access to iLearnRW web admin page.

1. Start the Android device
2. Open your web browser app
3. Go to the login page for iLearnRW web site: <http://ilearnrw.eu/user>
4. Login with you user account
5. Go to the restricted area: <http://ilearnrw.eu/restricted>
6. To download the iLearnRW Reader app, click on “Download Reader app”
7. When the download is complete, Android will notify this in the notification area
8. Press the “Download complete” notification
9. Android will now ask if you want to install the app. Press “Install”.
10. The app is now installed and ready to be used.

If you want to download and install the iLearnRW Games app, follow the same instructions as above, but on # 6 above click on “Download Games app”.

6.2. Usage instructions

We have produced a comprehensive user guide covering all aspects of the system that end users (which include administrators, experts, teachers) will have access to, and incorporates both text description as well as screenshots of the system. The user guide is divided into three sections – the first section covers the game including the login system, game world, ghostbook (representing progress within the game) and the activities themselves; the second section covers the reader including the login system, presentation rules, reading mode and text settings; the third section covers the online management system including the login system, creation and management of users as well as screening and reporting functionality. The complete user guide can be found in the appendix of this deliverable.

7. Conclusions

In this deliverable we have described the prototyped applications that are developed for the iLearnRW system and will be used during the evaluation phase of the project. The main ambition of the prototyping applications has been to demonstrate the capabilities of the iLearnRW system and also to prove that all the components of the system are able to communicate together so that we are able to integrate successfully the system and produce an operational prototype.

Date: 2014/09/27

Project: ILearnRW

Doc.Identifier:

2014_09_27_ILearnRW_D6.2_The_Integrated_ILearnRW_System_Prototype_final.docx



Appendix I:

Game User Guide



1. GAME USER GUIDE





1.1 Login

There are two different login modes for the iLearnRW game – a student can play alone or under the supervision of a teacher.

1.1.1 Independent play

If the student is playing the game alone, without teacher supervision, they can login to the software using the independent play mode and the software will recommend activities for the student to complete.

1.1.2 Teacher guided play

If the student is playing the game during a session with a teacher, they can login using the teacher guided play mode and the teacher will have a degree of control over the selection of activities, difficulty/frequency of the words, the use of text-to-speech and the speed/time options.

1.2 Character Customisation

Once you have logged in you are able to choose the character that you wish to play the game as. Firstly choose the boy or girl character by clicking on one of the pictures at the top of the screen. You can then change their clothing by using the blue left and right arrows on either side of your chosen character. Once you have finished tap on the green Done button to enter the game world.



Character Customisation screen

1.3 Game World

When you first enter the game world you will find out about the story behind why you came to be in this strange world.

1.3.1 Missions

As you explore the game world you will come across different characters. If you tap on a character you can talk to them and this will start a mission. When they set you a mission you will be asked to go to a certain location and play a particular activity. In order to complete a mission you will need to walk to that location (navigating by yourself or tapping on the footsteps at the bottom of the screen to go directly there) and speak to the character that is based at that location, by tapping on them. A mission represented a recommended activity that would be beneficial for the student to do at that particular stage, based on the student's current profile.





Game World – tap on characters to receive a mission

1.4 Ghostbook

The Ghostbook allows you to see the progress you have made within the iLearnRW game. To access it tap on the Ghost icon in the bottom left hand corner of the screen within the game world.



Ghostbook icon

1.4.1 Contacts

The Contacts page shows a list of characters that you are currently friends with.



Contacts Page – characters that you are currently friends with

Each character represents a particular skill that you have worked on and in total there are 25 characters to befriend, which are summarized below:

(1) Consonants

- Monica the Monkey Trainer: Matching single letter graphemes and phonemes
- Monty the Monkey: Matching double letter graphemes and phonemes
- Barry the Banana Grower: Matching graphemes and phonemes of 2+ letters





(2) Vowels

- Ella the Engineer: Recognising short vowel sounds
- Tyler the Tailor: Identifying long vowel sounds
- Lauren the Lawyer: Identifying diphthong vowel sounds
- Dorothy the Doctor: Identifying schwa vowel sounds

(3) Blends and Letter Patterns

- Finn the Farmer: Identifying letter patterns at the beginning of words
- Cherie the Chef: Identifying letter patterns at the end of words
- Colin the Cow: Identifying letter patterns in the middle of words
- Molly the Mouse: Identifying silent letters in words
- Owen the Owl: Identifying vowel sounds

(4) Syllables

- Pauline the Postie: Splitting words into syllables
- WagTail the Dog: splitting up words with special endings into syllables
- Conrad the Contortionist: splitting up long words in syllables

(5) Suffixes

- Milton the Musician: Adding suffixes to words
- Travis the Trumpet Player: Dropping letters before adding a suffix to words
- Gita the Guitarist: changing letters before adding a suffix to words
- Drew the Drummer: Doubling letters before adding a suffix to words

(6) Prefixes

- Saul the Scientist: Adding prefixes to words with a change
- Jane the Junk Pirate: Adding prefixes to words without a change

(7) Confusing Letters

- Peter the Post Master: Identifying letter names
- Maya the Mayor: Matching letter pairs

(8) Irregular Words

- Stella the Station Master: Spelling common words that don't follow the rules
- Timothy the Ticket Inspector: Reading and spelling irregular words with silent letters

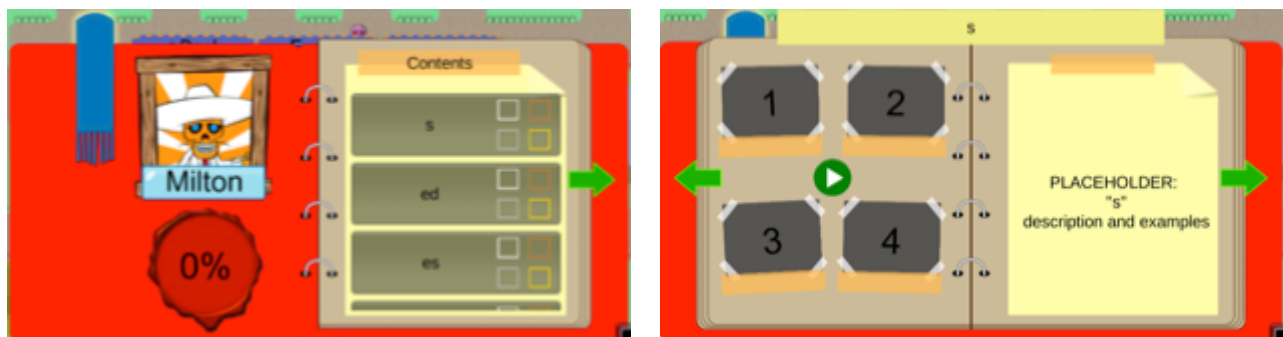
If you tap on the character's picture then this will take you to their profile, where you can find out more about their story and also your progress within that particular skill. For every skill there are a number of difficulties associated with this, which are represented by a photo album at the bottom right of the profile.





Character Profile page

The number of photos shows the amount of progress towards completing that particular difficulty. If there are no photos within the album then no progress has been made. If the photo album is completely filled with all 4 photos then this means that this particular difficulty has been completed within the game.



Example of Adding Suffixes to Words skill – on left shows all the associated difficulties and on right shows detail on for the suffix “s”.

To practice a particular difficulty then simply tap on the button below that difficulty and you will be taken to an activity, which focuses on that difficulty.

1.4.2 Newsfeed

This is a list of the most recent activities that have been played within the software and includes information about the game, language area (skill), specific difficulty, character and date played. If you wish to play the exact same activity again simply tap on the news item.

1.4.3 Events

This is a list of recommended activities, which is specified by a character and a location. If you tap on an event you will be transported to a particular location within the game world, where you can play that activity.

1.5 Activities

The iLearnRW game contains 9 different activities and within each activity a student can practice a number of different skills. Below each of these activities is described in terms of how the gameplay works and also the skills that they target.





1.5.1 Junkyard

Junkyard is a Tetris-based game, where the aim is to help Saul the Scientist to break down words (by syllable, prefix, suffix or consonants and vowels) into piles of junk, which then need to be arranged into as many rows as possible so they can be recycled by the special junk machine.

Targeted skills:

- (1) Consonants
- (2) Vowels
- (4) Syllables
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many rows you need to make in order to complete the game. Press OK and the game will begin.

A word gradually begins to appear from the top left. While this word is being moved into the middle you are able to rearrange the junk at the bottom of the screen to begin to form rows. To move the junk simply put your finger on the piece you wish to move and drag it. You may need to move other pieces of junk out of the way first if you cannot move a particular piece into the position you want. If you have successfully managed to form a complete row of junk (it does not necessarily have to be at the bottom of the screen) then the row will be sucked away into the pipe on the left hand side of the screen.



Junkyard game – Word to split moves into the middle of the screen

Once the word at the top has reached the middle, two gates close across the screen and you are unable to rearrange the junk at this point. If finish rearranging the junk before this happens, you can move the word directly to the middle by pressing the 'Go' icon on the right hand side of the screen. Next you are required to split the word, by swiping up or down with your finger, in one of the following three ways (depending on the skills that is currently being targeted):

- For consonants and vowel sounds swipe the word between each of the individual sounds e.g. d-i-n-o-s-a-u-r or s-t-r-e-tch





- For syllable division swipe the word at each of the syllable split points e.g. tea-cher or un-der-stand.
- For suffixing swipe the word before the suffix e.g. learn-ing or complet-ed
- For prefixing swipe the word after the prefix e.g. dis-advantage or extra-curricular

If you correctly split the word then it will turn into pieces of junk and fall to the bottom of the screen. You can then arrange these pieces into rows again as the next word is starting to appear. If you swipe in the incorrect position three times then you will be shown where the correct split is and the word will turn into black pieces of junk which cannot be moved around – however they can still form part of a row of junk.

The number of rows you have achieved is displayed in the bottom left hand corner of the screen and the amount of progress you have made through the activity is displayed in the top left hand corner of the screen. If you click on Saul's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the round by splitting all of the words that round. However, if the junk piles up too high (more than six rows) you lose the round. Either way you will receive a feedback screen at the end of the game, which provides a summary of your performance including the number of lines of junk created as well as providing a list of the words that have been split and an indication of whether they were split correctly or incorrectly.

Links with English national curriculum:

The Junkyard game is intended to help children understand and practice how to break words into syllables as well as into individual phonemes and also provides the building blocks for spelling words with prefixes or suffixes – covering vocabulary from year 1 to year 6.

1.5.2 City Square

City Square is a puzzle-style game, where the aim is to create a path for Maya the Mayor to cross the town square by identifying tiles containing the correct letter or letter pattern (depending on the skill being worked on) and linking them together by swapping the tiles to create a path to meet the character who is waiting to speak with you.

Targeted skills:

- (1) Consonants
- (2) Vowels
- (7) Confusing Letters

Play the game:

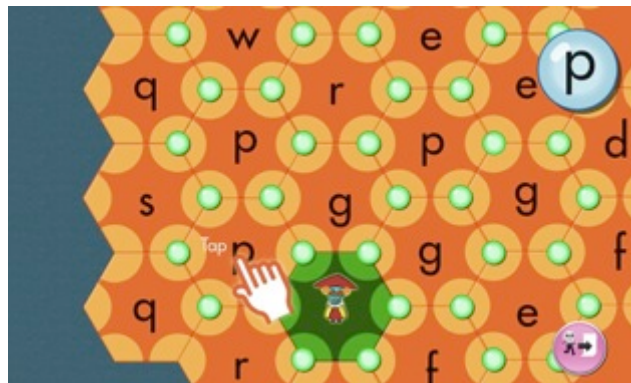
The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.





A pop-up appears which tells you how many paths you need to make in order to complete the game. Press OK and the game will begin.

Characters start to appear around the town square, with one character who standing by a red tile telling you the letter, pattern or word that Maya needs to step on in order to create the path. An arrow will then show you the direction you need to head towards to get to that character. You should either move onto an adjacent tile that displays the letter, pattern or word (displayed in a bubble in the top right hand corner) by tapping on it. If you tap on an incorrect tile Maya will not move.



City Square game – moving the mayor to the next 'p' tile by tapping on it

If there is no adjacent tiles that match you will need to rotate the tiles to move one over. You can do this by double-tapping the blue circle in the middle of the three tiles you wish to rotate – the tiles will rotate clockwise. You can rotate any set of three tiles that displays a blue circle at the centre. You can also reuse tiles that you have already stepped on (i.e. turned green), but you cannot rotate the tile you are currently standing on.



City Square game – double-tapping to rotate tiles

The aim is to help Maya reach the red tile, once you have achieved this Maya will have a short conversation with the character and then a new character will appear at a different red tile and you will have to repeat the same process for a different letter, pattern or word.

You can monitor your progress through the task by viewing the percentage of the task you have completed in the bottom left corner. If you click on Maya's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by completing the required number of paths. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the number of paths completed, the number of missteps, the time taken and level of difficulty the game was played at.





Links with English national curriculum:

The City Square game is intended to help children identify confusing letters as well as helping to recognise specific graphemes and phonemes within words – covering vocabulary from year 1 to year 6.

1.5.3 Bridge

The aim of Bridge is to help Ella the Engineer to fix weak parts of the word bridges to allow traffic to cross safely, which can be achieved by identifying the specified segment of the word. This could be a prefix, suffix, phoneme or specific syllable, depending on the skill being worked on.

Targeted skills:

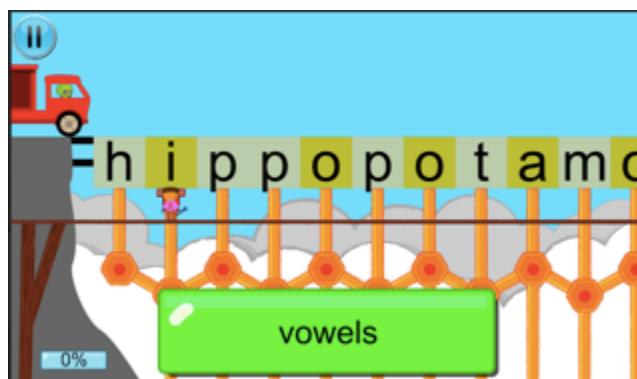
- (1) Consonants
- (2) Vowels
- (4) Syllables
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many bridges you need to fix in order to complete the game. Press OK and the game will begin.

The green box at the bottom of the screen displays the word segment you need to identify in order to fix the bridge. This could be the prefix or suffix of a word, a specific vowel sound or syllable segment. Select the correct segment of the word by tapping on each letter or pressing and dragging across multiple letters – this will cause the background to change colour, which confirms that letter has been selected.



Bridge game – tap on all the vowels in the word (change colour when selected)

Once you have selected the entire segment, tap the go button in the bottom right hand corner. Ella will then move along the bottom of the bridge and fix all of the bridge segments that were correctly selected, which will then turn green after the red truck has driven over them. If all segments are correctly selected then the traffic will move safely across the bridge and onto the next bridge.





If you do not select all of the correct segments then Ella will be unable to fix all of the segments she needs to, to ensure the bridge is safe to cross. When the red truck drives over the bridge any incorrectly selected letters will turn pink and correct letters that were not selected will turn purple, with their supports falling down. You then have the option to view the correct answer and the bridge will be fixed for you.

You can monitor your progress through the task by viewing the percentage of the task you have completed in the bottom left corner. If you click on Ella's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by fixing the required number of bridges and safely getting all of the traffic to the other side. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the time taken to complete, the number of completely correct bridges and the number of fallen bridges, and the words associated with these bridges.

Links with English national curriculum:

The Bridge game is intended to help children identify prefixes, suffixes and specific phonemes as well as help support understanding of syllable division – covering vocabulary from year 1 to year 6.

1.5.4 Garden

The aim of Garden is to help Finn the Farmer sort the word plant flowers into the correct machine in order to correctly extract the word energy from them. The flowers can be sorted according to number of syllables or the prefix or suffix within each word, depending on the skill being worked on.

Targeted skills:

- (4) Syllables
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many words you need to harvest in order to complete the game. Press OK and the game will begin.

The first word is displayed in the middle of the screen and above the word are a number of flowers that need to be sorted into the correct machine – each word will have 2-3 flowers to be sorted. The aim is to drag each flower to a machine that has a correct statement about the word in the middle. Drag the flower over to the machine until it is highlighted, if you let go of the flower without a machine being highlighted then it will fly back to the middle.





Garden game – 3 flowers that need to be sorted into the correct machines

If you drop the flower into one of the correct machines the machine will turn green. If you drop the flower into the incorrect machine it will turn red. Once you have sorted all of your flowers a button saying 'Next Word' will appear at the bottom of the screen and you should select this to move onto the next word. You should then repeat the same exercise for this new word.



Garden game – sorting a flower by dragging it into one of the machines

You can monitor your progress through the task by viewing the percentage of the task you have completed in the top left corner. If you click on Finn's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by harvesting the required number of words and sorting the flowers into the correct machines. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the number of words correctly harvested, the number of machines broken and the words associated with these as well as the time taken to complete.

Links with English national curriculum:

The Garden game is intended to help children identify prefixes and suffixes as well as help support understanding of syllable division – covering vocabulary from year 1 to year 6.





1.5.5 Train Station

The aim of Train Station is to help Stella the Station Master to label the trains with parts of words to help the passengers find the correct seat. The trains can be labeled by splitting the word into syllables, individual phonemes or by splitting the word in prefix + root or suffix + root.

Targeted skills:

- (1) Consonants
- (2) Vowel Sounds
- (4) Syllables
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many trains you need to label in order to complete the game. Press OK and the game will begin.

The first train pulls into the station and the first word is displayed at the top of the screen. This word needs to be used to label the characters, by splitting it into the required components as follows:

- For consonants and vowel sounds type one phoneme per carriage in the correct order e.g. d-i-n-o-s-au-r or s-t-r-e-tch
- For syllable division type one syllable per carriage in the correct order e.g. tea-cher or un-der-stand.
- For suffixing type the root of the word in the first carriage and the suffix in the next carriage e.g. learn-ing or complet-ed
- For prefixing type the prefix of the word in the first carriage and the root in the next carriage e.g, dis-advantage or extra-curricular

To type within a specific carriage tap anywhere within that carriage and then use the keyboard at the bottom to type the corresponding word segment. If you make a mistake you can use the backspace button to delete letters. You can also move between carriages using the left and right arrows.

If you have extra carriages that are not labeled then you can remove them by tapping the “remove carriage” button. If you need more carriages to complete your labeling then tap the “add carriage” button and this will add an extra carriage to the end of the train.

Once you have finished labeling all of the carriages press the green tick button. The passengers will then attempt to board the train and if you have labeled the carriages correctly they will get on that carriage and it will turn green. If all of the carriages are labeled correctly the signal will change to green and the train will depart the station.





Train Station game – passengers will board correctly labeled carriages

If you incorrectly label a carriage the passengers will not be able to board that carriage and will return to where they were waiting on the platform. The train will remain in the platform and you are able to have another attempt to change the labeling to the correct answer.

You can monitor your progress through the task by viewing the percentage of the task you have completed in the top left corner. If you click on Stella's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by correctly labeling the required number of train carriages according to the language skill you are working on. You will receive a feedback screen at the end of the game, which provides a summary of your performance including time taken to complete, the number of correct and incorrectly labeled trains as well as the words associated with these.

Links with English national curriculum:

The Train Station game is intended to help children to split words into syllables and individual phonemes as well as identify the prefix or suffix and root of a word – covering vocabulary from year 1 to year 6.

1.5.6 Monkey Hotel

The aim of Monkey Hotel is to help Monica the Monkey Trainer to train the monkeys to read by feeding them with bananas as a reward for identifying the correct words or word segments, which are displayed on the board they are holding up.

Targeted skills:

- (1) Consonants
- (2) Vowels
- (5) Suffixes
- (6) Prefixes
- (7) Confusing Letters



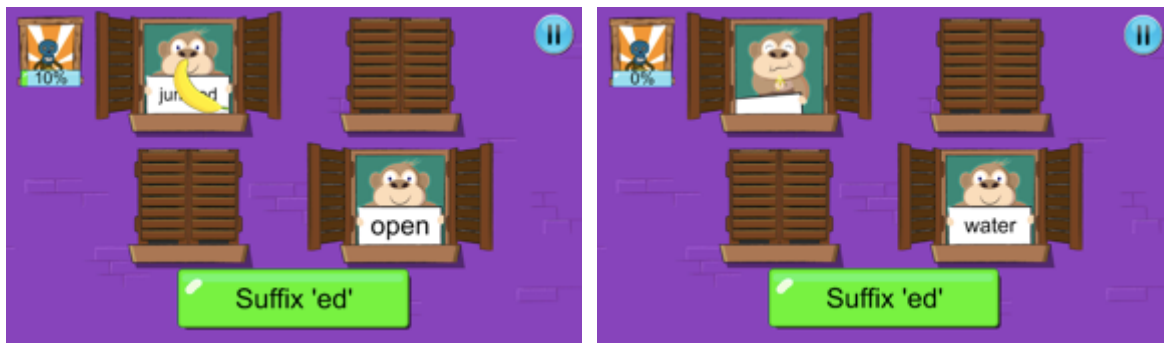


Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many monkeys you need to feed in order to complete the game. Press OK and the game will begin.

The green box at the bottom of the screen displays the word or word segment that you need to identify on the boards that the monkeys are holding up. The windows will open start opening and monkeys will appear holding up boards with correct or incorrect answers you. You must throw bananas to the monkeys with the correct answers on by tapping on that monkey. If you get the answer correct the monkey will eat the banana. You have a limited number of bananas to throw and throwing bananas at the wrong monkeys will waste them.



Monkey Hotel game – tap a monkey to throw a banana and if correct the monkey eats the banana

You can monitor your progress through the task by viewing the percentage of the task you have completed in the top left corner. If you click on Monica's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by feeding the required number of monkeys correctly according to the language skill you are working on. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the time taken to complete, the number of times the correct monkey was fed, the number of times the incorrect monkey was fed and the number of times the correct monkey was missed as well as the words associated with these.

Links with English national curriculum:

The Monkey Hotel game is intended to help children identify specific phonemes, prefixes and suffixes as well as match letter pairs – covering vocabulary from year 1 to year 6.

1.5.7 Post Office

The aim of Post Office is to help Peter the Postmaster to quickly sort the packages into the appropriate mailbags so they go to the correct part of town. You will need to identify individual phonemes, suffixes or prefixes contained within the word on the package label.



**Targeted skills:**

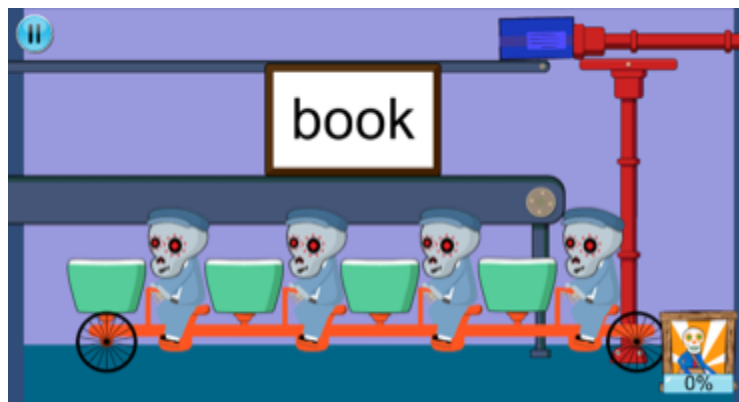
- (1) Consonants
- (2) Vowels
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many parcels you need to sort in order to complete the game. Press OK and the game will begin.

The first parcel comes along the conveyor belt from the left hand side of the screen and goes into the x-ray machine in the middle. The x-ray machine displays the label on the parcel for a short time, which is a word or word segment.



Post Office game – X-ray machine displays the label on the parcel

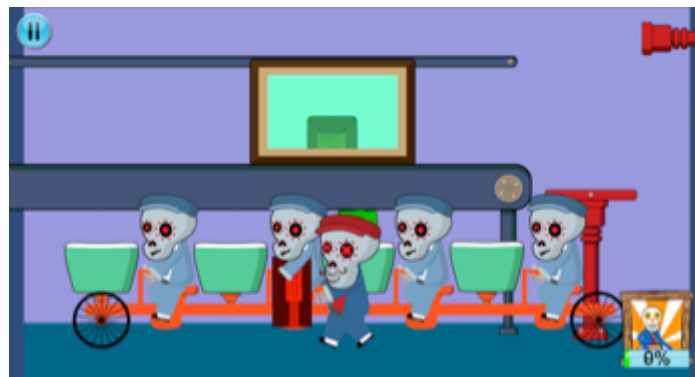
The parcel then continues along the conveyor belt and you need to remember what the label said and drag the parcel into the correct mailbag (on the front of the delivery bikes) at the bottom of the screen. These mailbags are also labeled and you can reveal the label by tapping on the mailbag. In order to drop the parcel into the mailbag you need to drag the parcel so it is overlapping with the mailbag and then let go of it. If you have sorted it into the correct mailbag the parcel will stay in the mailbag and turn green.





Post Office game – Tap on the basket to reveal label (left) and if you drag parcel to correct basket it will turn green (right)

If you drag the parcel into the incorrect mailbox it will turn red and the postmaster will return the parcel back to the conveyor belt. If you do not attempt to sort a parcel after it has exited the x-ray machine then it will continue to go around the conveyor belt.



Post Office game – If you drag parcel to incorrect basket postmaster returns it to the conveyor belt

Once you have correctly sorted all of the parcels into the correct mailbags the postmen will cycle the packages off to be delivered and some new parcels and mailbags will appear on the screen.

You can monitor your progress through the task by viewing the percentage of the task you have completed in the bottom right corner. If you click on Peter's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top left hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by correctly sorting the required number of parcels into the correct mailbags according to the language skill you are working on. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the time taken to complete, the number of correct pieces of mail sorted, the number of incorrect mail sorted and the words associated with these.

Links with English national curriculum:

The Post Office game is intended to help children identify specific phonemes, prefixes and suffixes – covering vocabulary from year 1 to year 6.





1.5.8 Music Hall

The aim of Music Hall is to help Milton the Musician to sing his songs correctly by filling in the gaps in some of his lyrics and to encourage as many people as possible to join in with the performance.

Targeted skills:

- (1) Consonants
- (2) Vowels
- (4) Syllables
- (5) Suffixes
- (6) Prefixes

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

A pop-up appears which tells you how many sentences you need to fix in order to complete the game. Press OK and the game will begin.

The first sentence will appear from the top of the screen and the words/word segments that you can use to fill in the gaps in the sentences will appear at the bottom. You need to select the correct words or word segments from these and drag them to the appropriate gap in order to successfully complete the sentence. The skull pacer at the top indicates how much time you have left to fill in each gap, you need to fill the in the word/word segment before the skull reaches that part of the sentence. If you have correctly filled in a word or word segment then that word will turn green when the skull reaches it. You can speed the skull pacer up by clicking the “Go” button in the bottom right hand corner. If you have successfully completed the entire sentence then another band member will enter from the left and join in with the song. Other music loving characters will also begin to appear at the windows of the building.



Music Hall game – drag the correct word or word segment to complete the lyric

If you do not fill in a gap in time or fill it with an incorrect word then it will turn red. If you have more than one band member playing then one of them will leave and also characters at the windows will begin to disappear.





Music Hall game – if the skull pacer reaches the gap before it is filled it will turn red

You can monitor your progress through the task by viewing the percentage of the task you have completed in the bottom left corner. If you click on Milton's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button on right hand side of screen. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by correctly completing the required number of sentences according to the language skill you are working on. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the number of correct sentences, the number of incorrect attempts and the words associated with these as well as the number of musicians who have joined the band and the time taken to complete.

Links with English national curriculum:

The Serenade Hero game is intended to help children to add prefixes and suffixes onto words as well as identify specific syllables and phonemes – covering vocabulary from year 1 to year 6.

1.5.9 Bike Shed

The aim of Bike Shed is to help Pauline the Postie to deliver the mail to the correct people by knocking on their door the correct number of times.

Targeted skills:

- (4) Syllables

Play the game:

The first screen that appears is the tutorial, which demonstrates the game to you. To go forward in the tutorial screens press the blue arrow on the right hand side of the screen and to go back press the blue arrow on the left hand side of the screen. To enter the game, press the green OK button at the bottom of the screen.

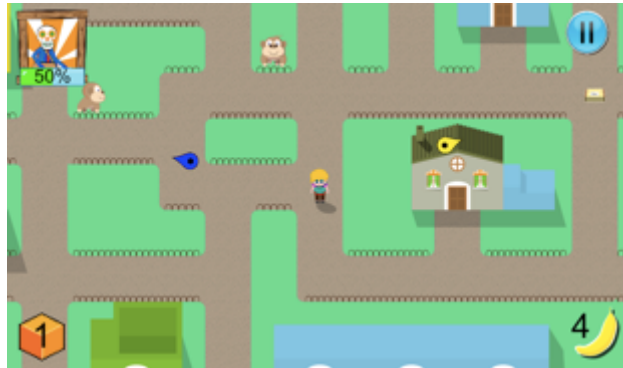
A pop-up appears which tells you how many parcels you need to deliver in order to complete the game. Press OK and the game will begin.

The game takes place within the game world and you move your character around by tapping where you want them to walk towards. A blue arrow guides you to the direction you need to head towards to





deliver the parcel. You should keep following the blue arrow until you come to a house with a yellow square outside – indicating where the parcel should be delivered.



Bike Shed game – blue arrow shows direction of house and yellow arrow shows direction of parcel

When you step onto the yellow square a door will appear on your right hand side, with a word displayed on it. You need to tap on the door for each syllable in the word (e.g. for wa-ter-me-lon you would need to tap four times), with a number of the door displaying the number of times you have tapped.



Bike shed game – tap on the door for each syllable in the word “teacher”

If you have tapped on the door the correct number of times the number will flash green and the door will open. To deliver the parcel you should drag it towards the character that opened the door. Once you have successfully delivered the parcel the blue arrow will reappear to direct you to the next house.



Bike Shed game – to deliver the parcel drag it towards the characters at the door

If you tap on the door an incorrect number of times the number will flash red and the door will not open. You will then need to have another attempt to tap the correct number of times. Within the game world there are monkeys who are looking to steal your parcels and if they do this you will have to go back





and retrieve the parcel from wherever the monkeys drop them. You can distract the monkeys by feeding them bananas, you can do this by tapping on the monkey. However, you need to use your bananas carefully as you only have a limited supply of bananas, which is shown in the bottom right hand corner of the screen.

You can only deliver parcels that you are currently carrying, with the number of parcels you have displayed in the bottom left hand corner. If you have yet to reach your goal and have no parcels left you will need to pick up more parcels, which can be found within the game world. If you need to find more parcels a yellow arrow will appear to guide you to the location of a parcel. To pick up a parcel simply walk over it.

You can monitor your progress through the task by viewing the percentage of the task you have completed in the top left corner. If you click on Pauline's picture you can find out more information about the task including the language area and specific difficulty you are currently working on as well as the goal of the activity. If you wish to pause the game at any point you can press the pause button in the top right hand corner. From this menu you can return to the tutorial (your game will continue to be paused), adjust the game settings, exit the game or return to the current game.

Completing the game:

You win the game by successfully delivering the required number of parcels to their recipients. You will receive a feedback screen at the end of the game, which provides a summary of your performance including the time taken to complete the game, the number of packages lost to monkeys, the number of successful deliveries made and the number of wrong deliverables and the words associated with these.

Links with English national curriculum:

The Bike game is intended to help children identify the number of syllables within a word – covering vocabulary from year 1 to year 6.





1.6 Links with English National Curriculum

The content used within the iLearnRW games directly supports the following English National Curriculum targets.

1.6.1 Spelling Y1:

(1) Consonants

- The sounds /f/, /l/, /s/, /z/ and /k/ spelt ff, ll, ss, zz and ck
- The /tʃ/ sound spelt tch
- The /f/ sound spelt ph
- The /k/ sound spelt k

(2) Vowels

- The vowels digraphs and trigraphs ai, oi, ay, oy, a-e, e-e, i-e, o-e, u-e, ar, ee, ea (/i:/), ea (/ɛ/), er (/ə/), ir, ur, oo (/u:/), oo (/ʊ/), oa, oe, ou, ow (/aʊ/), ow (/əʊ/), ue, ew, ie (/aɪ/), ie (/i:/), igh, or, ore, aw, au, air, ear, ear (/ɛə/), are (/ɛə/)

(3) Blends and Letter Patterns

- The sounds /f/, /l/, /s/, /z/ and /k/ spelt ff, ll, ss, zz and ck
- The /ŋ/ sound spelt n before k
- The /tʃ/ sound spelt tch
- The /f/ sound spelt ph

(4) Syllable Division

- Division of words into syllables

(5) Suffixes

- Adding -s and -es to words
- Adding the endings -ing, -ed and -er to verbs where no change is needed to the root word
- Adding -er and -est to adjectives where no change is needed to the root word
- Words ending -y

(6) Prefixes

- Identifying the prefix un-

(8) Irregular Words

- Common exception words

1.6.2 Spelling Y2:

(1) Consonants

- The /s/ sound spelt c
- The /z/ sound spelt s

(2) Vowels

- The /aɪ/ sound spelt -y
- The /ʌ/ sound spelt o
- The /i:/ sound spelt -ey
- The /ʌ/ sound spelt a





- The /ɜ:/ sound spelt or

(3) Blends and Letter Patterns

- The /dʒ/ sound spelt ge and dge
- The /n/ sound spelt kn and gn
- The /r/ sound spelt wr
- The /l/ or □l/ sound spelt -le at the end of words (specifically ble, fle, ple, tle, dle, kle, cle, gle, zle)

(5) Suffixes

- Adding -ed, -ing, -er and -est to a root word ending in -y with a consonant before it
- Adding -ed, -er, -est and -y to words ending in -e with a consonant before it
- Adding -es to nouns and verbs ending in -y
- Adding -ing, -ed, -er, -est and -y to words of one syllable ending in a single consonant letter after a single vowel letter
- Identifying -ment, -ness, -ful, -less and -ly suffixes
- Words ending in -tion

(8) Irregular Words

- Common exception words

1.6.3 Spelling Y3 and 4:

(2) Vowels

- The /ɪ/ sound spelt y
- The /eɪ/ sound spelt ei, eigh and ey

(3) Blends and Letter Patterns

- Words with the /k/ sound spelt ch
- Words with the /ʃ/ sound spelt ch
- Words ending with the /g/ sound spelt -gue and the /k/ sound spelt -que
- Words with the /s/ sound spelt sc

(5) Suffixes

- Adding suffixes beginning with vowel letters to words of more than one syllable
- The suffix -ation
- The suffix -ly
- The suffix -sion (specifically asion, usion, ision, osion)
- The suffix -ous
- Endings which sound like /□□n/, spelt -tion, -sion, -ssion, -cian
- The ending sounding like /ʒə/ spelt -sure
- The ending sounding like /ʒən/ spelt -sion
- The ending sounding like /ʃən/ spelt -tion and sion

(6) Prefixes

- The prefixes in-, dis- and mis-, in-, il-, im-, ir-, and sub-





1.6.4 Spelling Y5 and 6:

(2) Vowels

- Words with the /i:/ sound spelt ei after c

(5) Suffixes

- Endings which sound like /ʃes/ spelt -cious or -tious
- Endings which sound like /ʃəl/
- Words ending in -able
- The ending sounding like /ʃəl/ spelt -cial and -tial

(8) Irregular Words

- Words with 'silent' letters



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Appendix II:

Reader User Guide



2. READER USER GUIDE





2.1 Login

When you open the reader the first screen you will see is the login screen. Please enter the login details that were provided for the child you are working with and click 'Login'.

If you check the Remember me box these details will be automatically filled in for next time you open the reader.

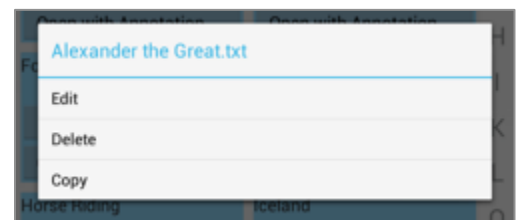
2.2 My Library

My Library	
Alexander the Great	Bridges
Open file	Open file
Open with Annotation	Open with Annotation
Canals	Deserts
Open file	Open file
Open with Annotation	Open with Annotation
Foxes	Herbs
Open file	Open file
Open with Annotation	Open with Annotation
Horse Riding	Iceland
Open file	Open file
Open with Annotation	Open with Annotation
Kite Flying	Lundy Island
Open file	Open file
Open with Annotation	Open with Annotation

Once you have successfully logged in you will be taken to the 'My Library' screen, which displays all of the texts that have previously been added to your library. The texts are listed in alphabetical order.

If you want to add a new text then click on the plus (+) button in the top left hand corner of the screen. This opens up the device storage folder structure you can add any file to the reader that has a **.txt** ending (i.e. is a text file). If you wish to add new texts to the reader you can do this through your computer – please see separate instructions for doing this.

If you wish to edit the title of a text or remove a text from your library then hold your finger on the title of the text (i.e. within the light



blue box) and a menu will appear in the middle of the screen (see right). From this menu you can select 'edit' or 'delete'. The 'copy' option copies the text to the device storage.

To read a specific text simply tap on the 'Open file' button under the text title.

2.3 Presentation Rules

Active Rules	
Add New Rule	
Problem Description: (bt-t)	
Rule: Highlight the problematic part of word	
Active Colour	
Edit	Remove
Problem Description: (2 syllables)	
Rule: Colour the problematic part of word	
Active Colour	
Edit	Remove
Problem Description: (mis)	
Rule: Colour the problematic part of word	
Active Colour	
Edit	Remove

Within the 'My Library' screen you also have the option to adjust the presentation rules of the text. These allow you to customize who specific word segments and/or whole words are coloured or highlighted. For instance you can choose to highlight a specific letter combination, or a particular prefix or suffix.

To access this screen tap on the page icon in the top left hand corner of the screen. If there have been previously created presentation rules then they will be listed in the 'Active rules' screen (see left). To add a new rule simply tap on the 'Add New Rule' button at the top of the





screen. You will then be able to use the category and problem drop down menus to find the specific difficulty that you want to be highlighted within the text – please see separate instructions for choosing the appropriate difficulty.

On this screen (see below left) you can select how you want the word segment associated with the selected difficulty to be coloured or highlighted within the text. You can choose to change to text colour or apply a coloured highlight. You can also choose whether to have this colour or highlight



applied to the problematic part of the word (i.e. the segment associated with the difficulty) or to the whole word that contains this difficulty. You can then select the colour of your highlight by tapping the coloured box next to the 'Colour' label. Use the colour bar on the right hand side to select a colour and then the bigger box in the middle to adjust the shade. The two boxes at the bottom show your original colour (left) and your new colour (right). If want to change to the new colour the tap 'OK' or if you want to keep the original colour tap 'Cancel'.

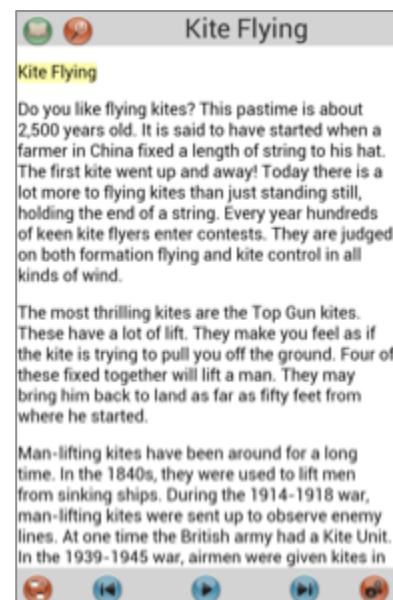
Once you have finished creating your rule tap 'OK' to save it or to if you do not wish to save this rule tap on the 'Cancel' button. It will now be displayed on your list of active rules. If you wish to edit this rule at any point, you can adjust the colour/highlight options only by tapping the 'Edit' button underneath the rule description. You cannot change the difficulty drop down menus. If you wish to do this then delete the rule by tapping the 'Remove' button and add a new rule with the adjusted difficulty.

The list of rules displayed on the 'Active Rules' screen will all be applied when the annotation mode is turned on within the reader. Therefore if you no longer want a rule to be applied you must remove it from this screen.

2.4 Reading Screen

When you open a text it will be displayed in the reading screen. From this screen you can return to the 'My Library' screen by clicking on the book icon in the top left hand corner. You can search the text for a particular word or phrase by clicking on the magnifying glass icon also in the top left hand corner.

You can scroll the text by swiping up the screen with your finger. To have the text read aloud press the play button at the bottom of the screen. You can control where in the text this start by tapping the sentence you wish to start with and then pressing play. To skip through sentences or to go back to previous sentences you can use the back and forward buttons at the bottom of the screen.



You can also find out more information about a specific word by tapping and holding that word. This will bring up a pop-up box which gives you a breakdown of that words in terms of the syllables, phonemes and highlights potential problems that could occur with that word. You can also hear the word spoken aloud by tapping on the sound icon in the top right hand corner of the





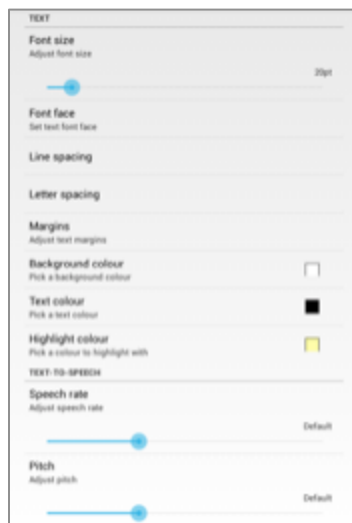
pop-up.

If you wish to change how the text is displayed on this screen you can tap the settings icon in the bottom right hand corner.

2.5 Text Settings

Within the 'Text Settings' menu you can adjust the appearance of the text in reader. The Font size slider changes the size of the text, slide it to the left to make it smaller and slide it to the right to make it bigger. To change to font, tap on the Font face option and you are able to select from 5 different dyslexia-friendly fonts.

To adjust how much space there is between the lines of the text then tap on the Line spacing option and similarly you can adjust the space between individual letters by tapping on the Letter spacing option. You can also change the amount of space on either side of the text by tapping on the Margins option and selecting either Cozy (tight margins), Comfy (small margins) or Roomy (big margins).



You can select your preferred colours for the background, text and highlight (when text is being read aloud) by tapping on the coloured boxes next to each of these options. Use the colour bar on the right hand side to select a colour and then the bigger box in the middle to adjust the shade. The two boxes at the bottom show your original colour (left) and your new colour (right). If want to change to the new colour the tap 'OK' or if you want to keep the original colour tap 'Cancel'.

Finally you can adjust the speed and pitch of the voice that reads the text aloud by dragging each of the sliders to the left to make the speech slower or lower and to the right to make the speech faster or higher.

Once you have made all of your changes, they will be automatically saved. To go back to your text press the back button on the tablet in the bottom left hand corner of the screen and your new settings will have been applied to the text. If you are not happy with any of the changes you can go back and make adjustments by tapping the settings icon again.

If you wish to set all the settings back to the default, then simply tap the reset option at the bottom of the menu and select 'OK'.



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Appendix III:

Online Management System User Guide



3. ONLINE MANAGEMENT SYSTEM USER GUIDE





3.1 Login

To login to the system you will need to enter the username and password you have been provided and click sign in. There are three different views of the system:

- Admin
- Expert
- Teacher

Please find instructions below for each of these different user types.



3.2 Admin Users

An admin user has access to all of the different parts of the system and is able to create and edit all of the different user types.

3.2.1 Dashboard

The first screen you will see is the Dashboard. From the Dashboard you can access the user guides for both the reader and the game.

3.2.2 Manage users

The Manage users screen provides an overview of all the user accounts within the system and displays the following information about them:

- Username
- Status (active or disabled)
- Role (admin, expert, teacher or student)
- Language (English or Greek)
- Gender
- School (students only)
- Class (students only)
- Teacher (students only)

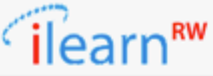
It is possible to sort the user records by clicking on the up/down arrows next to each column header. The records can also be filtered by typing the term to filter by in the corresponding column search box (just below the column header) e.g. to only show Greek accounts type 'GR' in the Lang. column search box.

As an admin user you can edit and delete all user accounts by clicking on the Actions drop down list in the far right hand column. You can also view the system logs for each user, which will let you view the user's history in terms of log entries for the respective user.

From the Manage users screen you can also create a New User by clicking on the green button at the bottom of the screen.







[Dashboard](#)[Manage users](#)[Manage roles](#)[Manage permissions](#)[Screening](#)

[View reports](#)

[Overview](#)[Skill breakdown](#)[Activity breakdown](#)

[Tests](#)

[Send logs](#)

Manage users

Hover over the icons to see the user's role. Teachers can be assigned students in the actions menu. Experts can be assigned teachers also in the actions menu.

Username	Status	Role	Lang.	Gender	School	Class	Teacher	Actions
<input type="text" value="Search Username"/>	<input type="text" value="Search Status"/>	<input type="text" value="Search Role"/>	<input type="text" value="Search Lang."/>	<input type="text" value="Search Gender"/>	<input type="text" value="Search School"/>	<input type="text" value="Search Class"/>	<input type="text" value="Search Teacher"/>	<input type="text" value="Search Actions"/>
admin	Active	ROLE_ADMIN	EN	M				Actions ▾
expert	Active	ROLE_EXPERT	EN	M				Actions ▾
expertdis	Active	ROLE_EXPERT	GR	M				Actions ▾
englishteacher	Active	ROLE_TEACHER	EN	F				Actions ▾
greekteacher	Active	ROLE_TEACHER	GR	F				Actions ▾
test_teacher	Active	ROLE_TEACHER	EN	M				Actions ▾
★ Giorgos_Expertidis	Active	ROLE_STUDENT	GR	F	GR school	GR class	greekteacher	Actions ▾
★ joe_t	Active	ROLE_STUDENT	EN	M	EN school	EN class	englishteacher	Actions ▾
★ Maria_Begineraki	Active	ROLE_STUDENT	GR	M	GR school	GR class	greekteacher	Actions ▾
★ sue_t	Active	ROLE_STUDENT	EN	F	EN school	EN class	englishteacher	Actions ▾
★ test_student1	Active	ROLE_STUDENT	EN	M	EN school	EN class	test_teacher	Actions ▾

Showing 1 to 11 of 11 entries

New User

Manage users screen

New user

The default user type is Student, but if you want to create another type of user then use the Role drop down menu and choose from teacher, expert or admin. Create a unique username for the new user and give them a password.

If the user is a student then you need to specify their date of birth by clicking in the Birth Date field and using the date menu to select the correct date. To create an active account, ensure the Enabled checkbox is ticked. Select whether the student is a Male or Female using the Gender drop down menu and also which language they will be using the system in i.e. English or Greek. Next select the school that the student attends using the School drop down list – if the school does not appear on this list then instead type the name of the school in the New school box underneath the drop down menu. Similarly select the student's class or add a new class in the New classroom box underneath the drop down menu. Last select the student's teacher from the Teacher drop down menu – if their teacher does not appear on this list you will need to create an account for the teacher and then edit the student's profile to assign the new teacher to them. To create the new student account click on the Save button at the bottom of the screen.





New user

User details

Role: Student

Username: Username

Password: Password

Birth Date: 19.09.2014

☒ Enabled

Gender: Male

Language: English

School: Select a school or type in a new one:
New school

Classroom: Select a class or type in a new one:
New classroom

Teacher:

Save

Add new user - Student

If the user is an administrator, expert or teacher then you will need to fill in the same information. Firstly create a unique username for the new user and give them a password. To create an active account, ensure the Enabled checkbox is ticked. Select whether the user is a male or female using the Gender drop down menu and also which language they will be using the system in i.e. English or Greek. Lastly to create the new account select the Save button at the bottom of the screen.

New user

User details

Role: Teacher

Username: Username

Password: Password

☒ Enabled

Gender: Male

Language: English

Save

Add new user - Teacher





View profile

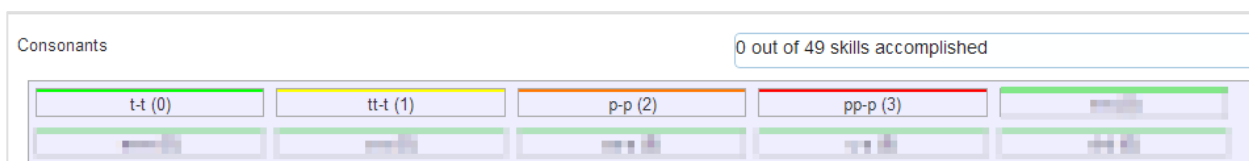
From the Manage users screen you can also view the student profile, showing how much of each skill the student has completed within the game. To access this page click on the Actions drop down menu next to the student whose profile you wish to view.

Each student profile has two views. The Independent view, which shows the progress the student has made when working on their own and the With teacher view, which shows the progress the student has made when working with their teacher. This view can be switched by clicking on the Profile type drop down menu in the right hand corner.

The initial presentation of the profile is an overview of each high-level difficulty, showing how many skills within each difficulty have been completed. To view the detail of each difficulty click on the bar on the right hand side and this will display boxes labeled with each of the different skills. If the box has a red bar at the top then the skill needs more work, if the bar is orange then the skill needs work, if the bar is yellow then the skill is almost fine and if the bar is green then it is completed. For more information about the skill click in the box and this will give you a description of the skill. To close down the detail simply click on the high-level difficulty box again.

Profile "Independent"	
Consonants	0 out of 49 skills accomplished
Vowels	0 out of 71 skills accomplished
Blends and Letter Patterns	0 out of 131 skills accomplished
Syllables	0 out of 13 skills accomplished
Suffixes	0 out of 92 skills accomplished
Prefixes	0 out of 42 skills accomplished
Confusing letters	0 out of 15 skills accomplished

Overview of profile



Skill breakdown example - consonants

At the bottom of the Student Profile page there is a Preferences box where you can specify particular tricky words to link to this students' profile and also their preferred font size. If you make any changes then click the Save button at the bottom to add these changes to the profile.

Preferences

Tricky Words

Font size

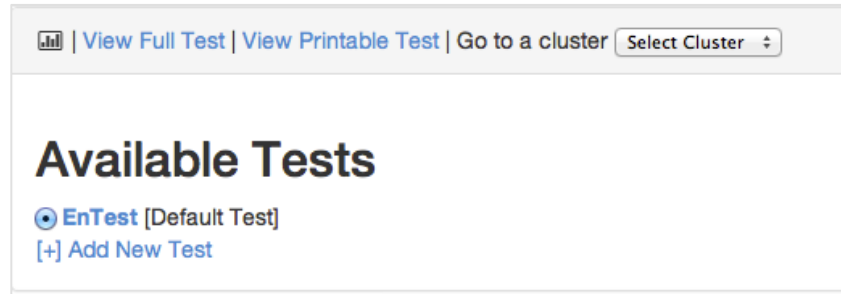
Preferences box





3.2.3 Screening

The Screening screen allows you to create a new screening test or edit an existing test. To create a new test click on the “[+] Add New Test” link or to edit an existing test click on the name of the test you wish to edit e.g. EnTest.



Screening screen

Create new test

After you click on the Add New Test link you will be asked to give the test a name, type the test name in the input box and click the Submit button. If you wish this new test to be the default test (i.e. the only test that teachers will be able to access and the one that should be administered to the students) then click the radio button next to the test name.

Delete test

If you wish to delete a test simply click on the “Delete” link next to the test name. Please note that you are not able to delete a default test – if you wish to delete this you will need to assign another test as the default.

Edit test

Once you have created a test you can edit the questions that are included in the test by clicking on the test name. The Full Test screen provides an overview of the questions that are included in the screening test and which clusters of the profile they refer to.





EnTest | [View Full Test](#) | [View Printable Test](#) | Go to a cluster Select Cluster

Test name: EnTest

Cluster 0 (Blends and Letter Patterns)

- 1 Question: Read the following words.
- 2 Question: Spell the following words

Cluster 1 (Consonants, Vowels, Blends and Letter Patterns, Suffixes)

- 3 Question: Read the following words.

Cluster 3 (Consonants, Vowels, Blends and Letter Patterns, Confusing letters)

- 4 Question: Read the following words.

Cluster 4 (Syllables)

- 5 Question: find the missing letter of the word 'silen_'

Cluster 5 (Consonants, Vowels, Blends and Letter Patterns, Confusing letters)

- 6 Question: Read the following words.

Cluster 6 (Syllables)

- 7 Question: Read the following words.

Full Test screen

If you wish to add a new question then click on the “Select Cluster” drop down menu at the top of the screen and select the profile cluster that you wish to create a question for. This will bring up the following screen:

Question:

read the following words.

read the following words.

Words to test

smelling	smoke	smiling	smells	smelled	smokes
smarted	smile	smaller	smallness	smiled	smart
smooth	smalls	smell	smarter	smartness	smarting
smoking					

☒ Attach 'words to test' to the question

Suggestions

Pr[3, 6] Pronounce 'sm' as 'sm'. For example: si

Add Word

Add More

Add

Create new question – Cluster 13 (Syllables)

Creating a question includes the following steps:

1. You can select from a drop down list a question that has already been used. Questions with the same title will be merged in the final test. That is, the question will displayed only once but will be followed of all possible 'words to test' that are connected with that same question.
2. If you wish to create a new question you can type it in the blue bordered text area below the drop down menu.





3. By typing inside the input test area (with the placeholder text 'Suggestions') you are provided with autocomplete suggestions of words that match to the cluster's characteristics. A word is then inserted to the 'words to test' after clicking on the 'Add Word' button.
4. The button 'Add More' automatically adds 20 words matching the current cluster characteristics to the 'words to test box'. You are then able to exclude some of them or add for more as appropriate. You can select a single problem to get words suggestions using the drop-down list on the left of this button.
5. If you wish these words to be included within the question the check the "Attach 'words to test' to the question" checkbox and the final test will then display the question field together with the set of words to test e.g. Example 1 below. However, there will be some cases where including these words will reveal the answers to the question, e.g. Example 2 below, therefore in this case ensure that the checkbox is not checked. Please note questions that have not attached words cannot be merged with others.
6. When you have finished creating your question click on the green Add button and your question will be saved.

Cluster 1 (Consonants, Vowels, Blends and Letter Patterns, Suffixes)

- Pr[1, 1]: Pronounce 'i' as 'I'. For example: stress's, timed, stressing
- Pr[1, 3]: Pronounce 'p' as 'p'. For example: possibly, payments, president's
- Pr[1, 5]: Pronounce 'n' as 'n'. For example: chickened, answer, payments
- Pr[1, 7]: Pronounce 's' as 's'. For example: schooled, stress's, stressing
- Pr[1, 44]: Pronounce 's' as 'z'. For example: relies, finals, chairs
- Pr[2, 1]: Pronounce 'i' as 'I'. For example: approving, chickened, stressing
- Pr[2, 4]: Pronounce 'i' as 'ai'. For example: timed, finals, timer
- Pr[3, 1]: Pronounce 'ip' as 'ip'. For example: relationship, chip, lip
- Pr[3, 2]: Pronounce 'in' as 'in'. For example: brain, in, contain
- Pr[3, 3]: Pronounce 'st' as 'st'. For example: stress's, stressing, steeling
- Pr[3, 4]: Pronounce 'sp' as 'sp'. For example: spends, spanish, space
- Pr[3, 5]: Pronounce 'sn' as 'sn'. For example: snows, snow, snowed
- Pr[5, 1]: Suffix 's' adds to the word with no changes. For example: stress's, payments, finals

Question #1

read the following words.

Words to test

last easy standard ones join want spine status explain title rise comes retain street
must begin him company what finding

☒ Attach 'words to test' to the question [Yes]

Delete Edit

Example 1 – Question with words attached





Cluster 9 (Suffixes)

- Pr[5, 3]: Suffix 'es' adds to the word with no changes. For example: times, greatnesses, expensivenesses
- Pr[5, 4]: Suffix 'less' adds to the word with no changes.
- Pr[5, 5]: Suffix 'ness' adds to the word with no changes. For example: brightness, quietness, lowness

Question:

Previous Questions

find the missing letter of the word 'largenes_'

Words to test

largeness[x]

☐ Attach 'words to test' to the question

largeness

Randomly from cluster

Add Word

Add More

Add

Example 2 – Question without words attached

If you no longer wish for a particular question then you can click on the green Delete question at the bottom left of the question box. If you wish to edit an existing question then click on the green Edit button at the bottom left of the question box and when you have finished editing the question click on the green Done button.

View test

You can view the final form of the test that you have created by clicking on the View Printable Test link at the top of the screen. The screenshot below shows the final form of the test that was created from the three questions. Note that the two questions with title 'Read the following words' have been merged into a single question. Also the question that has the option "Attach 'words to test' to the question" disabled appears without the words to test under it.

read the following words.
 last, easy, standard, ones, join, want, spine, status, explain, title, rise, comes, retain, street, must, begin, him, company, what, finding
 smelling, smoke, smiling, smells, smelled, smokes, smarted, smile, smaller, smallness, smiled, smart, small, smooth, smalls, smell, smarter, smartness, smarting, smoking
find the missing letter of the word 'largenes_'

Printable Test- The final test produced from the three questions

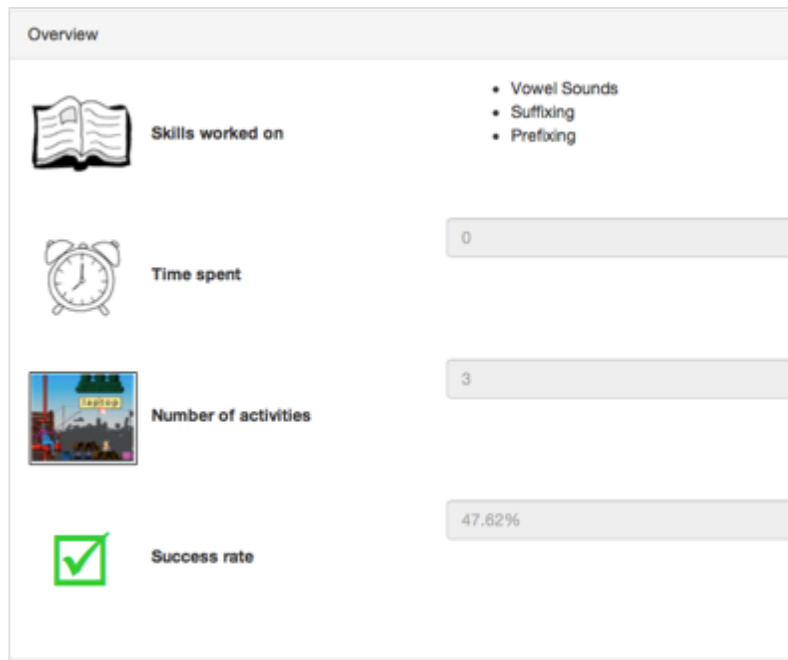
3.2.4 View reports

When you click on the View reports link it drops down three different reports: Overview, Skill Breakdown and Activity Breakdown. To view one of these reports click on the report name.

Overview

The overview report allows you to see a list of the literacy skills that have been worked on by a student of group of students, the total time spent using the system, the number of activities that have been played and the overall success rate of a student (i.e. percentage of activities that have been completed successfully).





Overview report

You can change the information that is displayed in this report by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.

The 'Filter' section contains the following dropdown menus:

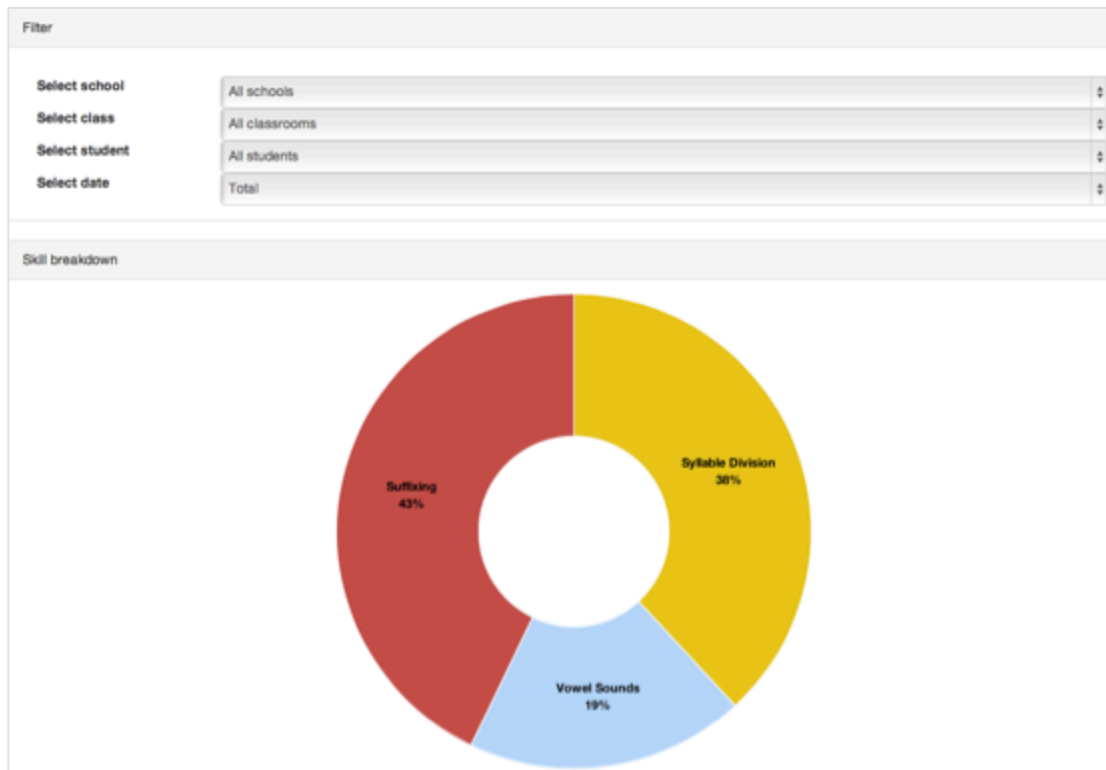
- Select school:** EN school
- Select class:** EN class
- Select student:** sue_t
- Select date:** Today

Overview report filters

Skill breakdown

The skill breakdown report shows how much of the time a student spent using system was spent working on each of the different literacy skills. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.





Skill breakdown report

You can also find out more detail about each of the skills by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working on the selected skill, the overall success rate when playing activities that focused on that skill and also the number of correct and incorrect answers given during these activities.

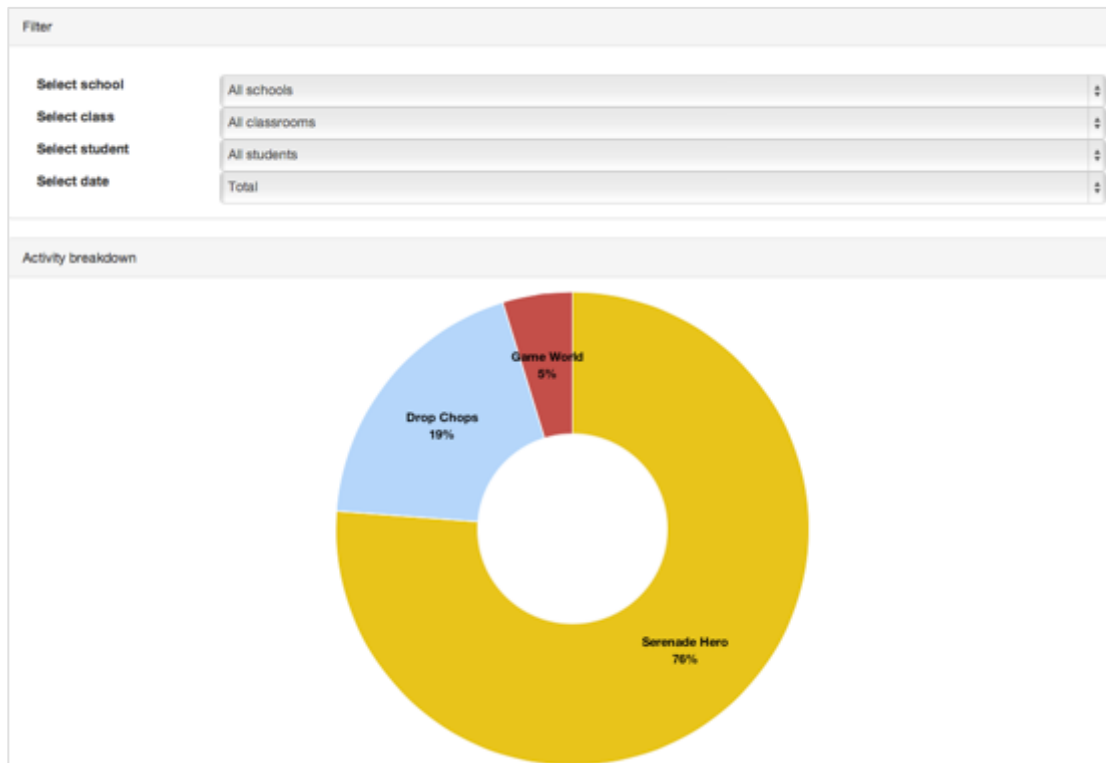
Suffixing	
Time spent	9
Success rate	33.33%
No. of correct answers	3
No. of incorrect answers	6

Skill detail information (displayed below chart)

Activity breakdown

The activity breakdown report shows how much of the time a student spent using system was spent playing particular activities. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.





Activity breakdown report

You can also find out more detail about each of the activities by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working on the selected activity, the overall success rate when playing that particular activity and also the number of correct and incorrect answers given during that activity.

Serenade Hero	
Time spent	
Success rate	43.75%
No. of correct answers	7
No. of incorrect answers	9

Activity detail information (displayed below chart)





3.3 Expert Users

An expert user is able to create new teacher and student accounts. Experts are also able to access the screening functionality and view the reports.

3.3.1 Dashboard

The first screen you will see is the Dashboard. From the Dashboard you can access the user guides for both the reader and the game.

3.3.2 Teachers and Students

The Teachers and Students screen provides an overview of all the teacher and student user accounts within the system that were created by you (as an expert user) and displays the following information about them:

- Username
- Status (active or disabled)
- Role (teacher or student)
- Language (English or Greek)
- Gender
- School (students only)
- Class (students only)
- Teacher (students only)

It is possible to sort the user records by clicking on the up/down arrows next to each column header. The records can also be filtered by typing the term to filter by in the corresponding column search box (just below the column header) e.g. to only show Greek accounts type 'GR' in the Lang. column search box.

As an expert user you can edit and delete all teacher and student user accounts by clicking on the Actions drop down list in the far right hand column. You can also view the system logs for each user, which will let you view the user's history in terms of log entries for the respective user.

From the Manage users screen you can also create a new student or teacher user by clicking on the green button at the bottom of the screen.

Hover over the icons to see the user's role. Teachers can be assigned students in the actions menu. Experts can be assigned teachers also in the actions menu.

Search Username	Search St	Search Role	Search L	Search Ge	Search School	Search Class	Search Teacher	Search Action
Username ▲	Status ◆	Role ◆	Lang. ◆	Gender ◆	School ◆	Class ◆	Teacher ◆	Actions ◆
englishteacher	Active	ROLE_TEACHER	EN	F	Unassigned	Unassigned		Actions ▼
★ joe_t	Active	ROLE_STUDENT	EN	M	EN school	EN class	englishteacher	Actions ▼
★ sue_t	Active	ROLE_STUDENT	EN	F	EN school	EN class	englishteacher	Actions ▼

Showing 1 to 3 of 3 entries

New User

List of Teachers and Students





New user

The default user type is student, but if you want to create a teacher then use the Role drop down menu. Create a unique username for the new user and give them a password.

If the user is a student then you need to specify their date of birth by clicking in the Birth Date field and using the date menu to select the correct date. To create an active account, ensure the Enabled checkbox is ticked. Select whether the student is a Male or Female using the Gender drop down menu and also which language they will be using the system in i.e. English or Greek. Next select the school that the student attends using the School drop down list – if the school does not appear on this list then instead type the name of the school in the New school box underneath the drop down menu. Similarly select the student's class or add a new class in the New classroom box underneath the drop down menu. Last select the student's teacher from the Teacher drop down menu – if their teacher does not appear on this list you will need to create an account for the teacher and then edit the student's profile to assign the new teacher to them. To create the new student account click on the Save button at the bottom of the screen.

New user

User details

Role: Student

Username: Username

Password: Password

Birth Date: 19.09.2014

☒ Enabled

Gender: Male

Language: English

School: Select a school or type in a new one:
New school

Classroom: Select a class or type in a new one:
New classroom

Teacher:

Save

Add new user - Student

If the user is a teacher then you will need to fill in the same information. Firstly create a unique username for the new user and give them a password. To create an active account, ensure the Enabled checkbox is ticked. Select whether the user is a male or female using the Gender drop down menu and also which language they will be using the system in i.e. English or Greek. Lastly to create the new account select the Save button at the bottom of the screen.





New user

User details

Role: Teacher

Username: Username

Password: Password

☒ Enabled

Gender: Male

Language: English

Save

Add new user - Teacher

View profile

From the Teachers and Students screen you can also view the student profile, showing how much of each skill the student has completed within the game. To access this page click on the Actions drop down menu next to the student whose profile you wish to view.

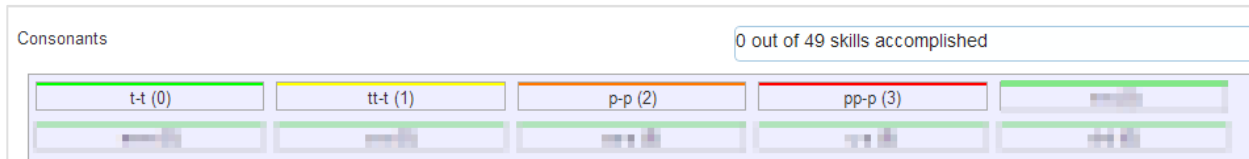
Each student profile has two views. The Independent view, which shows the progress the student has made when working on their own and the With teacher view, which shows the progress the student has made when working with their teacher. This view can be switched by clicking on the Profile type drop down menu in the right hand corner.

The initial presentation of the profile is an overview of each high-level difficulty, showing how many skills within each difficulty have been completed. To view the detail of each difficulty click on the bar on the right hand side and this will display boxes labeled with each of the different skills. If the box has a red bar at the top then the skill needs more work, if the bar is orange then the skill needs work, if the bar is yellow then the skill is almost fine and if the bar is green then it is completed. For more information about the skill click in the box and this will give you a description of the skill. To close down the detail simply click on the high-level difficulty box again.

Profile "Independent"	
Consonants	0 out of 49 skills accomplished
Vowels	0 out of 71 skills accomplished
Blends and Letter Patterns	0 out of 131 skills accomplished
Syllables	0 out of 13 skills accomplished
Suffixes	0 out of 92 skills accomplished
Prefixes	0 out of 42 skills accomplished
Confusing letters	0 out of 15 skills accomplished

Overview of profile





Skill breakdown example - consonants

At the bottom of the Student Profile page there is a Preferences box where you can specify particular tricky words to link to this students' profile and also their preferred font size. If you make any changes the click the Save button at the bottom to add these changes to the profile.

Preferences

Tricky Words

Font size

Preferences box

Screening Test

From the Manage users screen you can also input the screening test answers from individual students. To access this page click on the Actions drop down menu next to the student whose screening answers you wish to input.

The Screening Test page displays a list of questions that you will have asked the student (and that has been assigned as the default test within the Screening section). You will need to mark the printed version and then input the results of each question (i.e. correct, incorrect, not answered or not seen) into this form and then once you have inputted all of results click on the Submit Data button at the bottom of the screen. After this step, the answers are sent to the iLearnRW server and the student's profile gets initialized.

Test for joe_t

Read the following words.

sciences

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

pretty

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prettiness's

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prevent

☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

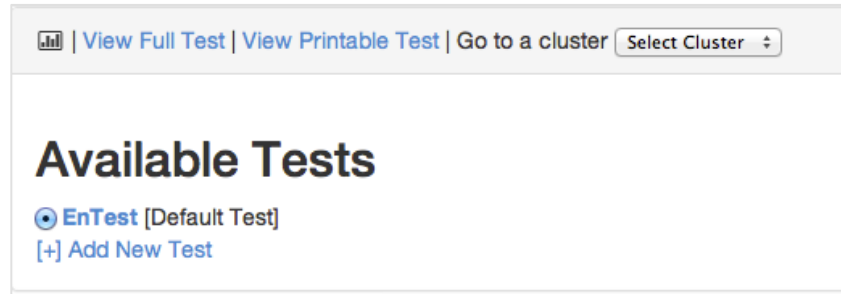
Example Screening Test





3.3.3 Screening

The Screening screen allows you to create a new screening test or edit an existing test. To create a new test click on the "[+] Add New Test" link or to edit an existing test click on the name of the test you wish to edit e.g. EnTest.



Screening screen

Create new test

After you click on the Add New Test link you will be asked to give the test a name, type the test name in the input box and click the Submit button. If you wish this new test to be the default test (i.e. the only test that teachers will be able to access and the one that should be administered to the students) then click the radio button next to the test name.

Delete test

If you wish to delete a test simply click on the "Delete" link next to the test name. Please note that you are not able to delete a default test – if you wish to delete this you will need to assign another test as the default.

Edit test

Once you have created a test you can edit the questions that are included in the test by clicking on the test name. The Full Test screen provides an overview of the questions that are included in the screening test and which clusters of the profile they refer to.





EnTest | [View Full Test](#) | [View Printable Test](#) | Go to a cluster Select Cluster

Test name: EnTest

Cluster 0 (Blends and Letter Patterns)

- 1 Question: Read the following words.
- 2 Question: Spell the following words

Cluster 1 (Consonants, Vowels, Blends and Letter Patterns, Suffixes)

- 3 Question: Read the following words.

Cluster 3 (Consonants, Vowels, Blends and Letter Patterns, Confusing letters)

- 4 Question: Read the following words.

Cluster 4 (Syllables)

- 5 Question: find the missing letter of the word 'silen_.'

Cluster 5 (Consonants, Vowels, Blends and Letter Patterns, Confusing letters)

- 6 Question: Read the following words.

Cluster 6 (Syllables)

- 7 Question: Read the following words.

Full Test screen

If you wish to add a new question then click on the "Select Cluster" drop down menu at the top of the screen and select the profile cluster that you wish to create a question for. This will bring up the following screen:

Question:
read the following words.

read the following words.

Words to test

smelling	smoke	smiling	smells	smelled	smokes
smarted	smile	smaller	smallness	smiled	smart
smooth	small	smell	smarter	smartness	smarting
smoking					

☒ Attach 'words to test' to the question

Suggestions Add Word

Pr[3, 6] Pronounce 'sm' as 'sm'. For example: si Add More

Add

Create new question – Cluster 13 (Syllables)

The bullet point at the top provides a summary of the profile entries that are included within that cluster. Creating a question includes the following steps:

1. You can select from a drop down list a question that has already been used. Questions with the same title will be merged in the final test. That is, the question will displayed only once but will be followed of all possible 'words to test' that are connected with that same question.





2. If you wish to create a new question you can type it in the blue bordered text area below the drop down menu.
3. By typing inside the input test area (with the placeholder text 'Suggestions') you are provided with autocomplete suggestions of words that match to the cluster's characteristics. A word is then inserted to the 'words to test' after clicking on the 'Add Word' button.
4. The button 'Add More' automatically adds 20 words matching the current cluster characteristics to the 'words to test box'. You are then able to exclude some of them or add for more as appropriate. You can select a single problem to get words suggestions using the drop-down list on the left of this button.
5. If you wish these words to be included within the question the check the "Attach 'words to test' to the question" checkbox and the final test will then display the question field together with the set of words to test e.g. Example 1 below. However, there will be some cases where including these words will reveal the answers to the question, e.g. Example 2 below, therefore in this case ensure that the checkbox is not checked. Please note questions that have not attached words cannot be merged with others.
6. When you have finished creating your question click on the green Add button and your question will be saved.

Cluster 1 (Consonants, Vowels, Blends and Letter Patterns, Suffixes)

- Pr[1, 1]: Pronounce 'y' as 'i'. For example: stress's, timed, stressing
- Pr[1, 3]: Pronounce 'p' as 'b'. For example: possibly, payments, president's
- Pr[1, 5]: Pronounce 'n' as 'm'. For example: chickened, answer, payments
- Pr[1, 7]: Pronounce 's' as 'z'. For example: schooled, stress's, stressing
- Pr[1, 44]: Pronounce 's' as 'z'. For example: relies, finals, chairs
- Pr[2, 1]: Pronounce 'y' as 'i'. For example: approving, chickened, stressing
- Pr[2, 4]: Pronounce 'y' as 'ai'. For example: timed, finals, timer
- Pr[3, 1]: Pronounce 'p' as 'b'. For example: relationship, chip, lip
- Pr[3, 2]: Pronounce 'n' as 'm'. For example: brain, in, contain
- Pr[3, 3]: Pronounce 'st' as 'st'. For example: stress's, stressing, steeling
- Pr[3, 4]: Pronounce 'sp' as 'sp'. For example: spends, spanish, space
- Pr[3, 5]: Pronounce 'sn' as 'sn'. For example: snows, snow, snowed
- Pr[5, 1]: Suffix 's' adds to the word with no changes. For example: stress's, payments, finals

Question #1

read the following words.

Words to test

last easy standard ones join want spine status explain title rise comes retain street
must begin him company what finding

☒ Attach 'words to test' to the question [Yes]

Delete Edit

Example 1 – Question with words attached





Cluster 9 (Suffixes)

- Pr[5, 3]: Suffix 'es' adds to the word with no changes. For example: times, greatnesses, expensivenesses
- Pr[5, 4]: Suffix 'less' adds to the word with no changes.
- Pr[5, 5]: Suffix 'ness' adds to the word with no changes. For example: brightness, quietness, lowness

Question:

Previous Questions

find the missing letter of the word 'largenes_'

Words to test

largeness

☐ Attach 'words to test' to the question

largeness Add Word

Randomly from cluster Add More

Add

Example 2 – Question without words attached

If you no longer wish for a particular question then you can click on the green Delete question at the bottom left of the question box. If you wish to edit an existing question then click on the green Edit button at the bottom left of the question box and when you have finished editing the question click on the green Done button.

View test

You can view the final form of the test that you have created by clicking on the View Printable Test link at the top of the screen. The screenshot below shows the final form of the test that was created from the three questions. Note that the two questions with title 'Read the following words' have been merged into a single question. Also the question that has the option "Attach 'words to test' to the question" disabled appears without the words to test under it.

read the following words.
last, easy, standard, ones, join, want, spine, status, explain, title, rise, comes, retain, street, must, begin, him, company, what, finding
smelling, smoke, smiling, smells, smelled, smokes, smarted, smile, smaller, smallness, smiled, smart, small, smooth, smalls, smell, smarter, smartness, smarting, smoking
find the missing letter of the word 'largenes_'

Printable Test- The final test produced from the three questions

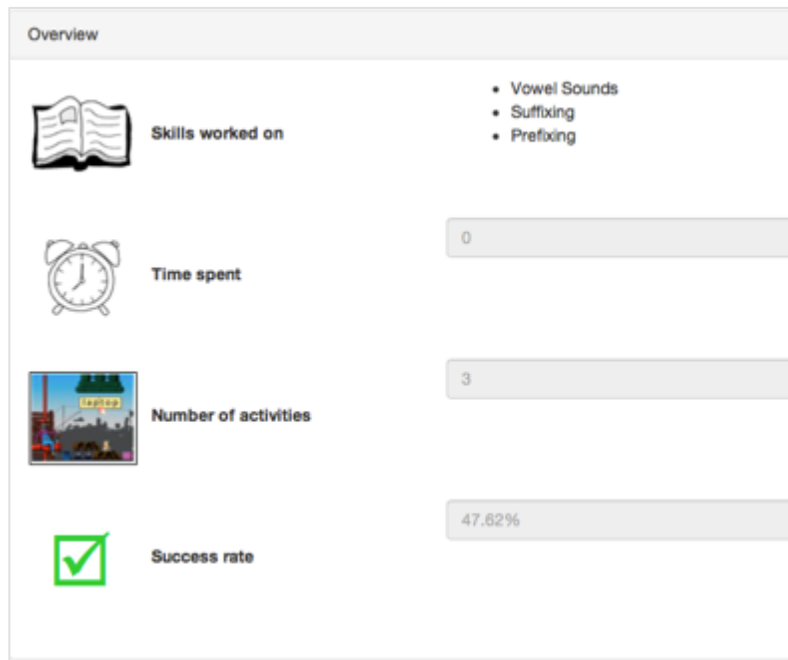
3.3.4 View reports

When you click on the View reports link it drops down three different reports: Overview, Skill Breakdown and Activity Breakdown. To view one of these reports click on the report name.

Overview

The overview report allows you to see a list of the literacy skills that have been worked on by a student of group of students, the total time spent using the system, the number of activities that have been played and the overall success rate of a student (i.e. percentage of activities that have been completed successfully).





Overview report

You can change the information that is displayed in this report by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.

The 'Filter' section contains the following dropdown menus:

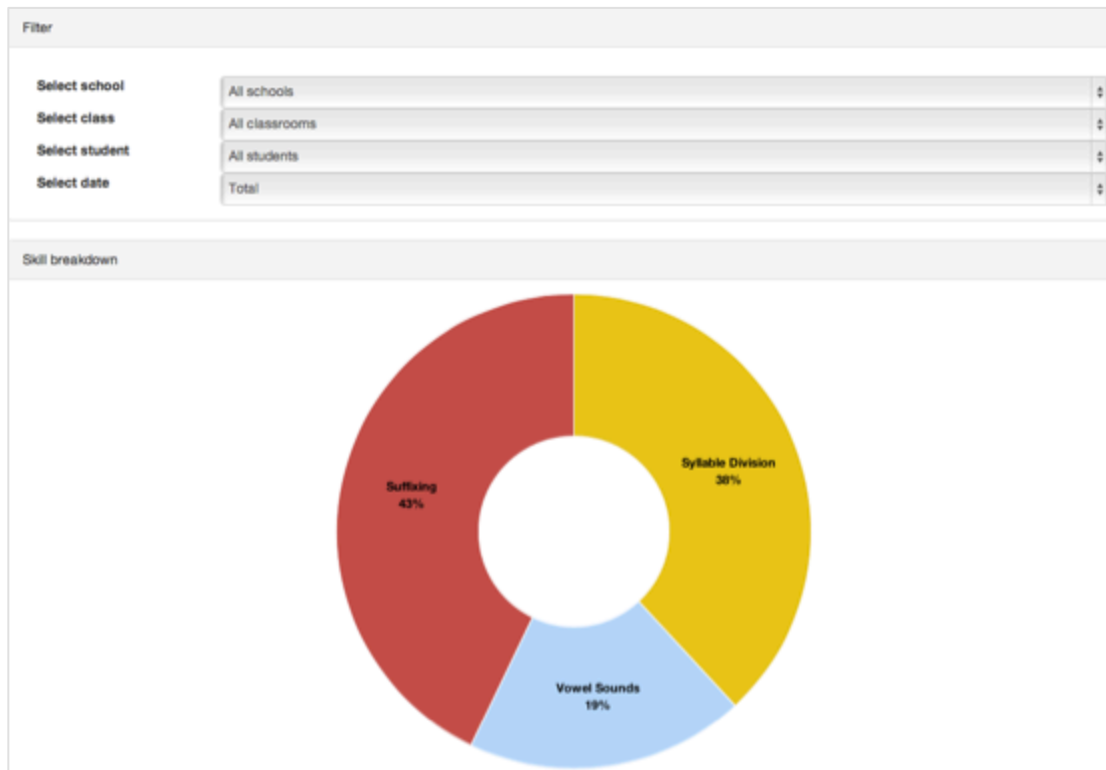
- Select school:** EN school
- Select class:** EN class
- Select student:** sue_t
- Select date:** Today

Overview report filters

Skill breakdown

The skill breakdown report shows how much of the time a student spent using system was spent working on each of the different literacy skills. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.





Skill breakdown report

You can also find out more detail about each of the skills by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working on the selected skill, the overall success rate when playing activities that focused on that skill and also the number of correct and incorrect answers given during these activities.

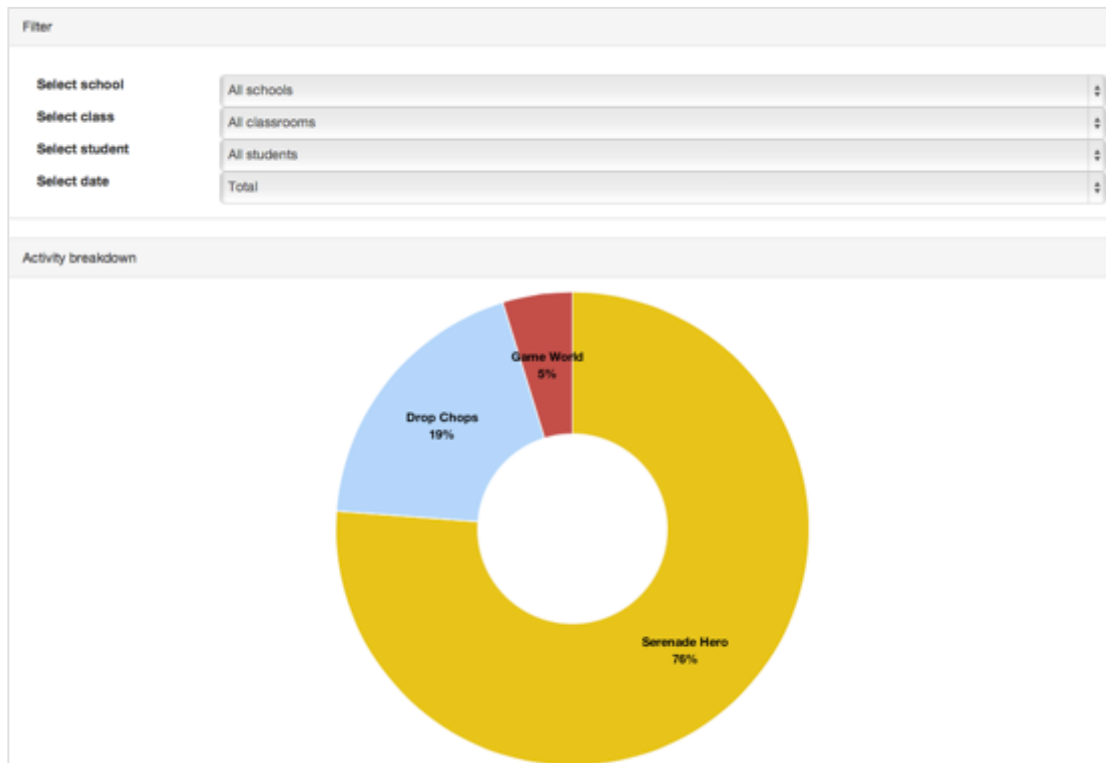
Suffixing	
Time spent	9
Success rate	33.33%
No. of correct answers	3
No. of incorrect answers	6

Skill detail information (displayed below chart)

Activity breakdown

The activity breakdown report shows how much of the time a student spent using system was spent playing particular activities. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by school, class and individual student. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.





Activity breakdown report

You can also find out more detail about each of the activities by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working on the selected activity, the overall success rate when playing that particular activity and also the number of correct and incorrect answers given during that activity.

Serenade Hero	
Time spent	
Success rate	43.75%
No. of correct answers	7
No. of incorrect answers	9

Activity detail information (displayed below chart)



3.4 Teacher Users

A teacher user is able to view all of their student information and also the reports.





3.4.1 Dashboard

The first screen you will see is the Dashboard. From the Dashboard you can access the user guides for both the reader and the game.

3.4.2 View Students

The Teachers and Students screen provides an overview of all the teacher and student user accounts within the system that were created by you (as an expert user) and displays the following information about them:

- Name
- Birthdate
- Gender
- School (students only)
- Class (students only)

It is possible to sort the user records by clicking on the up/down arrows next to each column header. The records can also be filtered by typing the term to filter by in the corresponding column search box (just below the column header) e.g. to only show Male students type 'M' in the Gender column search box.

Name	Birthdate	Gender	School	Classroom	Profile
test_student	22.09.2014	M	test school	test class	Profile

List of Students screen

View profile

From the Teachers and Students screen you can also view the student profile, showing how much of each skill the student has completed within the game. To access this page click on the Actions drop down menu next to the student whose profile you wish to view.

Each student profile has two views. The Independent view, which shows the progress the student has made when working on their own and the With teacher view, which shows the progress the student has made when working with their teacher. This view can be switched by clicking on the Profile type drop down menu in the right hand corner.

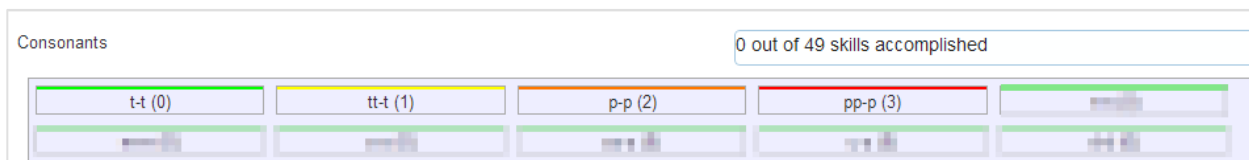
The initial presentation of the profile is an overview of each high-level difficulty, showing how many skills within each difficulty have been completed. To view the detail of each difficulty click on the bar on the right hand side and this will display boxes labeled with each of the different skills. If the box has a red bar at the top then the skill needs more work, if the bar is orange then the skill needs work, if the bar is yellow then the skills is almost fine and if the bar is green the it is completed. For more information about the skill click in the box and this will give you a description of the skill. To close down the detail simply click on the high-level difficulty box again.





Profile "Independent"	
Consonants	0 out of 49 skills accomplished
Vowels	0 out of 71 skills accomplished
Blends and Letter Patterns	0 out of 131 skills accomplished
Syllables	0 out of 13 skills accomplished
Suffixes	0 out of 92 skills accomplished
Prefixes	0 out of 42 skills accomplished
Confusing letters	0 out of 15 skills accomplished

Overview of profile



Skill breakdown example - consonants

At the bottom of the Student Profile page there is a Preferences box where you can specify particular tricky words to link to this students' profile and also their preferred font size. If you make any changes the click the Save button at the bottom to add these changes to the profile.

Preferences

Tricky Words

Font size

Preferences box

Screening Test

From the Manage users screen you can also input the screening test answers from individual students. To access this page click on the Actions drop down menu next to the student whose screening answers you wish to input.

The Screening Test page displays a list of questions that you will have asked the student. You will need to mark the printed version and then input the results of each question (i.e. correct, incorrect, not answered or not seen) into this form and then once you have inputted all of results click on the Submit Data button at the bottom of the screen. After this step, the answers are sent to the iLearnRW server and the student's profile gets initialized.





Test for joe_t

Read the following words.

sciences
☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

pretty
☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prettiness's
☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

prevent
☐ Correct ☐ Incorrect ☐ Not Answered ☒ Not Seen

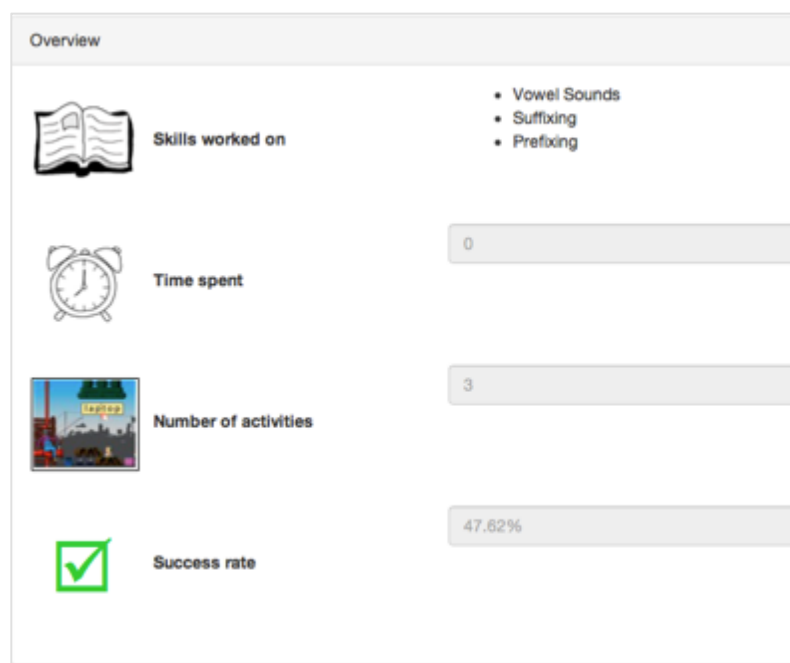
Example Screening Test

3.4.3 View reports

When you click on the View reports link it drops down three different reports: Overview, Skill Breakdown and Activity Breakdown. To view one of these reports click on the report name.

Overview

The overview report allows you to see a list of the literacy skills that have been worked on by a student or group of students, the total time spent using the system, the number of activities that have been played and the overall success rate of a student (i.e. percentage of activities that have been completed successfully).



Overview report

You can change the information that is displayed in this report by using the drop down menu filters at the top of the report. You can filter by your schools, classes and individual students that you work with. You can also select the time period you wish the information to be shown for using the date filter, which





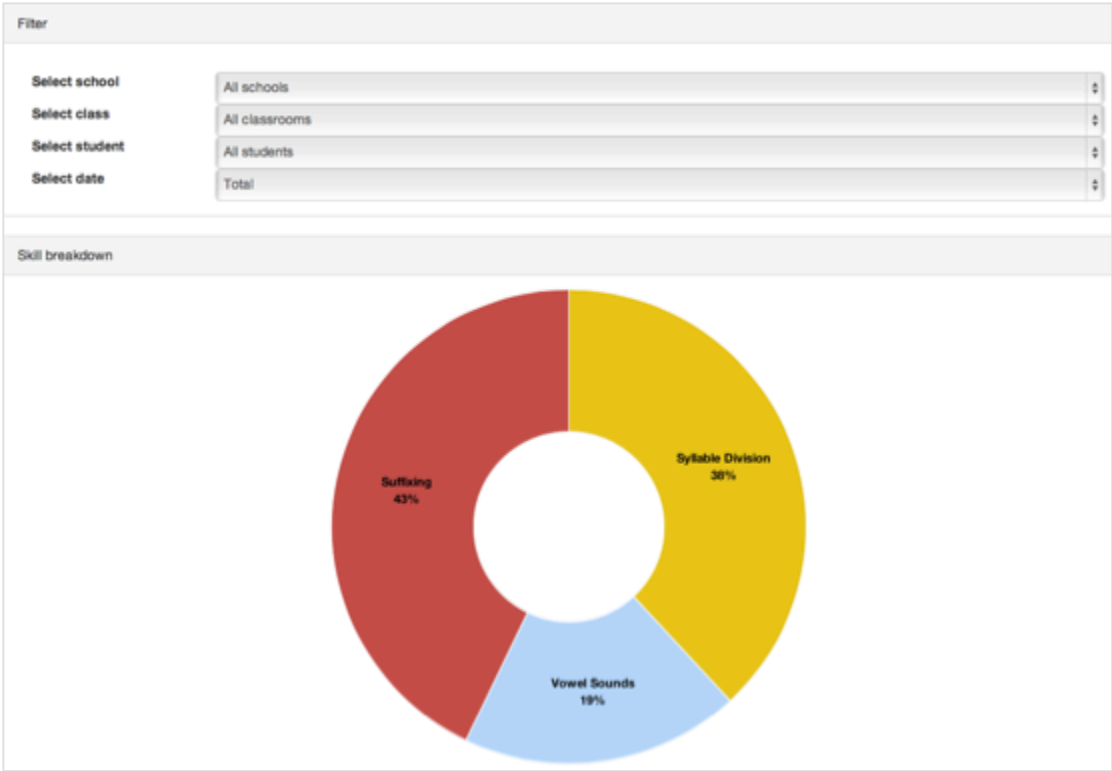
include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.

Filter	
Select school	EN school
Select class	EN class
Select student	sue_t
Select date	Today

Overview report filters

Skill breakdown

The skill breakdown report shows how much of the time a student spent using system was spent working on each of the different literacy skills. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by your schools, classes and individual students that you work with. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.



Skill breakdown report

You can also find out more detail about each of the skills by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working





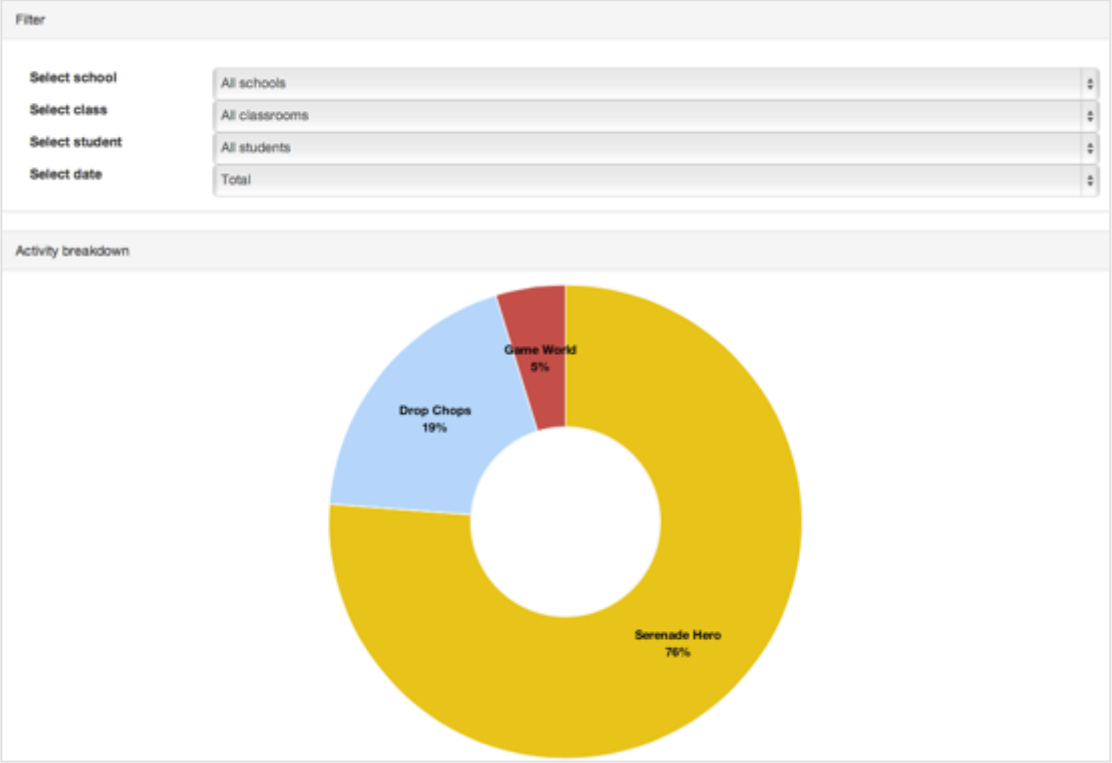
on the selected skill, the overall success rate when playing activities that focused on that skill and also the number of correct and incorrect answers given during these activities.

Suffixing	
Time spent	9
Success rate	33.33%
No. of correct answers	3
No. of incorrect answers	6

Skill detail information (displayed below chart)

Activity breakdown

The activity breakdown report shows how much of the time a student spent using system was spent playing particular activities. Again you can change the information that is displayed on the chart by using the drop down menu filters at the top of the report. You can filter by your schools, classes and individual students that you work with. You can also select the time period you wish the information to be shown for using the date filter, which include for the total time the system has been used for, this month, this week or today. You can also specify your own date range by selecting the custom range option – this filter is inclusive of the two dates you specify.



Activity breakdown report

You can also find out more detail about each of the activities by clicking on a particular segment of the chart. The detailed information will be displayed below the chart and will state the time spent working





on the selected activity, the overall success rate when playing that particular activity and also the number of correct and incorrect answers given during that activity.

Serenade Hero	
Time spent	
Success rate	43.75%
No. of correct answers	7
No. of incorrect answers	9

Activity detail information (displayed below chart)

