



edtech impact

Pedagogical Quality Report

Reading Eggs

About EdTech Impact

[EdTech Impact](#) provides an evidence-first marketplace that empowers educators and institutional leaders to make smarter buying decisions.

The platform brings together a diverse, and often siloed, community of EdTech users, EdTech providers, EdTech researchers and EdTech analysts to systematically assess the quality of education technology using a holistic assessment framework, global quality standards, and time-stamped certification programme.

Today, over 2,000 companies leverage the platform's data-driven insights to strengthen their product, showcase an independent and reliable evidence base, and gain access to a vibrant marketplace of over 400,000 in-market buyers.

EdTech Impact strikes a balance between robust research and practical user insights, giving a voice to all stakeholders, and an agile solution to building a sustainable evidence-first EdTech ecosystem within a variety of contexts.



The EdTech Impact Quality Framework is supported and governed by a consortium of research partners and expert organisations



Reading Eggs

Reading Eggs teaches and rehearses basic literacy skills in gamified lessons.

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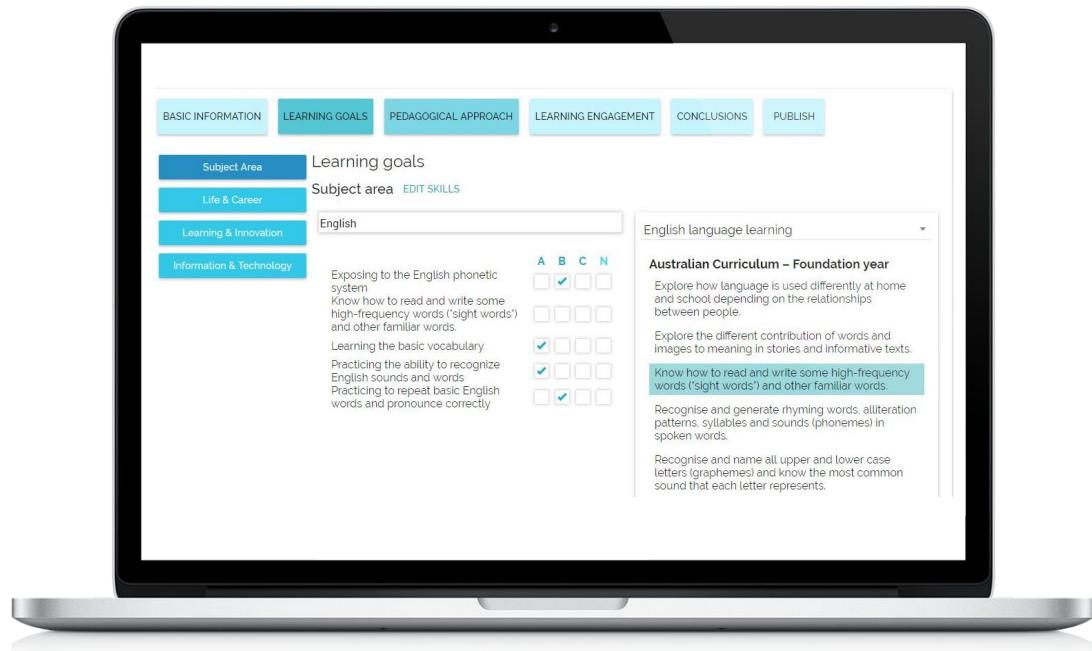
Learning Goals

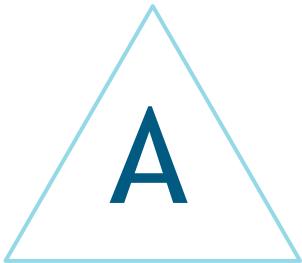
Matching the learning goals

The evaluator maps the product's learning goals against a specific curriculum/curriculums.

All supported skills are listed and classified as *didactic (A-level)* or *facilitative (B-level)* goals.

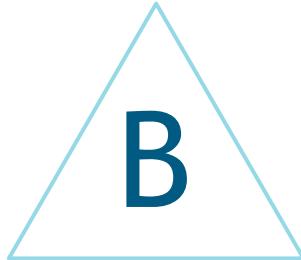
The Kokoa Tool has several hundred skills listed from various national curriculums on several subjects (Languages, STEM, Arts etc.)





Primary Goals

Content is instructional and didactic: Learning of these skills is constantly present in the core usage.



Secondary Goals

Content is partly instructional, partly facilitative: Learning of these skills is present in the core usage, but not essentially and constantly stressed.



Non-Existing

Content does not exist: Learning these skills would be a meaningful part of the use of the solution, but they are missing.





Subject Area

Reading and writing



Subject area - Primary skills

Literacy (Subject) - Common Core State Standard - Grade 1

- 1 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. 
- 2 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. 
- 3 With prompting and support, read prose and poetry of appropriate complexity for grade 1. 
- 4 Demonstrate understanding of spoken words, syllables, and sounds. 
- 5 Distinguish long from short vowel sounds in spoken single-syllable words. 
- 6 Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. 
- 7 Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. 
- 8 Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes). 



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

Literacy (Subject) - Common Core State Standard - Grade 1

- 9 Know and apply grade-level phonics and word analysis skills in decoding words.  A
- 10 Know the spelling-sound correspondences for common consonant digraphs.  A
- 11 Decode regularly spelled one-syllable words.  A
- 12 Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.  A
- 13 Read words with inflectional endings.  A
- 14 Recognize and read grade-appropriate irregularly spelled words.  A
- 15 Read with sufficient accuracy and fluency to support comprehension.  A
- 16 Read grade-level text with purpose and understanding.  A



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

Literacy (Subject) - Common Core State Standard - Grade 1

- 17 With guidance and support from adults, use a variety of digital tools to produce and publish writing. 
- 18 Ask and answer questions about key details in a text. 
- 19 Identify the main topic and retell key details of a text. 
- 20 Retell stories, including key details, and demonstrate understanding of their central message or lesson. 
- 21 Define words by category and by one or more key attributes. 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - General Aims - UK National Curriculum 2013 - Key stages 1 and 2

- 1 Acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language. 
- .
- 2 Write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences. 
- .
- 3 Read easily, fluently and with good understanding. 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Writing - transcription - UK National Curriculum 2013 - Key Stage 1 - Year 1

- 1 Apply simple spelling rules and guidance.  
- 2 Spelling words containing each of the 40+ phonemes already taught.  
- 3 Spelling common exception words.  
- 4 Spelling the days of the week.  
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - word reading - UK National Curriculum 2013 - Key Stage 1 - Year 1

- 1 Apply phonic knowledge and skills as the route to decode words.  A
 - 2 Respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes.  A
 - 3 Read accurately by blending sounds in unfamiliar words containing GPCs that have been taught.  A
 - 4 Read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word.  A
 - 5 Read aloud accurately books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words.  A
 - 6 Re-read these books to build up their fluency and confidence in word reading.  A
 - 7 Read other words of more than one syllable that contain taught GPCs.  A
 - 8 Read words containing taught GPCs and -s, -es, -ing, -ed, -er and -est endings.  A
-  = Primary goal: content is didactic
-  = Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - word reading - UK National Curriculum 2013 - Key stage 2 - Years 3 and 4

- 1 Apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they .
- 2 Read further exception words, noting the unusual correspondences between spelling and sound, . and where these occur in the word.



English - Reading - word reading - UK National Curriculum 2013 - Key stage 2 - Years 5 and 6

- 1 Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that . they meet.



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - comprehension - UK National Curriculum 2013 - Key Stage 1 - Year 1

- 1 Learning to appreciate rhymes and poems, and to recite some by heart. 
- 2 Discussing word meanings, linking new meanings to those already known. 
- 3 Understand books by drawing on what they already know or on background information and vocabulary provided by the teacher. 
- 4 Understand books by checking that the text makes sense to them as they read and correcting inaccurate reading. 
- 5 Understand books by discussing the significance of the title and events. 
- 6 Understand books by making inferences on the basis of what is being said and done. 
- 7 Understand books by predicting what might happen on the basis of what has been read so far. 
- 8 Listening to and discussing a wide range of poems, stories and non-fiction at a level beyond that at which they can read independently. 



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - word reading - UK National Curriculum 2013 - Key Stage 1 - Year 2

- 1 Continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent. 
- .
2 Read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation. 
- .
3 Re-read these books to build up their fluency and confidence in word reading. 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - comprehension - UK National Curriculum 2013 - Key Stage 1 - Year 2

- 1 Understand books by answering and asking questions.  
- 2 Understand books by predicting what might happen on the basis of what has been read so far.  
-



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Subject area - Primary skills

English - Reading - comprehension - UK National Curriculum 2013 - Key stage 2 - Years 3 and 4

- 1 Using dictionaries to check the meaning of words that they have read.  
-



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Life & Career

Social Skills / Cross-Disciplinary Thinking / Work life skills and
Entrepreneurship /



Life & Career skills

Cross-Disciplinary Thinking

- 1 Learning to combine information to find new innovations 
- 2 Learning to build information on top of previously learned 
- 3 Practicing to notice causal connections 
- 4 Encouraging to build new information and visions 
- 5 Practicing to notice links between subjects learned 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Life & Career skills

Social Skills

- 1 Enabling the growth of positive self-image 
- 2 Practicing communication through different channels 
- 3 Learning to listen other people's opinions 
- 4 Learning decision-making, influencing and accountability 
- 5 Learning to understand the meaning of rules, contracts and trust 
- 6 Practicing to give, get and reflect feedback 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Wellbeing and Sustainable Development

1 Learning to face failures and disappointments



2 Encouraging the growth of positive self-image



3 Practicing to recognize and express feelings



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= Primary goal: content is didactic



= Secondary goal: content is facilitative



Work life skills and Entrepreneurship

- 1 Learning to plan and organize work processes 
- 2 Practicing decision making 
- 3 Practicing versatile ways of working 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Cross Cultural Skills and Global Awareness

- 1 Encouraging to build new information and visions 
- 2 Supporting student to build their own linguistic and cultural identity 
- 3 Learning to face respectfully people and follow the good manners 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Learning s Innovation

Creativity and Innovation / Cognitive and thinking skills /
Learning to Learn / Critical Thinking s Problem Solving /



Learning & Innovation

Learning to Learn

- 1 Practicing persistent working 
- 2 Practicing to take responsibility of one's own learning 
- 3 Practicing to set one's own learning goals 
- 4 Practicing to evaluate one's own learning 
- 5 Learning to find the joy of learning and new challenges 
- 6 Practicing to find ways of working that are best for oneself 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Learning & Innovation

Cognitive and thinking skills

- 1 Practicing letters, alphabets and written language  A
- 2 Practicing memorizing skills  A
- 3 Practicing fine motor skills  A
- 4 Practicing categorization and classification  A
- 5 Practicing to observe spoken and written language  A
- 6 Practising visual recognition  A
- 7 Learning to notice causal connections  A



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Critical Thinking & Problem Solving

- 1 Practicing to notice causal connections 
- 2 Developing problem solving skills 
- 3 Practicing to look things from different perspectives 
- 4 Learning to recognise and evaluate arguments and their reasonings 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Learning & Innovation

Creativity and Innovation

- 1 Creating requirements for creative thinking  A
- 2 Practicing creative thinking  A
- 3 Practicing to use imagination and to be innovative  A
- 4 Practicing to improvise  B
- 5 Encouraging students to be innovative and express new ideas  B
- 6 Practicing to use imagination and to be innovative  B
- 7 Practicing to use arts as a way to express  B



= Primary goal: content is didactic



= Secondary goal: content is facilitative



Information & Technology

Multimodal Literacy / Media and Information Literacy /



ICT Literacy - Primary skills

Media and Information Literacy

- 1 Practicing keyboard skills and touch typing  
- 2 Learning the basics of spelling  
- 3 Learning to plan and design own written content and textual representations  
- 4 Practicing to use information independently and interactively  
- 5 Practicing to find, evaluate and share information  
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative



ICT Literacy - Primary skills

ICT Literacy

- 1 Using technology as a part of explorative process  A
 - 2 Building common knowledge of technological solutions and their meaning in everyday life  B
 - 3 Using technology resources for problem solving  B
 - 4 Using technology as a part of explorative and creative process  B
 - 5 Using technological resources for finding and applying information  B
 - 6 Understanding and practicing safe and responsible uses of technology  B
 - 7 Using technology for interaction and collaboration  B
 - 8 Using technology to express one's emotions and experiences  B
-  A = Primary goal: content is didactic
-  B = Secondary goal: content is facilitative



ICT Literacy - Primary skills

Multimodal Literacy

- 1 Learning to understand and interpret diverse types of texts 
- 2 Experiencing and exploring sounds and music from different sources 
- 3 Practicing logical reasoning to understand and interpret information in different forms 
- 4 Using technology as a part of explorative and creative process 
- 5 Learning to acquire, modify and produce information in different forms 
- 6 Practising to understand visual concepts and shapes and observe their qualities 
- .



= Primary goal: content is didactic



= Secondary goal: content is facilitative

Pedagogical Approach

Assessing the pedagogy

Pedagogical Approach » Subject Area

Passive - Active

Hide this parameter -

Solution promotes mainly one-way communication. ⊖

Is the communication bi-directional or just information delivered for the player? Think about how the product provides information.

Fully A lot o A little Not at all □

Q □

T □

Solution provides demonstrations ⊕

Q □

T □

Solution allows passing through the content with no/low engagement. ⊕

Q □

T □

Solution allows user to skip content. ⊕

Q □

T □

The evaluator answers a set of statements to assess the product's pedagogical approach.

The answers to the questions result to a numeric score on each parameter. The parameters are shown as contrary pair sliders.

The assessment is divided into four parameters:

1. Passive - Active
2. Rehearse - Construct
3. Linear - Non-linear
4. Individual - Collaborative

The set of questions and definitions, have been developed by researchers from the Helsinki University.

Criterion definition



Passive / Active

Passive: Learner in an observant role

Active: Learning by doing



Individual / Collaborative

Individual: Learner is learning by her- or himself

Collaborative: Requires collaboration with other learners



Linear / Non-linear

Linear: Proceeding linearly through repetitive tasks

Non-linear: Supports free exploration and finding solutions in variable ways.



Rehearse / Construct

Rehearse: Practicing earlierly learned

Construct: Learning and constructing new concepts



The magnifier tells where the product currently positions the learner, in the pedagogical dimension.



The pin shows where the product should position the learner according to the pedagogical principles.



The Rating Scale



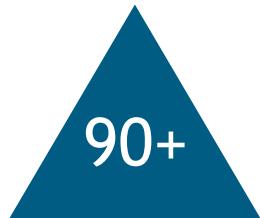
Fair

There are crucial issues with the pedagogical approach. Improvements are necessary in order to achieve high educational quality.



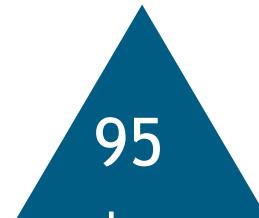
Good

The pedagogical approach is valid. However, many improvements could be made in order to improve this aspect of learning experience.



Excellent

The pedagogical approach is innovative and meaningful. Some improvements could be made in order to improve this aspect of learning experience.



Outstanding

Product is exceptionally innovative and provides high educational value. The content is delivered in an extremely meaningful and engaging way.



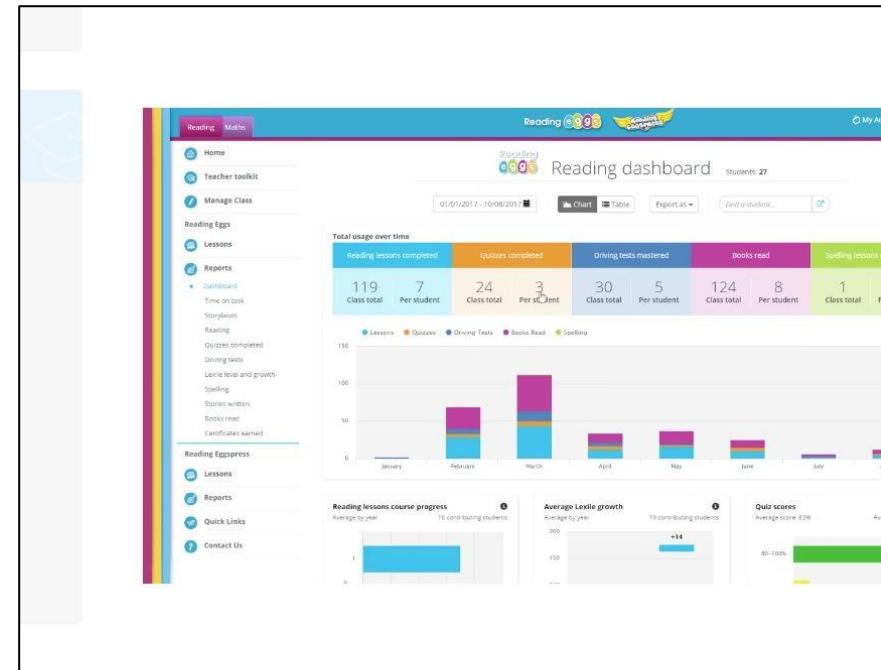
Passive - Active: 93/100 = Excellent

Passive



Active

Strengths: Reading Eggs provides a lot of materials for the students to practice with. Most of the activities require active engagement from the user and they can go forward only by going through all of the activities. There are several extra materials, like games and stories that the user can play with after completing the given tasks, and the teacher material also includes extra activities done in class. The users can't skip content but the teacher can give certain tasks for the students, and the teacher can adjust the assignments based on the data provided by the solution. Reading Eggs rewards the learner after progression and provides instant feedback on all actions.





Passive - Active: 93/100 = Excellent

Passive



Active

Development areas: Some of the activities are designed so that the user can click through them without actually understanding what they do. For example, in the picture, the feedback is given so that the user can click wrong item once and then he or she can see the right answer and continue without understanding why it's the right one.

The solution responds or adapts to user's activities in a quite traditional way - giving feedback and proceeding linearly. If the student could mark the activities they like most or want to more of, it would make their path more self-managed and personal, and could give more information for the teacher as well.





Rehearse - Construct: 82/100 = Good

Rehearse

82



Construct

Strengths: Reading Eggs provides a lot of material which starts from letters and phonemes and continues to words and stories. The extent of the planned material makes it support learning over time in a very comprehensive way, and the learner's new skills are built upon the existing skills and knowledge. By default, all the students start from the same baseline but the teacher can give individual tasks as well even though the students wouldn't have gone through all the content yet.

The screenshot shows the Reading Eggs teacher dashboard. The top navigation bar includes 'Reading' (selected), 'Maths', 'My Account', and 'Logout'. The left sidebar has a 'Home' icon and a list of sections: 'Teacher Toolkit', 'Management', 'Reading Eggs', 'Lessons', 'Assignments', 'Reports', 'Reading Eggspress', 'Lessons', 'Assignments', 'Reports', 'Quick Links', and 'Contact Us'. The main content area is titled 'Welcome Saila Juuti' with 'Active students: 0'. It features a banner 'Where children become great readers!'. Three green notifications are displayed: 'NEW Summary Report now available for Reading Eggs [here](#) and Reading Eggspress [here](#)' (with a close button 'x'), 'New and improved pupil importer [here](#). Pupils can be imported directly into classes.' (with a close button 'x'), and 'Your school has started a Mathseeds trial. Click the Mathseeds tab to get started.' Below this are two large buttons: 'Start > Reading Eggs' with an egg character and 'Start > Reading Eggspress' with a boy character. At the bottom are two boxes: 'Manage students' (with 'Manage Pupils' button) and 'Manage assignments' (with 'Reading Eggs Manage Assignments' button). A sidebar on the right says 'Your free trial expires on 31st December, 2019. [How do I subscribe?](#) You can add 30 pupils to your class. [How can I add more?](#)



Rehearse - Construct: 82/100 = Good

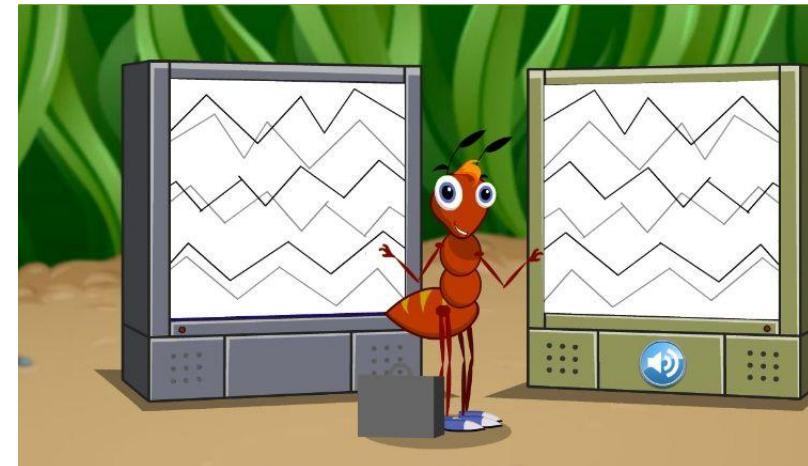
Rehearse

82



Construct

Development areas: The feedback is given in a way that it only tells whether the answer is right or wrong, it doesn't support the student to get to the right solutions by giving little hints. In some activities, students can't even see what was the right answer. This doesn't support the learning experience in an optimal way. Would it be possible to provide feedback in a more constructive way, by giving support if the answer is not right, for example by pointing out the question again and explaining why the given answer was not right? It would be also nice to see more open-ended and creative activities where students could use the letters and words that they have learned. Write the Book activity is a nice example of this. It would also be good if the students could see what they have learned so far and reflect their own progress.





Linear - Non-linear: 91/100 = Excellent

Linear



Non-linear

Strengths: Reading Eggs follows linear, predetermined user progression. The content is divided into lessons and students need to progress in order if the teacher doesn't give other instructions and give other tasks. The learning progress is quite directly comparable between students, and teachers have data about this. The placement test sets the right difficulty level for each student.





Linear - Non-linear: 91/100 = Excellent



Development areas: Could the solution promote a bit more free exploration? There are a lot of activities and it would be nice if the students could more freely choose what activities they'd like to do? Also, more open-ended activities could help students to practice the skills they'd like to learn more.



Individual - Collaborative: 87/100 = Good

Individual

87



Collaborative

Strengths: Most of the activities are done individually and independently, without interacting with other students. Some of the teachers' activities include collaborative tasks. Students can also write stories and other students can rate them, but otherwise, there is no collaboration in Reading Eggs.

The screenshot shows the Reading Eggs platform interface. At the top, there are tabs for 'Reading' and 'Maths'. The 'Reading' tab is selected, showing the 'Reading Eggspress' logo. On the right, there are links for 'My Account' and 'Logout'. Below the tabs, the text 'Reading Eggs Maps & Lessons' is displayed, along with 'Active students: 0'. On the left, a sidebar menu includes: Home, Teacher Toolkit, Management, Reading Eggs (selected), Lessons, Assignments, Reports, Reading Eggspress, Lessons, Assignments, Reports, Quick Links, and Contact Us. The main content area is titled 'Reading Eggs Maps & Lessons'. It features three large boxes representing 'Map 1 Lesson 1', 'Map 1 Lesson 2', and 'Map 1 Lesson 3'. Each box contains an illustration of a cartoon character (a rabbit, a caterpillar, and a caterpillar respectively) on a grassy field. Below each illustration, there are buttons for 'Preview' and 'Resources'. Each box also lists 'Phonically Decodable Words', 'Vocabulary Words', 'Phonetic Letters And Sounds', and 'High Frequency Sight Words'.



Individual - Collaborative: 87/100 = Good



Development areas: Could there be another way to give feedback to fellow students than giving a rating? Star review doesn't tell that much to a student who created the story, but constructive feedback would be useful for both the writer and the receiver. For example, there could be ready-made comments that the students could pick if you don't want to make it possible to give open feedback. Most of the extra activities in the teacher's material are very teacher-led. They could support collaboration and doing things as a group or pairs more.

Learning Engagement

The Six Aspects of Learning Engagement

Q Autonomy

Feeling that the user's actions in the product are based on their own decisions rather than feeling there is external pressure to choose a certain action.

Q Competence

The user can feel capable and effective in their actions rather than feeling incompetent or ineffective.

Q Relatedness

Feeling that in the product there is meaningful contact with people who care about you rather than feeling lonely and uncared for. You can also feel connection with fictional characters and events in the product.

Q Respect

Feeling that the product takes the user into account as a capable and desired actor rather than feeling that the user's opinions and experiences are neglected.

Q Stimulation

Feeling that the product offers plenty of enjoyment and pleasure rather than feeling bored and understimulated by the product.

Q Safety

Feeling that the product is a safe environment for having fun and trying out things rather than feeling uncertain of the consequences or threatened by other users.

The Rating Scale



Well supported

There are several well executed features which support this aspect of learning engagement



Supported

The product takes into account this aspect of learning engagement. Some improvements could be made in order to make the support better.



Not Supported

There are issues with the learning engagement in this area.



Autonomy Score: 3.5/5 = Supported

The players actions in the product are based on their own decisions rather than feeling external pressure to choose a certain action.

Main strengths	Score
1. It is easy to understand, what is the goal in using the product.	4
2. The product motivates the use well.	4.3

The variety of different types of activities is both motivating and meaningful. The assignment tool makes it possible for the teacher to direct the students to those activities they need the most. Students follow a linear route but there are extra activities that they can more freely pick and play after collecting eggs from the main activities.



Autonomy Score: 3.5/5 = Supported

The players actions in the product are based on their own decisions rather than feeling external pressure to choose a certain action.

Main development areas	Score
1. It is possible to use creativity and express yourself when using the product.	3
2. The user can create their own goals for the use.	2.7

There are not that many creative and open-ended activities. That would give students more freedom and possibilities to use the vocabulary they gain by using the product, even for the lower levels of writing.



Competence Score: 4.21/5 = Well supported

Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective

Main strengths	Score
1. The first time experience is encouraging and it is easy to learn to use the product	4
2. The challenges and tasks in the product feel optimal for the targeted users	4.7
3. The product gives you enough information to use it efficiently.	4.7



Competence Score: 4.21/5 = Well supported

Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective

Main development areas	Score
1. The product rewards the user in a meaningful way and according to the challenge	4

All the users start from the same baseline so it might be a bit frustrating for more advanced students. The rewarding system is based on extinct motivation as students collect eggs from the core activities and then can move to play games with the eggs. Also, it's not that easy to follow what you have actually learned by using the product. Could there be a way to show the students what they have learned and maybe include some self-evaluation tasks? For example, the achievement awards could hold some more concrete information than just the percentages in quizzes.



Relatedness Score: 3.72/5 = Supported

The product supports meaningful contact with people who about your actions rather than feeling that the contact is one-sided or meaningless. The user can feel connection with fictional characters and events in the product.

Main strengths Score

1. The visuals and characters in the product are suitable for targeted users. **4.3**
2. The story or fictional world present in the product motivates learning **4.3**

The fictional world is nice and sets a nice frame for the learning experience. Reading Eggs has put a lot of effort on creating animations, music and visual world.



Relatedness Score: 3.72/5 = Supported

The product supports meaningful contact with people about your actions rather than feeling that the contact is one-sided or meaningless. The user can feel connection with fictional characters and events in the product.

Main development areas Score

- | | | | |
|----|---|---|----|
| 1. | The product supports social interaction, such as multiplay or sharing of content with other people. | — | 2. |
| | | | 6 |
| | | | 7 |

There isn't much communication between the students, even though it could be a good extension for the learning experience. The students are learning about words and literacy so there could be collaborative activities where they could use the new skills together. The visuals are a bit old fashioned and in some activities it was hard to understand, what they represent. Sometimes they were of low quality and showing pixels.



Respect Score: 4.4/5 = Well supported

Feeling that the product takes the user into account as a capable and desired actor rather than feeling that the user's opinions and experiences are neglected.

Main strengths	Score
1. The product doesn't include discriminative narrative or enforce unnecessary stereotypes	5
2. The product doesn't make assumptions on player's age, gender, race or origin.	5

The product is easy to use and no bugs were found during the use. Though, it works a bit slowly. The product is suitable for various kinds of learners in the classroom. Feedback on all actions is instant and respectful.



Respect Score: 4.4/5 = Well supported

Feeling that the product takes the user into account as a capable and desired actor rather than feeling that the user's opinions and experiences are neglected.

Main development areas	Score
1. The product doesn't have bugs which cause errors or crashing.	4. 7
2. The product gives clear feedback on all your actions	3. 3

Because the solution uses Flash, it was sometimes frustrating to use - Safari browser prompted warnings several times during the use. The given feedback is not always clear and doesn't support the learning experience. In many activities, the game mainly shows that the answer was wrong but doesn't even give a chance to see what was the right answer and in some cases, students can't even see what were the choices so they could try to guess why it was a wrong one. In some activities, the product shows right away which one is the right one if the student chooses the wrong one.



StimulationScore: 3.92/5 = Supported

Feeling that you get plenty of enjoyment and pleasure rather than feeling bored and understimulated by the product.

Main strengths	Score
1. The product's graphics, sounds and other elements support the narrative and user experience in a meaningful way and are pleasant.	4. 3
2. The product encourages exploring it further.	4. 3

The animations and visuals are interesting and of high quality. The product encourages the students to move on to the next activities and the rewarding system motivates doing more things.



StimulationScore: 3.92/5 = Supported

Feeling that you get plenty of enjoyment and pleasure rather than feeling bored and understimulated by the product.

Main development areas	Score
1. The user doesn't unnecessarily need to repeat things which they have already learned	3

The car game is great, but the words flying into it are not. They come hasty and are a bit distracting. Some games seem a bit long, and advanced students might get frustrated. Maybe the students could get the option of choosing how many rounds, words or other will be in a game, or the game could adapt the amount of repetition according to the student's skill level.



Safety Score: 3.84/5 = Supported

Feeling that the product is a safe environment for having fun and trying out things rather than feeling uncertain of the consequences or threatened by other users

Main strengths Score

- | | | |
|----|--|------------|
| 1. | If the user shares content - their work, their comments or anything else - it is always clear, who has | <u>3.7</u> |
| | access to the shared content. | |
| 2. | The product doesn't include content or advertising which would be harmful for the targeted users | <u>5</u> |

The product is safe to use and it's easy to understand who can see the work you do. All content is age appropriate.



Safety Score: 3.84/5 = Supported

Feeling that the product is a safe environment for having fun and trying out things rather than feeling uncertain of the consequences or threatened by other users

Main development areas Score

1. The user cannot make irreversible errors. Points that lead to restarting the use or re-doing things 3.7 without a considerable effort should not be possible
2. Making errors is beneficial. Everytime you make an error, you learn something from it. 3

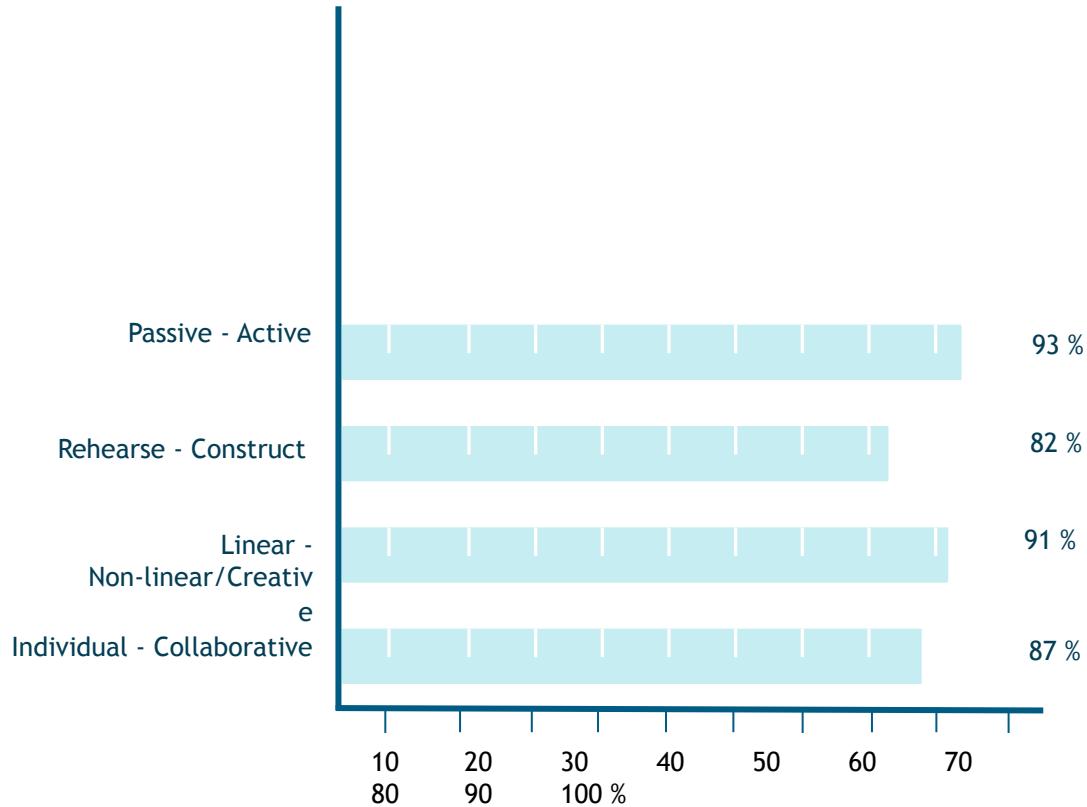
Making errors could be more beneficial. Every time you make an error, you should learn something from it but now the students don't get much feedback other than whether the answer was right or wrong. If a user needs to interrupt their work in the middle of the level, they always need to start from the beginning when they return. Some levels are quite long, so this might be frustrating.

Results

Combined scores of pedagogical dimensions:

- Life & Career: 10 skills
- Learning & Innovation: 20 skills
- Information & Technology: 7 skills

The score explains how product performs when considering different pedagogical dimensions. According to the analysis, the main development needs are to **make learning experience more constructive and creative**.



Reading Eggs

High Educational Quality Aspects

1. Reading Eggs has a lot of content and a wide selection of teacher's materials to support the learning experience.
2. The lovely voices, animations and songs makes the solution feel engaging and interesting.
3. The huge variety of characters as a part of the solutions fosters creativity and imagination.
4. The student can practice letters, phonemes, spelling, and typing in variety of ways and in a comprehensive manner

Pedagogical Approach

88 % 3.93

Learning Engagement



QUALITY PEDAGOGY CERTIFIED 2025/2026

Reading Eggs

Education
Alliance
Finland

CERTIFIED
PEDAGOGICAL QUALITY

QUALITY PEDAGOGY

edtech
impact

Valid: 7/2025 - 7/2026

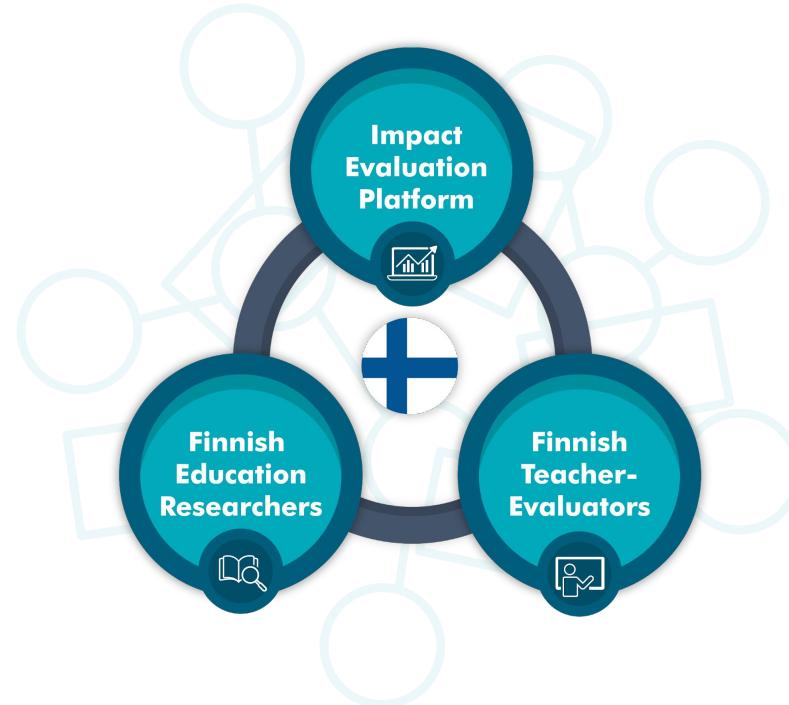
Michael Forshaw
Michael Forshaw | CEO
EdTech Impact

EdTech Impact uses the Education Alliance Finland method, based on educational psychology and Finnish knowledge, to evaluate the pedagogical quality of learning solutions. This certified product is a well designed educational solutions that aligns with learning science principles. Its design complies with research on learning and pedagogy and pursues to implement good practices in order to promote and support learning.

The EAF Method Background

Quality Pedagogy

EdTech Impact conducts impact evaluations with the help of the EAF method based on global quality standard for learning solutions.



Expert Evaluation and Rating

The analysis of how the product supports learning of different skills is done by using a contrary pair criterion. The evaluator uses contrary pairs to diagnose skill-specifically the pedagogical approach which the product represents. The diagnosis is done by using slider between contrary pairs, setting the slider in a position that describes the product's approach. Evaluator uses the same slider to describe the best possible approach and gives a rate (0-100) on how adequate approach the product has.

All diagnoses and ratings are done by two-three expert-evaluators separately. After all skills are diagnosed through the criterion, evaluators discuss and form a concluding diagnose of two separate evaluations.

The rating points out the strengths and development areas, mirroring them with the needs of education field and product development possibilities. After pointing out the development areas, the analysis gathers suggestions on how to improve the product.

Outcomes

- Q Defining **what** and **how** the product teaches
- Q Analysis of features which **engage** the learners
- Q Pointing out the strengths and development areas
- Q Giving validation for building the marketing message

Pedagogical Model and Learner Perception

In the first phase of the analysis evaluators are forming product related statements to define a variation of skill sets that the use of the product supports. The base of the statements is formed upon definitions of 21st century skills, Finnish pedagogics and existing research evidence related to the product. The reason for using the mentioned influencers is that they represent the needs of the education field globally.

In the second phase the same influencers are used to develop the criterion for evaluation how the product supports learning of different detected skills. Finnish new curriculum represents a learner perception based on most advanced understanding of efficient pedagogical approach and therefore it can set the highest quality standards for education tools.

Pedagogical approach - Passive / Active

Regarding the role of the student, we characterize the learning solution as promoting learning that is situated somewhere on the scale between *passive* and *active*. As key components determining the characteristics of the solution on this scale we use *accountability*, *behavioural engagement* and *emotional engagement*.

Agency	Behavioural engagement	Emotional engagement
<i>Autonomy</i>	<i>Interactivity</i>	<i>Activating motivation</i>
<i>Self-regulation</i>	<i>Engagement</i>	<i>Sustaining motivation</i>
<i>Intentionality</i>	<i>Scaffolding</i>	<i>Feed forward</i>



Pedagogical approach - Rehearse / Construct

Regarding the learning activities, we characterize the learning solution as promoting learning that is situated somewhere on the scale between rehearse and construct. As key components determining the characteristics of the solution on this scale we use sparking of interest, building of knowledge and reflection of learned.

Interest	Knowledge building	Reflection
<i>Activating interest</i>	<i>Deflning goals</i>	<i>Reflection</i>
<i>Mapping prior knowledge</i>	<i>Applying existing knowledge (adaptation/assimilation)</i>	<i>Decision-making</i>
<i>Customisation</i>	<i>Knowledge creation</i>	<i>Difficulty optimisation</i>

Rehearse



Construct

Pedagogical approach - Individual / Collaborative

Regarding the learning activities, we characterize the learning solution as promoting learning that is situated somewhere on the scale between individual and collaborative. As key components determining the characteristics of the solution on this scale we use interaction, responsibility and regulation.

Interaction	Responsibility	Regulation
<i>Interaction</i>	<i>Accountability</i>	<i>Self / co-regulation</i>
<i>Fostering collaboration</i>	<i>Peer support</i>	<i>Personal / shared learning goals</i>
<i>Content sharing</i>	<i>Information sharing</i>	<i>Independency / co-dependency</i>

Individual



Collaborative

Pedagogical approach - Linear / Non-linear

Regarding the learning process, we characterize the learning solution as promoting learning that is situated somewhere on the scale between linear and non-linear. As key components determining the characteristics of the solution on this scale we use procession and predictability.

Process	Predictability
<i>User progression</i>	<i>Predictability of outcomes</i>
<i>UX optimisation</i>	<i>UX limitations</i>



Assessing User Happiness

The user experience evaluation is done from the perspective of the user happiness. The evaluation assesses, how fun and engaging a product is to use, and it is suitable for entertainment games, learning games and utility apps,.

The evaluation focuses on things the users are able to do in the product, and how these features make the users feel. It takes into account the general usability of the products, but looks behind issues which are not essential for the experience. Therefore this type of evaluation is also suitable for proof of concept -state prototypes and ideas.

The evaluation report serves as a tool for the design and development team. It shows what are the features that support the user happiness the best, and how they do it. It will also point out things that hinder the happiness, and ways the experience could be improved.

Sources: The aspects of player happiness are from Hassenzahl, Marc et al: *Designing Moments of Meaning and Pleasure. Experience Design and Happiness. International Journal of Design Vol. 7 No. 3 2013*

Autonomy	<i>The user's actions in the product are based on their own decisions rather than feeling there is external pressure to choose a certain action.</i>
1. The user can create their own goals for the use.	4. The product sets limitations for using it when and where I want to, and the limitations feel unnecessary or annoying.
2. The product motivates the use well	5. It is possible to make choices, and the different choices have clearly different and meaningful outcomes.
3. It is easy to understand, what is the goal in using the product.	6. It is possible to use creativity and express yourself when using the product.

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

Inostroza, Rodolfo et all (2012). [Usability Heuristics for Touchscreen-based Mobile Devices](#).

Nielsen, Jacob. (1994a). [Enhancing the explanatory power of usability heuristics](#).

Competence	<i>Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective</i>
1. The product rewards the user in a meaningful way and according to the challenge	5. Progression on the product depends on succeeding on things relevant for learning.
2. The product gives you enough information to use it efficiently.	6. The first time experience is encouraging and it is easy to learn to use the product
3. Navigation in the product is easy and intuitive.	7. It is possible to feel successful and proud of myself when I am using the product.
4. The challenges and tasks in the product feel optimal for the targeted users	Experienced and advanced users can find more challenge in the product.

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

Inostroza, Rodolfo et all (2012). [Usability Heuristics for Touchscreen-based Mobile Devices](#).

Nielsen, Jacob. (1994a). [Enhancing the explanatory power of usability heuristics](#).

Relatedness	<p><i>In the product there is meaningful contact with people who care about your actions rather than feeling that the contact is one-sided or meaningless. The user can feel connection with fictional characters and events in the product.</i></p>
1. The story or fictional world present in the product motivates learning	4. The product supports social interaction, such as multiplay or sharing of content with other people
2. The product uses language which makes you feel welcome and cared for.	5. The product provides examples or motivation to learn the skill it tries to teach.
3. The visuals and characters in the product are suitable for targeted users.	6. The product supports communication with other people and there are good reasons to communicate

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

Inostroza, Rodolfo et all (2012). [Usability Heuristics for Touchscreen-based Mobile Devices](#).

Nielsen, Jacob. (1994a). [Enhancing the explanatory power of usability heuristics](#).

Respect

Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective

1. The product gives clear feedback on all your actions	4. The product is suitable for both inexperienced and experienced users. Players can eg. skip tutorials or choose wanted difficulty levels
2. The product doesn't make assumptions on player's age, gender, race or origin.	5. The product doesn't have bugs which cause errors or crashing.
3. The product doesn't include discriminative narrative or enforce unnecessary stereotypes	

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

Inostroza, Rodolfo et all (2012). [Usability Heuristics for Touchscreen-based Mobile Devices](#).

Nielsen, Jacob. (1994a). [Enhancing the explanatory power of usability heuristics](#).

Stimulation	<i>Feeling that you get plenty of enjoyment and pleasure rather than feeling bored and understimulated by the product.</i>
1. The product encourages exploring it further	4. The user doesn't unnecessarily need to repeat things which they have already learned
2. The product's challenge level is optimal for the targeted users, or it can be chosen	5. The product's graphics, sounds and other elements support the narrative and user experience in a meaningful way and are pleasant.

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

Inostroza, Rodolfo et all (2012). [Usability Heuristics for Touchscreen-based Mobile Devices](#).

Nielsen, Jacob. (1994a). [Enhancing the explanatory power of usability heuristics](#).

Safety	<i>Feeling that the product is a safe environment for having fun and trying out things rather than feeling uncertain of the consequences or threatened by other users.</i>
1. Making errors is beneficial. Everytime you make an error, you learn something from it	4. The user does not lose any hard-won rewards or results if they do something wrong.
2. There is a way to report and possibly block misbehaving users.	5. If the user shares content - their work, their comments or anything else - it is always clear, who has access to the shared content.
3. The product doesn't include content or advertising which would be harmful for the targeted users	6. The user cannot make irreversible errors. Points that lead to restarting the use or re-doing things without a considerable effort should not be possible

Sources: The heuristics are adapted from the following sources:

Korhonen, Hannu & M. I. Koivisto, Elina. (2006). [Playability heuristics for mobile games](#).

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Theoretical background

The white paper article describes the theoretical background of the evaluation.

KOKOA STANDARD HOW TO DESIGN ENGAGING EDUCATIONAL SOLUTIONS?
December 7th 2017

How to Design Engaging Educational Solutions?
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HOW TO DESIGN ENGAGING EDUCATIONAL SOLUTIONS?

Abstract

The aim of this white paper is to examine the key components in designing good educational solutions. In this paper, we define a framework to guide educational solution design processes from the viewpoint of educational psychology. More precisely, we present the key components in designing a quality educational solution, as well as a pedagogical model, that can be used as the framework in design. Well-designed educational solutions have the power to foster or even transform goal-oriented learning pursuits, but not without good pedagogical design. Therefore, the design process should take into account the research on learning and pedagogy and pursue to implement good practices in order to promote and support learning. This can be achieved by designing solutions to implement a pedagogical model such as the engaging learning model. We conclude that instead of developing the most popular product, learning solution design should focus on trying to identify the goals and find the best way to help students of all ages and levels reach them.

Keywords: engaging learning, educational solution, educational solution design, pedagogical practices, educational psychology, engaging learning model

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