

Biblio Game KOKORO Saver

The Lab of Library
Information Science at
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with DUALIS

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➤ Outline

Fostering children's interest in books is one theme of reading guidance. Even children who do not like reading often enjoy reading their favorite books consistently. Thus, consistent book recommendations that match a reader's interests are important for effective reading guidance. It is not easy, however, to recommend which books are good to read because every child has her or his own interests. In this study, we classified impressions after reading, assigning one or more of 15 elements (as book feeling parameters) based on expressions in book reviews, and developed the growing game using them as growing elements. Assigned elements were set as pairs for sensitivity, such as happy/sad, funny/serious, safe/disturbing, expected/unpredictable, larger than life/down to earth, and so on.

Production Period : 14 April 2016 to Present
Target Age : The Higher Grades of Elementary School to Middle School



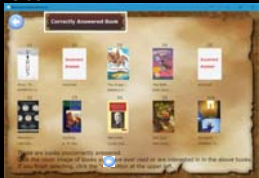
Quiz/Adventure Game × Rearing × KANSEI Parameter The New Generation of Reading Support Games is Born!

➤ How to Play

① Solving Quizzes or Choosing Adventure



The player answers questions about a story or game characters in a novel, or gets to choose how the adventure unfolds.



Book covers of **correctly answered books** (Quizzes) or **related books** of selected adventure(Adventure Book) are shown.

② Improving KANSEI parameters



All of about 2,505 books, which are related to the quizzes or adventure, have their own **KANSEI parameters**. When a quiz is correctly answered, or a story selected, the parameters of the book are improved.

What is a KANSEI parameter?

It is a parameter which **expresses impressions of book as pairs of KANSEI words**.

Pairs of KANSEI words are contrasting pairs of affective words such as "Excitement - Cool off" or "Fresh - Leaden."

One pair of KANSEI words has from -3 to 3 values which how impressions of a book have elements like "excitement" or "fun."



For example, "The Battery" by Atsuko Asano is a book which has elements like excitement or fun and brings moving impressions, because the value of parameter "excitement - cool off" is 1.57 and the value of parameter "moving - spoiled" is 1.54

1	Expected	Unpredictable
2	Cool off	Excitement
3	Spoiled	Moving
4	Disgusting	Beautiful
5	Bleak	Optimistic
6	Down to earth	Larger than life
7	Leaden	Fresh
8	Disturbing	Safe
9	Serious	Funny
10	Sad	Happy
11	No sense of tempo	Fast pace
12	Demanding	Easy
13	Conventional	Unusual
14	No sex	Sex
15	Gentle	Violent

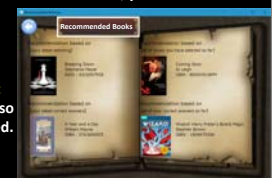
③ Rearing

A character evolves into 12 kinds of different characters depending on the values of accumulated **KANSEI parameters**.



④ Recommended Books

Books are recommended to you which have **similar impressions to books which were correctly answered**, depending on values of accumulated KANSEI parameters. In addition, you can discover new books because books which **have similar but different values** are also recommended.



➤ Expected Effects

The growing game serves as a mechanism for recommending books in accordance with children's interests. The game allows children to choose among books for which they had similar impressions. This will help children keep their reading interest. We had undergraduate students aged of 18 to 19 play the game to examine the system, and found that the students enjoyed the game when the level control of the questions was appropriate. The students also had favorable impressions that the game, in many cases, recommended books that attracted/matched their interests. Moreover, they thought that this system was effective for reading guidance.

➤ A Vision of the Future

In the test play, some students pointed out that the details of questions in the game were not satisfactory. For example, some questions might be too difficult for elementary or junior high school students. Those statements suggested that the system would be more effective with questions from various perspectives and at appropriate student levels. We are planning to improve our game by, for example, increasing the number of books for children in quizzes, and by increasing the kinds of quizzes and questioning summaries or genres of books at the same time. In the future, we'd like to publish our game on a homepage, and we hope that it will be played at home or the library and serve for continuous reading support.

- Development System and Used Contents : TyranoScript Language <http://tyrano.jp>, Jewel Saver FREE <http://www.jewel-s.jp> & Amazon.com <http://www.amazon.com>
- If you have any questions related to our game and our project, please contact The Lab of Library Information Science of Doshisha University (URL: <http://www.slis.doshisha.ac.jp/E-mail> : info@slis.doshisha.ac.jp)
- We would like to thank the HAYAO NAKAYAMA Foundation for Science & Technology and Culture, who supported this work.
- DUALIS is the Doshisha University Association of Library Information Science. This body was founded in 2013 and mainly functions as a study meeting for students aiming to become librarians.