Mixing it up! Coding in classical reading promotion

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Abstract:

The public library is a „third place" for children and teens as well as for adults.
To fulfill this role the library needs to adapt to children's and young adults interests and media habits. Today reading promotion in children's libraries includes more than promoting books – digital tools and digitized media became a common phenomenon in the average children's librarian toolbox.

In Berlin, Germany, the public children's libraries use digital media and tools to connect children's and young adult's daily life with the library as a place where they find all the media they use so naturally. The library is also a place where they improve their digital skills systematically.

Keywords: digital skills, empowerment, children, young adults, reading promotion.

Immersing coding in classical reading promotion

The library supports and teaches the skills children and young adults need to participate in a media society and to benefit from educational programs. Reading promotion in Berlin public libraries fosters different reading skills with STEM activities and multimedia programs. But why are reading skills today different from those of 30 years ago?

Linear reading is no longer the only reading skill a pupil needs. Today reading requires the ability to *navigate* through a text. Books, especially non-fiction books, look more and more like websites. Visual elements enhance the information presented in the text, as do graphics, statistics and maps. Embedded in the text are internet links and little snippets of - more or less - useful additional facts. The reader navigates through this text, opens links, and must be able to find his way back to the primary pages etc.

Advanced reading skills are crucial for a successful and satisfying reading career

Building and practicing the requested skills is what the Berlin children's libraries aim for. Children need to have *easy* access to stimulating reading promotion programs, encouraging their joy of reading, their self-determined ability to choose a text, to select the information needed, or just to have fun reading. Surrounded by modern digital media children and young adults find it odd if the library is rejecting this important part of their lives. On the other hand, libraries are in the unique position to be able to deliver everything that is essential to reach out to interested young readers.

Children's libraries in Berlin offer all kinds of media and tools children use in their daily lives, such as:

- Books, comics, mangas and magazines
- DVD, Blu Ray Discs, CD, Tonies
- Tablets and computers with internet access and office programs for inhouse use

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Therefore reading promotion in Berlin's children's libraries includes:

- working with books
- using digitized media
- introducing digital tools

All of this takes place in guided library tours for school classes or kindergarten groups, in events and educational programs during vacation time, or in the afternoon. Since children are very interested in robots and computers, the public libraries of Berlin started to include coding and roboting in their reading promotion programs.

Working with learning bots at the library's reading promotion program

In the public library at Reinickendorf, a borough in the north of Berlin, coding workshops for school classes follow Alexander von Humboldt on his famous journey to South America. The pupils collect information from books about the explorer, build a map, and program BlueBot robots so the bot follows the route of Alexander von Humboldt.

Humboldt coding workshop at the library in Berlin-Reinickendorf Copyright: Chr. Bornett

At a different workshop the children use tablets, an app called the "Word Factory" and BlueBots, i.e. mini robots. Here, the focus is on the written language: the children "hunt" for words within the app; they look for specific words in books and collect them; they sort and classify words as: funny words, football words, smelly words, lovely words…; they read and catch flying words in the app; and they program the BlueBot so it can retrace the letters they have drawn on large sheets of paper.
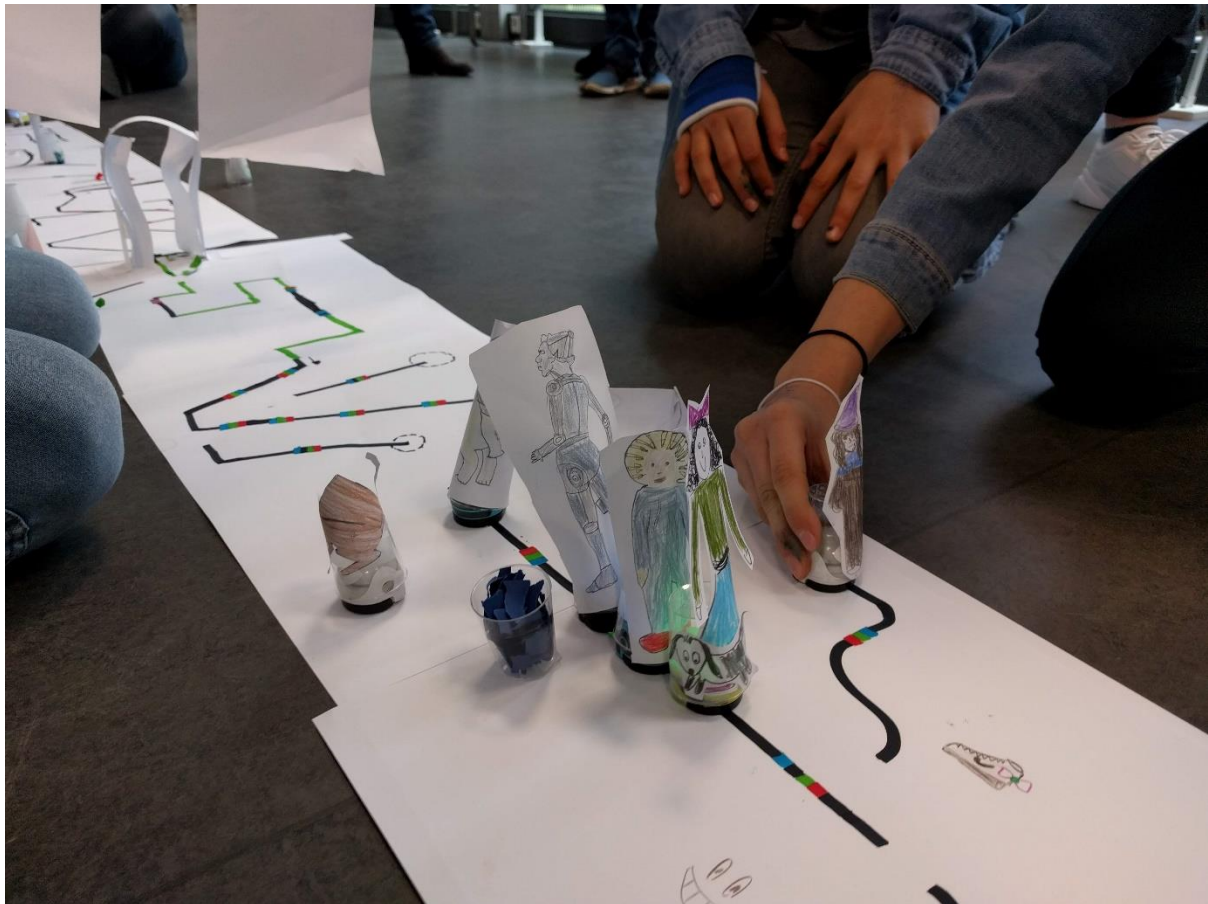
The Wizard of Ozo

At the Zentral- und Landesbibliothek Berlin (ZLB), Germany's largest children's library. workshops with Ozobots are an important component of reading promotion. The mobile, walnut size mini robots recognize lines and colors. By drawing lines in different colors with special felt tip markers the participants learn how to program the cute robots. Guided by black lines and color codes the robots twirl, drive back and forth, waggle like crazy, and so on. Coding with pencil and paper imparts first fundamental coding skills without using screens, or feeding data into specific devices. Children love doing it!

It was crucial to the ZLB to combine these STEM learning activities with classical reading promotion. The goal was to connect the different skills in an interesting format, suitable for different age groups and various occasions.

An external information scientist supported the library staff in creating different formats and connecting them with classical reading promotion.

The workshop "The Wizard of Ozo" for classes grades 5 to 6 combines roboting, coding and reading promotion. It is based on the famous children's book "The Wizard of Oz" by L. Frank Baum. The playful character of the Ozobots makes it easy to tell stories with them: through coded routing, movement instructions and haptic designing of the Ozobots as literary characters from the story.

The children form groups in which each is reading a chapter of the Wizzard of Oz story. With a lot of fantasy and simple methods they disguise the Ozobots as Dorothy, the Tin Man, the Wicked Witch and so on…

The Ozobots move on the lines drawn on paper. Each is programed to act as a character from the Wizard of Oz.   *copyright ZLB | Moritz Haase/Olaf Janson*

On huge papers sheets the children draw lines and integrate commands to make the Ozobots act like the characters they represent. Now Dorothy's house can fly with the tornado and crush the Wicked Witch of the East by landing in the magical country of Oz – under the paper house an Ozobot twirls and races on a wildly drawn line.

Children love this kind of workshops, and they often ask to take the Ozobots with them to class to learn more about coding

This led the library to the second step the staff is planning at the moment: cases with Ozobots and educational material to be handed to the teacher, borrowing these cases for four weeks in succession of a workshop at the library. Schools benefit from the library as an external learning place and partner in imparting digital skills as well as reading skills. This strengthens existing co-operations between libraries and schools and creates new ones as well.

What are the core benefits?

- Children experience the library as a place where all their media are part of every-day life.
- The children's library is a lively place where traditional and contemporary media coexist.
- The participants come to know that reading is a crucial skill to master what interests them.
- The techniques and tools work also in a vacation program – not only for school classes!

In all of these programs coding never stands alone, but is part of a reading promotion training that fosters various skills the pupils need in class – and life.

References

IFLA Guidelines for Library Services to Children
https://www.ifla.org/publications/node/67343?og=51