Instructional Software and Its Influence on Kindergarten Reading

Brief Overview/Context/Introduction

Instructional software is defined as a computer program that is designed to deliver instruction or assist with the delivery of instruction on a topic (Robyler & Doering, 2013, p.77). For this assignment, I have chosen two forms of instructional software to review. I have chosen "Starfall" as the main software that I will be reviewing. Starfall was published by Starfall Education in 2002. The overall purpose of Starfall is to teach children how to read with phonics.

The software that I have chosen to use for comparison purposes is "Raz-Kids". Raz-Kids was published by Learning A-Z in 2009. Raz-Kids is used as an interactive online reading tool that allows children to listen for modeled fluency, read for practice, record their reading, and check their comprehension (Raz-Kids, 2013). My goal is to determine if and how these types of instructional software's enhance the reading abilities of Kindergarten students and encourage them to read.

Educational Value

Promotion of Student Learning

After thoroughly reviewing Starfall, I believe that the software can fully promote student's learning in literacy and reading. Starfall begins with basic phonemic awareness and phonics skills that children need to learn to read. These phonemic awareness and phonics skills can be found in Starfall's first tier which is "ABCs: Let's Get Ready to Read" (Starfall, 2013). In this tier, students are exposed to Kindergarten Readiness standards. A kindergarten readiness objective for District of Columbia Public Schools is as follows: Students will be able to identify 10 or more letters (DCPS, 2013, p.5) Students will also be able to identify 10-20 letter sounds

(DCPS, 2013, p.5). In the first tier of Starfall, students are exposed to letters and letter sounds. Students are able to identify and recognize all of the uppercase and lowercase letters in the alphabet. They are then able to identify and recognize all of the letter sounds and how they relate to the beginning sounds of words. The first tier of Starfall uses standards and objectives that students need to prepare them for kindergarten. It provides students with the skills that they need when learning how to read.

After students have mastered the skill set of: "ABCs: Let's Get Ready to Read", they are then able to move on to: "Learn to Read" (Starfall, 2013). In this tier, students are exposed to games that work on blending and putting sounds together to make words. They are also exposed to books that help them sound out words and put those sounds together to read the words. Each book focuses on a sound (i.e. the short a sound) and that sound is the emphasis of the book. In this tier, students are exposed to Kindergarten phonics objectives. A Kindergarten phonics objective for DCPS is as follows: Students will be able to use letter-sound matches to decode simple words in decodable text (DCPS, 2013, p.3). The Starfall "Learn to Read" tier helps students with this objective. They are able to read simple stories and are given help in decoding the words in the story. The software helps the students sound out the letters in the words and put the sounds together in order to read the words. The student is able to listen as the software decodes the word and can decode the word along with the software.

Students are able to advance up to four tiers in Starfall. The third tier, "It's Fun to Read", and the fourth tier, "I'm Reading", are geared toward students who are in first and second grade and are considered good readers. At these tiers, Starfall can be considered a tutorial teaching function. Tutorial teaching involves instructional sequence on a topic that is similar to a teacher's classroom instruction and that is self-contained (Robyler & Doering, 2013, p.86).

After reviewing the "I'm Reading" tier of Starfall, it is apparent that it can be completed at home or in the classroom with little to no teacher or parent supervision. The child is able to easily navigate the software and advance in levels of reading at their own pace.

The software improves student learning beyond what students learn in the classroom. The students are able to clearly hear the letter sounds and the articulation and pronunciation of words. The students are able to go back and continually repeat what is being said to them until they master the sounds and pronunciation. The students are also able to pair what they are learning with games that reinforce the reading skills.

In the classroom, teachers have a tendency to keep moving and advancing through the curriculum. With Starfall, the children are able to take their time and work at their own pace. This allows them to avoid activities that they may not yet be ready for. The students are also able to self-correct themselves if they make any mistakes on the activities.

Starfall is software that parents can use at home with their children. After conferencing with the teacher, parents are able to see where their child's reading abilities lie. At home, parents can use Starfall to work with their child at their current reading level. They can use Starfall to reinforce reading skills that the child is learning in the classroom and to help advance him or her to the next reading level.

Strengths

The Starfall software exhibits much strength. Students are able to develop language and the phonics and phonemic awareness skills that they need to read. The website is visually appealing and very easy to navigate. This is crucial when attempting to captivate young readers. Starfall works wonderfully for students who are English Language Leaners. They are able to

learn at their own pace and do not have to feel anxious about having to keep up with their classmates. ELL's can talk as much or as little as they want. The songs and games provided on the website provide a learning environment that is not threatening (Wormer & Dame, 2010, p.135).

Starfall also appeals to the multiple intelligences of students. The website has songs for musical learners, vibrant graphics for visual learners, and sign language and motions for kinesthetic learners (Wormer & Dame, 2010, p. 135). Starfall offers free resources, such as worksheets and writing journals, which allow parents and teachers to expand student learning outside of the website.   The website also offers a new kindergarten curriculum program that is available for purchase to parents and educators. The curriculum's focus is on reading and language arts (Wormer & Dame, 2010, p. 135).

Limitations

Starfall also exhibits limitations. The website does not possess communicative language activities that are beneficial in enabling language acquisition for ELL's. This does not allow ELL's to discuss any communication they have with the text they read. It also does not allow them to orally communicate what they have read (Wormer & Dame, 2010, p. 135).

The four language modalities are: listening, reading, speaking, and writing. Emphasis is placed on listening and reading in Starfall (Wormer & Dame, 2010, p. 135). All students who are learning to read, especially ELL's, could benefit from the additional speaking and writing components. They would be able to hear themselves as they read and possibly pick up any errors that they are making. They could also write their own stories to help them practice writing and forming the letters of the words that they are sounding out.

Interest Level, Ease of Use, and Absence of Bias

Starfall is engaging, fun, and interactive for young learners. Students are able to learn to read and read for fun. The activities are engaging and the positive reinforcement that is given with it encourages and motivates children to read (Wormer & Dame, 2010, p.136). The website is easy to navigate. This feature motivates students to want to use the software. The students do not have to worry about being frustrated because they cannot get from one level or section to another. They can use the software at their leisure and work at their own pace. The student is able to click on his or her specific tier, click on the letter, book, or activity that they wish to work on, and work from there. The learner is able to stop at any time without any penalization and come back when they are ready.

As previously stated, the software is user-friendly for parents and educators. Teachers and parents can leave comments and suggestions at any time for the website to make improvements. If they are having a technical difficulty, there is a "Frequently Asked Question" page and a help desk with common questions and problems that users have. Educators and parents can also collect journals, worksheets, and other activities that relate to each book on the website (Wormer & Dame, 2010, p.135).

Starfall appeals to the interest level of multiple learners. Starfall offers something for a wide range of multiple intelligences. Logical and mathematical learners are able to use books and activities that include counting, sequencing, addition and calendar math. Students are also exposed to a plethora of genres. Children are able to read poetry, comics, plays, riddles and folktales. They are able to interact with paintings and the music of famous composers and musicians (Wormer & Dame, 2010, p. 135).

Starfall is also culturally relevant software. The stories that are housed on Starfall represent characters who come from a variety of ethnic groups. The stories also represent diversity by depicting a variety of cultures. Children are even able to create characters that have their skin color and look like them. This is extremely important for ELL's who are learning a new language. A character in which they share similarities make what they are learning more relevant (Wormer & Dame, 2010, p. 136). The software does allow students to use sign language and motions. I was not able to discover any options for learners who were blind. Starfall is free software. Users do not pay for anything unless they wish to purchase the Kindergarten curriculum.

Comparison of Starfall with Raz-Kids

A review of Raz-Kids online books helped me to better understand strength of Starfall's online books and reading activities. Raz-Kids is limited in that it only allows learners to practice reading skills through online books. The students can listen to the story being read for fluency, read for practice, record their reading, and take quizzes to check their comprehension of the story (Raz-Kids, 2013). Unlike Starfall, Raz-Kids does not make learning to read interactive and engaging. The graphics on Raz-Kids are not vibrant and colorful like those on Starfall. There are no intriguing sound effects that grab the reader and make him or her want to explore. Raz-Kids does not include games or a variety of genres like Starfall. A subscription to Raz-Kids must be purchased in order for it to be used. Upon subscribing, students are subjected to learning and reading at the teacher's pace. Overall, Raz-Kids is a collection of leveled readers that available as e-books.

Overall Evaluation of Software/Conclusion

Holistically, I would give Starfall an excellent rating. I would definitely recommend this software for use in enhancing the reading abilities of Kindergarten students and encouraging them to read. The strengths of this software outweigh its limitations. The software begins with a focus on beginning reading strategies and advances until student's can read independently. At the first level, the software focuses on letter identification and letter sounds. At the second level, children can sound out words and put the sounds together to read the words. At the third and fourth levels, children can focus on reading different genres and integrating reading with other subject areas (art, music, etc.).

Starfall is culturally relevant and has something for everyone. English Language Learners to learners who are blind are able to engage in Starfall. Starfall's graphics are eye-catching and bring the reader into the website. It is easy to navigate and user-friendly for teachers, children, and their parents. The overall presentation and design of Starfall makes learners, parents, and educators want to use it. I would recommend that educators or parents who want to integrate technology into their Kindergarten child's reading use Starfall.

References

Roblyer, M.D. & Doering, A.H. (2013). *Integrating educational technology into teaching.* Upper Saddle River, NJ: Pearson Education.

Wormer, A. & Dame, A. (2010). Starfall.com. *The Reading Matrix.* (10)1, Retrieved from: http://www.readingmatrix.com/articles/april_2010/wormer_dame.pdf

(2013). District of Columbia Public Schools Kindergarten English/Language Arts Standards. Retrieved from: http://dc.gov/downloads/TEACHING%20&%20LEARNING/Learning%20Standards%202009/DCPS-ELA-KIND-STANDARD-LEARNING-ACTIVITIES.pdf

(2013). District of Columbia Public Schools Kindergarten Readiness Standards. Retrieved from: http://dc.gov/DCPS/Files/downloads/TEACHING%20&%20LEARNING/Learning%20Standards%202009/DCPS-STANDARDS-KINDERGARTEN-READINESS.pdf

(2013). Raz-Kids [computer software]. Available from: http://www.raz-kids.com/

(2013). Starfall [computer software]. Available from: http://www.starfall.com/

Software Publication Information Form

A. Title of Main Software: Starfall

Version: N/A **Medium (e.g., compact disk, DVD, Internet:** Internet

Publisher: Starfall Education

Year: 2002

Cost: Free

URL for Publisher or Website link to software: http://www.starfall.com

Target Grade(s) /Age(s): Preschool-2nd grade/ Ages 3-8 (My Target Grade: Kindergarten)

Subject(s): Reading

- **System Requirements:**
    - Windows 95, Macintosh OS8, or Linux
    - Internet connection
    - 64 MB Ram
    - 200 MHz processor
    - Internet Explorer 4 or Netscape 4
    - Flash Player 4

B. Title of Comparative Software: Raz-Kids

Version: N/A **Medium (e.g., compact disk, DVD, Internet):** Internet

Publisher: Learning A-Z

Year: 2009

Cost: $89.95 per classroom for 1-9 classrooms for one year/ $74.95 per classroom for 10-49 classrooms for one year

URL for Publisher or Website link to software: http://www.raz-kids.com

Target Grade(s) /Age(s): Kindergarten-6th grade/Ages 5-11 (My Target Grade: Kindergarten)

Subject(s): Reading

System Requirements:

- Macintosh or Windows environment for basic web browsing.
- Windows must have Internet Explorer 6 (latest version preferred) or Firefox 1.0 (latest version preferred).
- Macintosh must have Firefox 1.0 or Safari 2 (latest version preferred).
- Cookies and JavaScript must be enabled.