

THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

LOCATION:
*Beaverton, Oregon, United
States*

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Education and Academia

NOMINATING COMPANY:
America Online

ORGANIZATION:

StudyDog

PROJECT NAME:

Using the Internet to Build a Lifelong Love of Reading

Summary

StudyDog, Inc. addresses the most pressing educational need of young children -- learning to read before fourth grade. Nearly two-thirds of fourth-grade children fail to achieve proficiency in reading, according to the National Assessment of Educational Progress. To address this challenge, StudyDog has developed a new class of on-demand educational software that emulates the performance of a model teacher (i.e., an education expert), but with much less cost and more consistency and availability. The StudyDog on-demand system is the first to incorporate reading assessments, validated and correctly designed and scoped curriculum, the ability to keep children engaged, and the technology to manage, measure and report reading progress for parents.

Recognizing the technological significance and the social impact of StudyDog, AOL has entered into a 6-year distribution agreement where they will sell StudyDog to their sizeable subscriber base.

Introductory Overview

Plain and simple, StudyDog teaches children to read. It was built to address the needs of children having difficulty learning to read, and it is effective in teaching all children fundamental early reading skills they need to become successful in life.

For more than three decades, the National Assessment of Educational Progress, the Nation's Report Card, has documented the difficulty children have reaching proficiency in reading with nearly two out of three children failing to reach this level of reading development by fourth grade. This is a time when classroom instruction transitions from learning to read to reading to learn.

Dr. Reid Lyon, formerly from the National Institute for Child Health and Human Development, wrote in 2002, "Specifically, in our NICHD-supported longitudinal studies, we have learned that school failure has devastating consequences with respect to self-esteem, social development, and opportunities for advanced education and meaningful employment. Nowhere are these consequences more apparent than when children fail to learn to read."



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

ORGANIZATION:
StudyDog

PROJECT NAME:
*Using the Internet to Build a
Lifelong Love of Reading*

LOCATION:
Beaverton, Oregon, United States

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Education and Academia

NOMINATING COMPANY:
America Online

Children struggling to read in fourth grade are greatly disadvantaged compared with their literate peers. The American Federation of Teachers, in their publication, "Reading: The Cornerstone of Learning," reports, "For every child, reading is truly the gateway to knowledge. In fact, teaching children to read is probably the single most important task of our elementary schools."

Driven to fulfill this need, StudyDog combined innovative Internet tools with creative characters, stories and instruction, and solid, research-proven reading curriculum. This new generation of online instruction focuses on customizing instruction for each child, capturing the child's interest, and teaching the reading skills the child needs to succeed. This expert system allows parents to support their children while StudyDog teaches the children to read.

StudyDog has captured the interest and curiosity children have for the Internet in its innovative use of an on-demand, instructional model. Within this model, StudyDog is able to deliver a very rich, multi-media experience specifically designed for every child at anytime and to any Internet-connected computer. StudyDog is at the forefront of applying such an on-demand model to educational online learning. Driving the model, StudyDog has developed a learning management system for testing children's reading development, adapting the curriculum to each child's needs, tracking and redirecting each child's reading development, reporting progress to parents and teachers in real time and managing parents' and teachers' accounts. StudyDog does the "heavy lifting," allowing parents to encourage and support their children and teachers to leverage their instructional time.

Building on the capacity of our on-demand model, StudyDog designed characters, stories, and instruction to engage children in an entertaining, yet educational manner. StudyDog, the character, is a companion for children as they move through the lessons. A quest-like story enwraps the lessons, so children see continuity that keeps them interested in what is coming next. High quality graphics, voice and music further enhance the instructional experience.

Driving the StudyDog lessons is a solid, research-proven early reading curriculum. Specifically modeled from the National Reading Panel's 2000 findings, which are at the heart of No Child Left Behind and Reading First, the StudyDog curriculum focuses on developing reading skills related to:

- phonemic awareness -- understanding that language is made from distinct sounds
- phonics -- associating language sounds to specific letters
- reading fluency -- learning to automatically read with rhythm and flow
- vocabulary -- expanding an understanding and recognition of words
- comprehension -- understanding and using what is read

The StudyDog curriculum is consistent with states' early-childhood reading standards and reflects the early instruction endorsed by educational researchers (Dr. Roland Good, University of Oregon; Dr. Sally Shaywitz, Yale University; and Dr. Catherine Snow, Harvard University, for example).

Instruction, presented in the 15-minute lessons, includes explicit teaching of the specific reading skills, demonstration of the skills and guided practice for the children to master the skills. Lessons are lengthened when needed to revisit specific lesson activities and reinforce children's learning.



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

ORGANIZATION:
StudyDog

PROJECT NAME:
*Using the Internet to Build a
Lifelong Love of Reading*

LOCATION:
Beaverton, Oregon, United States

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Education and Academia

NOMINATING COMPANY:
America Online

Because of the design of StudyDog, the lessons are available to children at any time and from any Internet-connected computer at www.studydog.com and through our partners, including America Online (Ready, Set, Read), and the National Center for Family Literacy (primarily serving low-income families).

Among the children who have completed StudyDog lessons, 90 percent have shown a full year's growth in reading skills. Through our scientific trials, we have shown that StudyDog is accountable for two-thirds of the reading development gains children show compared with randomly assigned control children. Additionally, StudyDog has been reviewed and approved for Title 1 Supplemental Educational Service in Oregon and California.

Benefits

StudyDog has proven to be very effective in helping young children learn to read. It is particularly capable of capturing the attention of children who are reluctant to learn to read and encouraging their reading success.

Daliah Lundquist of Vancouver, WA, writes us, "We have tried everything with Ryan, so I was at first skeptical as to how much of an effect it would have. Ryan has a very difficult time with auditory learning. What pleased me most was his attitude towards StudyDog. He has become confident and most importantly he wants to learn. What used to be a battle has turned into a pleasure. Working with StudyDog has far exceeded my expectations."

With StudyDog, children take a first big step toward reading and school success. For most children, learning to read is a struggle, and for some, a mighty struggle. In a classroom setting, early attempts to read often lead to embarrassment, failure, and reluctance to learn to read. With StudyDog, children can enjoy an engaging, learning experience from the comfort and privacy of their own home.

"First of all, thank you so much for your wonderful reading program. Our son, who was taught very little in kindergarten, has taught himself to read with StudyDog. He loves it, and begs to get on the computer to do more. At last, the goal of truly fun and educational software is being realized. I've seen very few educational software products that were so engaging and effective." Scott Williams, Penfield, NY

StudyDog has also proven to be effective for teachers, leveraging their time and supplementing their reading instruction in class and after school. Brenda Coats, Reading Specialist at Dry Hollow Elementary School in Oregon, reports that, "All of our kindergarten and struggling first and second-grade students use StudyDog, including our English language learners. In kindergarten, the students start StudyDog after they gain oral language competency necessary to begin learning to read." In interviews with the children, we found that they like this different way of learning reading skills, giving them a break from classroom worksheets and group reading tasks.

With a high concentration of low-income children in St. Louis, Missouri, the Neighborhood Houses use StudyDog in their after-school program. Reading development is extremely low for the children served by the centers. In 14 weeks, 91 percent of the children showed a full year of reading skill development, a significant level of development in comparison to a randomly selected control sample. Parents and children loved StudyDog. Wanda Brownridge reports that "Parents wish StudyDog was available for their older students at our centers, also."



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

ORGANIZATION:
StudyDog

PROJECT NAME:
*Using the Internet to Build a
Lifelong Love of Reading*

LOCATION:
Beaverton, Oregon, United States

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Education and Academia

NOMINATING COMPANY:
America Online

The benefits provided by StudyDog have helped children, parents and teachers address the difficult problems of young literacy that are critical to academic success and life fulfillment. Our efforts are growing as more and more parents and teachers use StudyDog with their children. We are encouraged by the growth of our services and impact we are having on children's lives.

The Importance of Technology

Addressing reading needs on a national scale is one of the thorniest problems facing educators today. Through federal efforts, elementary schools and classrooms are beginning to focus more on children's early reading development. Progress is slowly being made, but much more needs to be accomplished for every child to have the benefits of reading literacy. StudyDog's technology design, using an on-demand software model, allows families and classrooms virtually unlimited access to the StudyDog lessons. With its technology design, engaging creativity, and solid curriculum, StudyDog is capable of addressing the reading needs of individual, young children on a national scale. StudyDog is highly scalable because of its design and use of information technology.

Originality

The StudyDog Expert System is the first program to incorporate reading assessments, validated and correctly designed and scoped curriculum, the ability to keep the child engaged, and the technology to manage, measure and report reading progress.

Patent-pending technology enables StudyDog to uniquely customize a reading course for each child, deliver scientifically developed curriculum based on a child's assessed needs and performance, and keep a child engaged while learning to read. StudyDog analyzes each child's reading needs and performance to continually determine and deliver the specific instructional sequence needed by that child.

The uniqueness and advantage of StudyDog is centered on leveraging technology and validated curriculum, and on the changing needs of the market. Since most parents are very busy and not experts in reading curriculum and instruction, they want a reading solution that teaches their child to read and yet keeps them informed of their child's performance. This is unlike the traditional way, where a reading program presents the curriculum but left it up to the parents to teach their children and to keep them engaged.

StudyDog's unique application of an on-demand model – which lets us reach literally millions of parents and their children with an affordable and effective product that children love -- is our greatest accomplishment. This sets StudyDog apart from other, more traditional reading services.

Success

StudyDog is used in more than 1,000 schools across the nation and internationally to supplement classroom reading instruction. More than 50,000 parents use StudyDog at home with their children. Children who use StudyDog show increased interest and skill in reading, often overcoming their reluctance to read.



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

ORGANIZATION:
StudyDog

PROJECT NAME:
*Using the Internet to Build a
Lifelong Love of Reading*

LOCATION:
Beaverton, Oregon, United States

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Education and Academia

NOMINATING COMPANY:
America Online

StudyDog has achieved several critical milestones in reaching these teachers, parents, and children:

- The StudyDog reading service was launched in 2003 for PC computers and in 2004 for Mac computers.
- Validation studies of the effectiveness of StudyDog were conducted in 2004 and continue with each annual end-of-the-year reviews of children's performance data.
- More than 1,000 schools and over 50,000 parents have used our reading lessons.
- We have developed partnerships with the National Center for Family Literacy to distribute StudyDog to low-income families.
- Our partnership with AOL was launched in January 2006 and is showing impressive parent subscriptions.

Difficulty

At its inception, StudyDog set a demanding and difficult task— to build a software system that could teach children reading skills like an expert reading tutor. The traditional reading models were either a fun, interactive game that lacked sufficient curriculum and teaching methodologies or rigorous, uninspiring curriculum that failed to engage a child.. Also, we wanted to provide parents and teachers such tutoring expertise they could afford and that would greatly enhance and leverage their limited time. In short, our goal was fairly radical, in that we wanted StudyDog to emulate a human tutor. The clear benefit to parents is that their children are given expert instruction, and StudyDog does the teaching. The benefit to teachers, who already are the experts, is the leverage they realize for placing selected students with StudyDog.

This defined the product development efforts for our curriculum, creative design, and information technology staffs. Bringing these three groups together allowed StudyDog to capture children's attention, customize and manage their learning, and teach essential reading skills.

We approached our development efforts by describing the critical attributes of a human reading tutor. Tutors gains knowledge about the children they serve, and select curriculum to fit the children's needs. They select appropriate instructional methods to teach sound reading curriculum. They adapt to the children's changing needs as they develop reading competency to motivate and challenge the children. Finally, they measure and report the children's performance to parents and teachers.

Our development efforts had to address each of these attributes of a reading tutor. We developed online interactive assessments for young children in order to identify their reading needs. We used that information to customize a course of study for each child. The responses from each lesson activity are monitored and used to repeat lessons or redirect children to additional skill lessons they need. This flexibility allows StudyDog to address student's needs and to keep challenging and motivating them to advance in their development.

Capturing lesson data from children allows StudyDog to provide real-time, online reports to parents or teachers. These reports keeps parents informed about their child's progress and motivates parents to encourage their child's reading success.

As you can see, StudyDog was able to address its challenging development goals by uniquely combining the qualities of a research-proven curriculum, with creative animation and teaching methods, and innovative software development.