

THE ADVANTAGES AND DISADVANTAGES OF USING SMART PENS FOR YOUNG CHILDREN'S ENGLISH LEARNING

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Abstract: *A smart pen, also called touch-talk pen, reads out loud paragraphs, stories and vocabulary in books designed specifically for it. They also include puzzles and songs. The books are of many subjects, including English. The aim of this study is to investigate the advantages and disadvantages of the use of smart pens for English learning activities of young children. First, the smart pen's functions and effects will be reviewed from the perspective of producers' declaration. Afterwards, a survey including questionnaires and interviews will be carried out amongst parents whose children have been using smart pens. Their answers, which reflect the effects of smart pens on their children's English learning, will be analyzed to draw out the advantages and disadvantages of the use of smart pens for children's English learning, especially in comparison to the commitments made by suppliers. Finally, recommendations will be made referring the purchase, use, manufacture, and supply of this product.*

Keywords: *smart pen, learning habit, English acquisition, advantage, disadvantage*

1. Introduction

In Vietnam, education is considered the national policy, as Article 9 of The Education Law of Vietnam (2005) states, "Educational development is the first national priority with a view to improving people's knowledge, training manpower, and fostering talents." In Vietnam, it is widely believed that human resource is the driving force of the nation's development. Simultaneously, providing the best for the next generation is Vietnamese tradition, with the belief that it is parents' duty as well as old age security. Understanding that trend of the time, producers of educational products make great efforts to meet the demand of parents and to make profits for their businesses. In that context, in 2009, the smart pen (also called touch-talk pen) was first launched in the Vietnamese market.

Since smart pens are a new line of products in Vietnam, there have been hardly any studies about the effectiveness of this tool in education. The aim of this research is to investigate the advantages and disadvantages of the use of smart pens for English learning activities of young children from 3 to 7 years old. The advantages and disadvantages can be of a wide range, from English learning effects to educational effects on children, including English acquisition and learning habits. The data were collected through questionnaires distributed to 30 parents whose children are using smart pens, and 5 of them were interviewed to get more detailed responses.

2. Background

2.1 Functions and prices of some popular kinds of smart pens

The functions of smart pens are reading aloud lessons and stories, singing songs, recording children's voice, asking questions for quizzes and games and giving answer keys or responses to children's answers. Children can hold the pen in their hand when they are using it. Or children can point the pen at the part of book they want the pen to read, and then put it on the base, for the pen to talk aloud while standing still on its base. Figures 1 and 2 show how children can use smart pens, while Figure 3 illustrates parts of a pen and their functions. Table 1 provides information about prices of sets of smart pens and books introduced by some popular smart pen companies in the market. The data show that the price of smart pens are not remarkably different amongst companies, although Teddy, the newest

brands, are making big efforts to reduce the price by providing pens with smaller starting sets of books at a lower price.

Table 1. Prices of some popular smart pen sets

Teddy Smart Pen (Toan Duong Company)	Panda Smart pen (SCTV Company)	Smart Pen K600 (Smart World Company)
Price: VND1,480,000 (approximately US\$74) (Pen and books) English I Like (volume 1 & 2) 4 English-Vietnamese stories 2 basic Vietnamese books (<i>But Teddy thong minh – Tu sach than ky</i>)	Price: VND2,150,000 (approximately US\$107) (Pen and books) Let's Learn English 1 Vietnamese (Volume 1 & 2) English Picture Dictionary, Volume 1&2 Alphabet and numbers 1 story Pronunciation Addition and subtraction (<i>Gioi thieu but Panda</i>)	Price: VND2,190,000 (approximately US\$109) (Pen and books) International Phonetic Alphabet English Songs Vietnamese Volume 1, 2 &3 Preschool textbook for Mathematics, English, and Chinese 2 stories (<i>But thong minh mau xanh</i>)



Figure 1. Children using smart pens (Source: <http://giadinh.net.vn>)



Figure 2. Smart pen standing on its base (Source: <http://www.butthongminhcamau.com>)



Figure 3. Parts of a touch-talk pen (Source: <http://teddy.vn>)

2.2 The working principle of touch-talk pens

Figure 4 is a graph demonstrating the basic principle of working of a touch-talk pen in the Vietnamese market. There are more complicated procedures, e.g. game and puzzles. Nevertheless, they are designed and developed based on the basis illustrated in Figure 1, according to Mr. Le Quang Trung from Toan Duong Company, producer of Teddy smart pens.

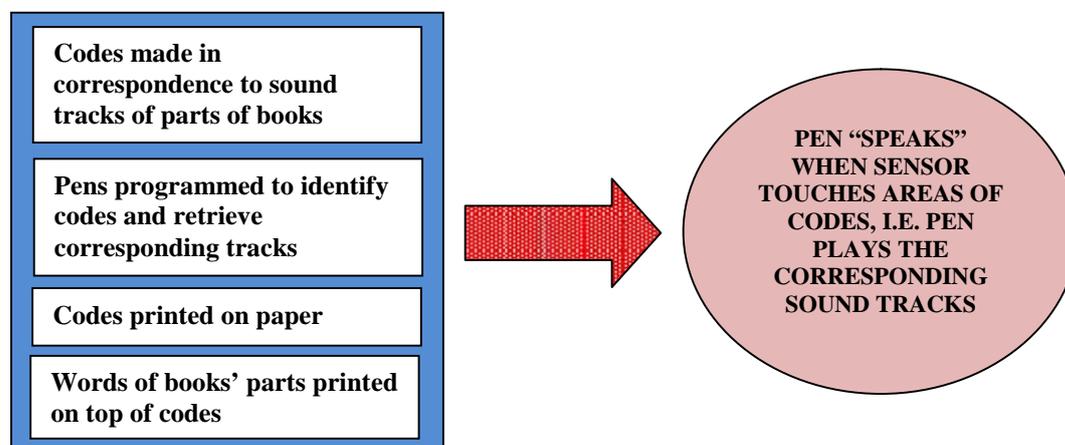


Figure 4. Smart pens' basic principle of working

2.3 Advertisements for smart pens

To promote their products, all smart pen companies have advertisements on the media, including newspaper, television, and the internet. On Teddy's website, <http://teddy.vn/>, it is stated that "like a teacher, the pen helps your child to learn letters, words, mathematics, and necessary skills, to get familiar to foreign languages, to learn and to listen to foreign languages better".

At <http://www.youtube.com/watch?v=DR4QBvZhis&feature=endscreen>, a video clip to advertise Smart pen K600 shows a child being disappointed with her parents' being busy, then getting happy and successful in learning with the help of her new smart pen. Then the clip is concluded with a song saying the smart pen is children's faith and dream for a bright future, and a trust for families.

For Panda, at <http://panda.sctv.vn/?s=H>, we can see a video clip showing Santa Claus to give Panda smart pens to children as Christmas gifts. For the question he puts to the children, "Do you want to talk to foreigners?" the answer is Panda smart pens. On Panda homepage, the slogan is "Panda biet noi, me con minh cung gioi" ("Panda can speak; both mommy and child make progress").

3. Literature Review

According to Newby, Stepich, Lehman and Russell (2000, p. 9), technology performs as a bridge to connect theory and practical problems. They stated that "instructional technology translates and applies basic research on human learning to produce instructional design principles and processes as well as hardware products that teachers and students can use to increase learning effectiveness" (p. 10). Therefore, it is natural that producers of educational products for children make constant efforts to apply new technologies into their products.

Young children's language learning is in a specific style. As Scott and Ytreberg (1999) noticed, toys have an important role in language classroom for children. They can be used in various activities, and they also help to connect the outside world with activities in the classroom. (p. 114). Discussing one of child learners' characteristics, the two authors noticed, "Young children are often happy playing and working alone but in the company of others. They can be very reluctant to share. It is often said that children are often self-centered up to the age of six or seven and they cannot see things from someone else's point of view." (p 2-3). This requires appropriate methods of instructions, according to child learners' age and personality.

In the content of new approaches suggested by linguists, language learning is closely related to communication. Children language acquisition and performance first of all rely on the input they get

from the environment, which consists of teacher talk, textbooks, materials, other students, nonverbal, outside class exposure, and even their own production (Brown, 2000, p. 295). Meanwhile, the communicative language teaching approach, the most recent and popular English teaching approach, owns the following four main characteristics: (1) focusing on all the components of communicative competence and not restricted to grammatical or linguistic competence, (2) engaging learners in the pragmatic, authentic, functional use of language for meaningful purpose, (3) seeing fluency and accuracy as complementary principles underlying communicative techniques, and (4) making learners to use language productively and receptively, in unrehearsed contexts. (Brown, 2000, p. 266-267)

4. Discussion

4.1 Advantages in using smart pens for children's English learning

According to responses from parents whose children are using smart pens, the smart pens bring many advantages. 90% of respondents are satisfied with their decision to buy smart pens for their children. The most prominent strength of smart pens is the friendly convenient design. A smart pen and its books are closely related to pen and books, which are traditionally associated with learning and education. A smart pen and books can provide many activities that are often provided by CD players and computers, but more quickly and convenient, and without any negative effects on eyes like what sitting long before the computer electronic screen can cause. Additionally, smart pens are viewed by parents as comparatively safe for the children, although children's use of the pen should be cared at some extent, like the use of any other hard long object.

All of the parents considered the pen as a helpful source of language and knowledge input for children an interesting toy for children to entertain themselves and play with others in get-togethers. They noticed that smart pens help children acquire language and knowledge gradually, and encourage children's learning. 90% of the respondents think that the pen helps children to spend their free time and not to disturb parents' work. 30% of the parents mentioned the pen as a means for parents to play with children, and help them learn through the content of the pen and accompanying books. They reported that the pen reminds them of stories to tell children, general knowledge and English words or sentences to teach their children.

A small proportion of parents, accounting 30 % know that the pen is upgradable, and they are contented with the fact, although a majority of parent respondents did not know that they can buy more books and upgrade their pen to read new books. In general, smart pens have positive effect on children language acquisition and learning habits, if they are used smartly.

4.2 Disadvantages

The parents' responses suggest that smart pens generally do not make any harm to their children. Nonetheless, they reflected on some problems they encountered when using the pen for their children, and some things they do not like in the pen they bought.

For 30 % of respondents, the problem is that their children got bored soon after they took the pen, some broke the pen or tore the books and then the pen set have to be put away. On the other hand, in some other cases, children are too interested in playing with the pen, and ignore their school work.

Some parents said that they bought the pen because advertisements made them believe that smart pens can help their children make remarkable progress in English learning, but the effects did not meet their expectation. Some smart pens read the stories but not vocabulary, so they do not really teach English effectively, because stories are long and children cannot remember the words, then they just help children relax and get somehow familiar to English. Smart pens give the questions in oral words, but the answer required is merely children's pointing at the picture of what is the right answer. If children are passive in nature, they may play with the pen without saying anything. In other words, the pen helps children practice listening, but does not give them chances to speak English communicatively. Even in English story books, games and quizzes are sometimes designed in Vietnamese, so they do not effectively help children practice English.

Some parents are concerned about some utterances spoken by their smart pens. For example, some compliments are exaggerating. A smart pen says "B n qu là m t thiên tài" (You are a genius) when the child can answer a simple question. They think compliments like this are somehow inexact, which flatter children and give them a false impression of being better than they are. Another parent is concerned about the language items she considers inappropriate or not polite enough for children to learn. For example, a little pig says " c r i, c r i, con n ây!" (OK, OK, I am coming) in an

annoying voice when his mother is calling the kids for dinner, which is not suitable for children to learn. When parents can find inappropriate utterances in Vietnamese, they infer that inappropriate English utterances can be taught to their children as well, without their notice.

The Vietnamese voice lead to a problem when it is produced in the North or the South accent only, which does not match children' region and which causes confusion. Besides, some parents think that the English voice in the pen they bought is not very natural and does not sound native, and that they would like to have better choices.

Some parents' complaints involve the pens' technical limit. On some pages, the words read aloud and the texts do not match. 10 % of respondents complained that after some months, their pens' tips get insensitive and almost unable to read, and some pens do not provide clear sounds after some months.

Generally, smart pens are expensive, concerning Vietnamese average income. The current price is considered "quite expensive" by 80% of parents, and none of them think that it is cheap. 20% percent of parents suggest that they wish the pen's price could be lower so they could buy them as presents for relatives and friends' children.

Although parents consider smart pens interesting and helpful, no parents think that the smart pens can really teach their children new knowledge or lessons like a teacher, which are sometimes hinted in commercial advertisements of smart pens. They still need to take their children to English classes for good English competence. Therefore, as for the commercial programs of smart pens, 80 % of the respondents think that information provided is too general or overstated, but not highly practical and helpful.

5. Recommendations

5.1 Producers to invest more in the technical aspects, and provide quick effective technical assistance after sales

Many parents complain about the problem that pen reads the wrong stories which do not match the stories children are pointing at. On websites of smart pens, it is explained that this happens because children forget to point to the logo of each book on the cover, so the pen reads the previous books it recognizes. This explanation seems logical, but it does not reach many parents, whose have the impression that smart pens often encounter technical problems.

This problem calls for a quick and accessible technical staff that can easily and promptly help children and parents solve technical problems with the pens and books. Hot line number should be printed on books or pen, where users can read any time. Quick assistance may greatly enhance users' trust. Improvements on designing of pens' functions should be researched for, for example, adding oral detailed answer keys for all questions, instead of saying "right" or "wrong" after children's pointing action like what some pens do now. Besides, smart pen companies should provide parents with choices between North and South Vietnamese accents when they buy the pen of any brand. This can be done by providing the corresponding sound tracks for each pen at the time of purchasing.

5.2 Content of books and pens to be developed intensively

5.2.1 Books' content

The writing and editing of books is a big challenge to Vietnamese educational system, even in the field of normal printing books. It is obvious that is it a difficult issue for smart pen companies to deal with. Nevertheless, for the development of the line of products, this challenge needs to be taken bravely and responsibly.

In order to improve the attraction of smart pen and books, there should be more stories for children to read about Vietnamese modern life, not always Western, Chinese, or old traditional Vietnamese stories. For the purpose of helping children to improve English competence, more communicative and interactive functions should be designed for the pens. And firstly, all English texts should be accompanied by English glossaries, to help children carry on intensive learning from books.

Everyday skills, which school books often lack, should be provided by smart pens, to help children carry on what is taught in real life. That will help to avoid long passive period of time playing with the pen. Swimming, making a toy, planting a tree, and so on, are what children, especially in urban area, are hardly familiar to. According to 45% of respondents, real life skills should be included in smart pens' contents, especially expressed in English with illustration.

5.2.2 Speech and voices of the pen

The producers need to pay more attention to the details in the products, in each sentence, to avoid any mismatch or mistake that can cause distrust in users. The quality of voices recorded for sound tracks in smart pens need to receive intensive investment, for good, natural, and standardized pronunciation and intonation, ideally of native speakers. As talking is the main function of a touch-talk pen, the talking part needs to be as convincing as possible.

5.3 Better price policy, regular upgrading, improved distribution system, more factual advertisements, and effective after-sales services

Although smart pen companies are producing many new books, it seems that a majority of parents and children are not aware of that. What happens to the smart pen set of many children can be illustrated by Figure 5.

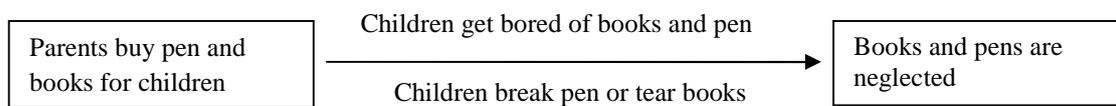


Figure 5. What often happens

From the problem illustrated, it can be seen that after-sales services and updating of information are necessary to make sure that children and parents are timely informed about the product’s upgrading, and more factual commercials of the products should be launched. A parent suggests that the company should trace after consumers, perhaps via email, and inform them about new books which they can buy and add to their children collection. Also, the pen should be sold separately to replace broken one when necessary. Especially, the books may be in succeeding volumes to maintain children’s interests, the way Doraemon stories gained success in Vietnam in recent decades.

If smart pen companies can reduce price of smart pens, they can extended their market. And if they can regularly intrigue parents to buy new smart pen books for children, they will make more profits. A more effective system is illustrated by Figure 6.

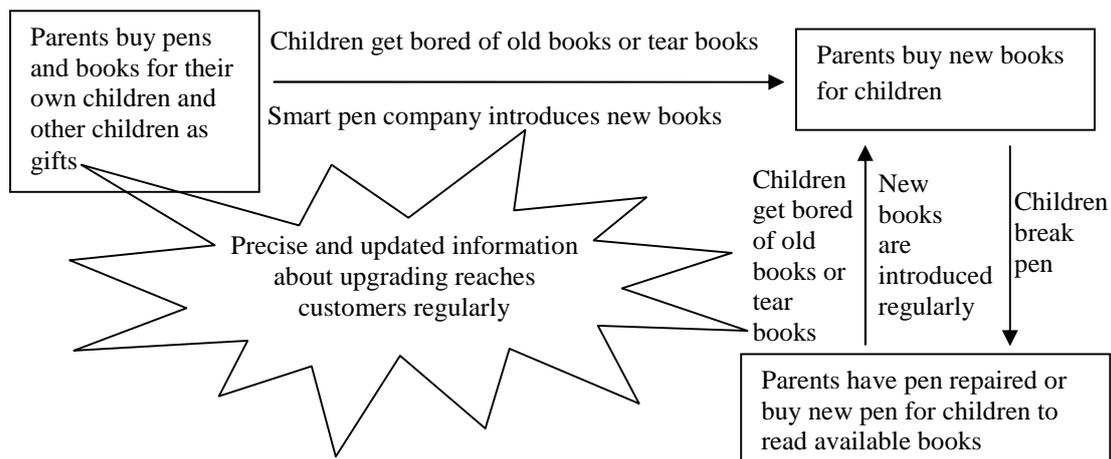


Figure 6. What should be enhanced

5.4 Smart pen to be consider as an additional educational tool, and not substitution to teachers or parents

On the basis language teaching and learning theory, and the pen’s functions, this recommendation is made towards parents. It is obvious that the pen can entertain children without parents’ presence. Some

smart pens advertisements trigger that wish of parents and state that parents can let children learn with smart pens and they will study well without taking their parents' time. Many parents praise it for this function, because parents are getting much busier in the modern world. But this can become a major disadvantage for the child development if overused. In their job, teachers have conversations with children, judge what children do and say, and give feedbacks in various ways. Parents do the same, when they have time for their children. The communication help children develop fully.

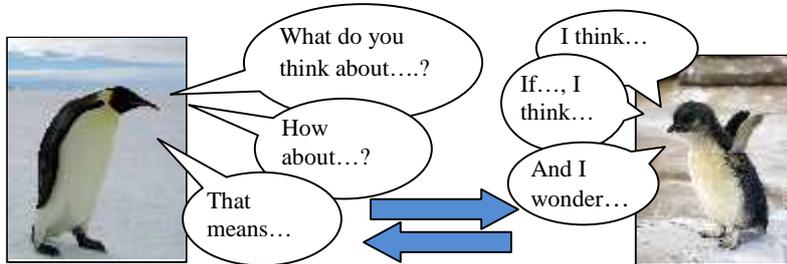


Figure 7. Two ways communication between adults and children

Meanwhile, smart pens can play sound tracks, and can be a very helpful source of input for adults and children, but they can neither understand children's psychology nor really communicate with children. Figure 8 summarizes what smart pens and children often do in each other's presence. In this process, the child is somehow passive and does not have the need to really talk to the pen. The pen speaks but cannot listen and response to children's spontaneous ideas. Unlike what some advertisements for smart pens may hint, smart pens are not capable of giving children good tutoring at home like a language teacher.

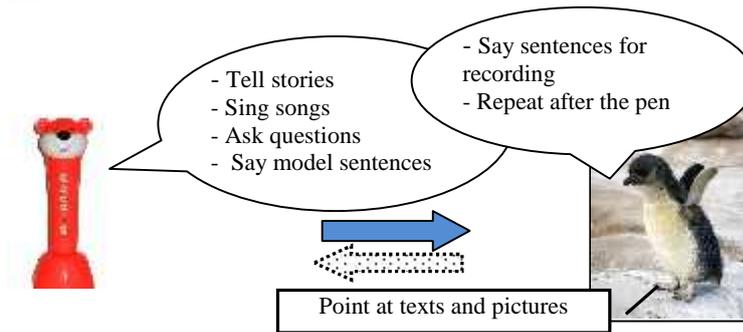


Figure 8. Relation between the pen and children

Therefore, it is still necessary for parents to talk and play with children. Instead of the passive relation with the pen, a child should be helped to enjoy the multi-direction relation with pen, friends and adults, as illustrated in Figure 9.

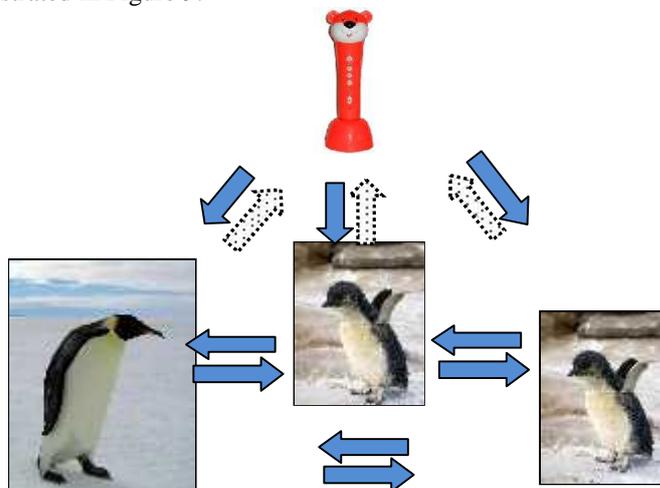


Figure 9. The relation that should be built amongst children, adults, and smart pens

Parents can also help children use the pen for longer time by instructing children to use the pen correctly and renewing children's interest in the pen. Although children can get bored of their toys quickly, they often want to keep their properties. Parents, therefore, should provide children with enough space to keep their belongings, including their smart pen set. After some time, when the parents take out the forgotten smart pen from the store and suggest giving it to some other child, it is very likely that the child owner of the pen will feel a renewed interest in this tool and can use it enthusiastically again. In short, a smart pen is best used with parents' assistance, like the slogan of Panda, "Panda bi t nói, m con mình cùng gi i." (Panda can speak; both mommy and child make progress).

6. Conclusion

Smart pens are helpful aids to education. Still, especially for young children, the communication with other people, especially loved ones, are necessary for full development and language progress. Parents, although investing money into educational products, should not neglect the person-to-person relationship with their children. At the same time, producers of smart pens need to make continuous improvements to their products in order to serve users effectively.

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