# The Dispositions of Professional Educators Contemplating the Use of The Readingpen® as a Motivational Factor to Increase Reading Fluency

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## PURPOSE AND SIGNIFICANCE OF STUDY

This project is intended to examine the relationship between the implementation of the Readingpen® and the dispositions of professional educators towards the impact the pen has on motivating students to increase their Reading fluency and comprehension. In the past, research has indicated that the Readingpen® does in fact increase Reading fluency by acting as a motivational tool (The Readingpen® Group, 2005). However, additional data must be collected to support the notion of a student utilizing this pen and developing an increase in Reading fluency as a result of being more motivated. More importantly, what are the dispositions of professional educators on the impact the pen has as a motivator to increase student success in Reading? To date, the limited evaluative research involving the pen has been performed by the company manufacturer: www.readingpen.com. Therefore, it is imperative that objective, independent researchers, such as myself, conduct additional research.

Up to date, most research has focused on student/pupil usage. However, it is important to consider what teachers feel (dispositions) about the pen in the first place for integration to be done well. If they do not approve then there is no way for researchers such as us to measure pupil usage. Therefore, in order for this question to be answered, professional educators were asked to participate in a research-based project on their dispositions of the Readingpen® acting as a motivational tool to increase Reading fluency and comprehension success.

The Readingpen® was first introduced seven years ago. In that first year, the main purpose of the pen was a small translation tool for international executives. Currently, over 1 million pens have been sold worldwide in 35 different countries. One of the early propositions for the use of the Readingpen® in the classroom was to assist students with reading disabilities. However, many realized that the pen might have more to offer which resulted in schools asking this important question: Can this tool be a valuable benefit in K-12 reading instruction (The Readingpen® Group, 2005)?

In an attempt to answer this above question, US technology experts were assigned to evaluate the use of the Readingpen® in the K-12 educational market. Conducting several case studies, the technology experts gathered initial positive feedback simply stating that the Readingpen® acted similarly to a math calculator, a personal assistant that results in the acceleration of student success. A 6th grade Readingpen® case study educator states, "I have seen reluctant readers begin to read more as a result of having the additional support of the Readingpen®" (The Readingpen® Group, 2005). Many of the educators' research disclosed that they were able to integrate the Readingpen® into various subjects within the curriculum. However, others stated that their main concentration of use was primarily in the language arts department: reading, spelling, vocabulary, and SSR or Silent Sustained Reading (The Readingpen® Group, 2005).

The Readingpen® has many key features for the K-12 educational classroom. First and foremost, its small unique size enables it to be labeled as an easily accessible tool ready for use. Some of the features included with this intuitive, friendly tool are: built in LCD Screen where words are displayed, provides synonyms in response to vocabulary, and built in speaker and headphones (T.H.E. Journal, 2005, p. 1).

## STATEMENT OF RESEARCH QUESTIONS

The research questions for this study are as follows:

1.   Are the dispositions of in-service and pre-service teachers affected by the functions' of the pen?
2.   Are the dispositions of in-service and pre-service teachers affected by individual years of computer usage?
3.   Are the dispositions of in-service and pre-service teachers correlated with the Readingpen as a motivational tool?

## RECRUITMENT PROCEDURES

This research project utilized 14 Duquesne University graduate students from the School of Education. The students in a graduate level class termed "Technology and Education," were asked to participate in this research-based project. In order to expose the graduate students to the pedagogical functions of the pen, I taught a scripted mini Reading lesson. However, before I began the lesson I split the class into two separate groups. Each group was given a short poem and some words that they were required to scan. As both groups scanned a word, I walked them through all the built in functions of the pen: scanning, visual built in LCD screen, audio function which pronounces/spells a word aloud, Thesaurus, Dictionary, and 81 different built in Languages.

Implemented into this lesson, candidates utilized the pen in small group activities to not only grasp a feel for how the pen works and discover the functions of the pen, but most importantly, contemplate how the pen impacts the professional dispositions of in-service and pre-service teachers. Once the lesson was completed and the graduate students had the opportunity to interact with the pen, candidates subsequently completed the *Survey of Teachers' Attitudes Toward Computers* focusing on the dispositions of implementing this pen in their classroom as a motivational tool for Reading success. There were five levels to choose from (strongly disagree to strongly agree) (Texas Center for Educational Technology, 2005).

## FINDINGS AND DISCUSSION

As I sat down and analyzed my data, I was very surprised by the outcome that I had received. Going into this process, I held the pre-notion that a lot of individuals that were not computer savvy were going to hold negative dispositions towards the Readingpen◊. However, based on the data I gathered many individuals had mixed feelings about the pen for
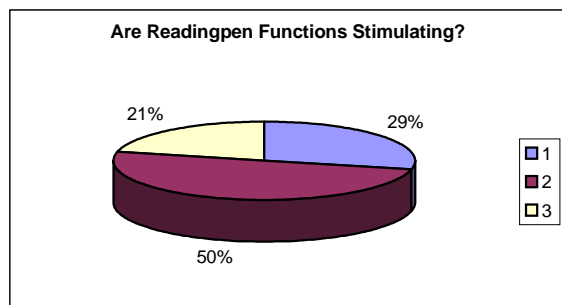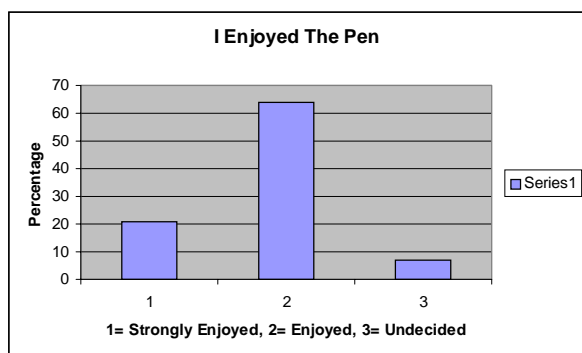
*Figure 1.*

**Are Readingpen Functions Stimulating?**

21%
29%
50%

1
2
3

*Figure 2.*

**Does The Computer Make Me Nervous?**

Percentage

80
70
60
50
40
30
20
10
0

1    2    3

Series1

1= Strongly Agreed, 2= Agreed,
3= Computer Nervousness

*Figure 3.*

**I Enjoyed The Pen**

Percentage

70
60
50
40
30
20
10
0

1    2    3

Series1

1= Strongly Enjoyed, 2= Enjoyed, 3= Undecided

*Figure 4.*

**Statements 2 and 6**
**Blue= Statement 6, Purple= Statement 2**

Percentage

80
60
40
20
0

1    2    3

Series1
Series2

1= Strongly Agreed/Enjoyed, 2= Agreed/Enjoyed,
3=Undecided/Nervousness

various reasons. For example, a few worried that the functions of the pen would be too difficult for a primary aged student. This leads into my first research question that I asked:

1. Are the dispositions of in-service and pre-service teachers affected by the functions' of the pen?

As I looked at the results to the survey, specifically statement 15 which says, "I think the Readingpen◊ functions are stimulating and would increase student productivity in Reading fluency.", 50% or 7 individuals stated that they agreed, 21% or 3 individuals strongly agreed, and 28% or 4 individuals were still undecided.

After I looked at that question I really started to ask myself why those 4 individuals were undecided. Were they undecided because they did not receive enough time with the pen or did not have time to use it once in their own classroom setting? Or, a much better question is, were they undecided because they are afraid to give technology a chance? Unfortunately, many teachers are not as computer savvy as they should be and in turn this affects their ability and willingness to use technology in their classrooms. This leads into my second research question:

2. Are the dispositions of in-service and pre-service teachers about the pen affected by individual pre-held dispositions about the computer?

For this question I utilized in the survey statement numbers 2 and 6. First, I looked at statement 6, which says, "Working with computers makes me nervous." The following are the results to this question:

According to the chart above, approximately 70% or 10 individuals strongly agreed that the computer does not make them nervous. Approximately twenty-one percent or 3 individuals agreed that the computer does not make them nervous, and on the flip side, about 7 percent or 1 individual thought the computer made them nervous. Now
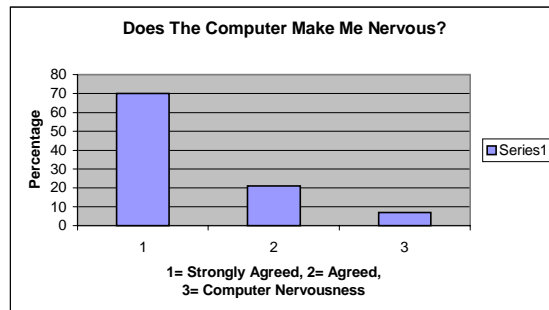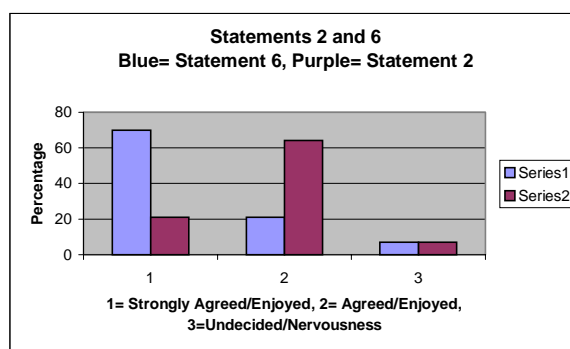
take a look at the results from statement 2, which says, "I enjoy using the Readingpen◊." According to the chart below, 7% or 1 individual was undecided, 64% or 9 individuals enjoyed using the pen, and 21% strongly enjoyed using the pen.

Now, when placing the statement results side by side this is what the data looks like.

First, as applied to the Strongly Agree/Enjoyed column there is a great deal of difference between the two percentages. I immediately started to question this. Why are teachers who claim to not be nervous around the computer questioning the use of the Readingpen®? One notion I thought of was that they are just becoming comfortable with the computer that they are afraid to open up to new technologies. This also reminded me of a comment made during my research delivery by one of the in-service teachers. She stated, "I don't know if I want my students being taught by a piece of machinery." This leads me to believe that because some of our teachers are "old fashioned" or have not had the technology interaction as pre-service teachers are receiving prior to graduation, they are more afraid or lenient to use a new technology such as the pen in their classroom.

Now look at the second column otherwise known as the Agreed/Enjoyed column. In this case 21 percent of the in-service teachers agreed that the computer does not make them nervous but 64 percent of them enjoyed the use of the pen. I started wondering why this group of candidates enjoyed the use of the pen much more than group one. After some thought and consideration I came to the conclusion that there are a plethora of reasons why this group enjoyed the pen more than the first. Maybe this group felt more comfortable using technology to teach students or according to one special education teacher said, "My students would think this pen is a gift from heaven."

My last and final research question focused strictly on the teachers' dispositions and the pen as a motivational tool for increasing Reading success. The questions states:

*Figure 5.*
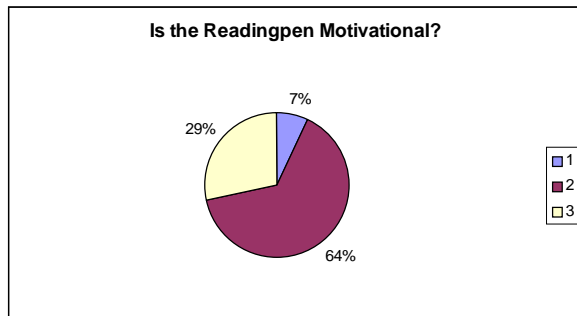
**Is the Readingpen Motivational?**

7%

29%

64%

□ 1
■ 2
□ 3

3.    Are the dispositions of in-service and pre-service teachers correlated with the Readingpen as a motivational tool?

For this answer, I focused on statement number 7 in the survey, which says, "The Readingpen◊ is a motivational tool."  According to the results charted below, 64% said that they agreed the pen was motivating, 29% said they strongly agreed that the pen was a motivational tool, and 7% disagreed with the pen as being a motivational tool.

I received a great deal of feedback from the teachers after completing the research project with them.  First, as applied to the pen being a motivational tool, many stated that it makes learning "interesting." Students would no longer be learning out of a book 8 hours of the day, but learning off a technological device.  The pens features, namely the LCD built in screen, audio function that can read/spell out words, built

in dictionary and thesaurus, and even the left-handed function for left-handed individuals can all play a key role in a child's Reading success. Today, teachers need something stimulating that will capture their student's attention.  Many of the teacher's felt that the Readingpen® could offer just that.

In conclusion, although many of the teachers felt that the pen was a motivational tool, 7 percent did not agree with it as a successful educational device.  The main reasoning I received behind this thought process was that students may in fact become reliant on the pen, which, in this case would offer no improvement in Reading success.  However, this in turn would be a teacher's responsibility to look for in a child's behavior.  If the teachers felt the student was becoming dependent on the pen, they could wean the child off the pen gradually.  This is just one important reason why teacher's dispositions or feelings about the Readingpen® need to be considered first before successful integration/ student measurement can be completed within the classroom.

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