



## An Exploratory Case Study

on what makes a good school website: Investigation of Long Island School District Website Homepages across the socioeconomic statuses.

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## Abstract

The purpose of this exploratory case study was to examine 50 public school district websites in Nassau and Suffolk County to identify the differences in quality and content across the different socio-economic levels.



## Introduction

With the New York State Board of Education spending 17.2 million dollars during this fiscal year on Informational Technologies, we believe that individual school district websites are a good indicator of how districts are using informational technologies to reach students, staff and the community around them.

The digital divide is a reality in schools across Long Island. Our study explores how the quality of school district websites can or cannot be a reflection of their socio-economic levels.



## Literature Review

We conducted a thorough literature review from a broad range of recent literature across four disciplines. We identified key characteristics of 44 articles of the more than eighty articles reviewed as part of this empirical research where items such as the what and why school districts should have websites.

Our Literature review helped to determine the qualities of a good school website, as well as, information on how to evaluate school websites and create one of your own.



## The Problem

State of New York's Department of Education needs to provide a consistent template for the distribution of money placed forth for informational technologies so that all schools can have quality websites regardless of socio-economic status thus promoting communication with the community.

Some of the benefits of a school website: linking schools in the district, developing communication in classes, grade levels, and cultures, encouraging parental involvement, presenting information to visitors about the school and acquisition of technology skills

(Miller, Adsit & Miller, 2005).



## The Purpose of the Study

The purpose of this study is to examine school district websites and identify differences between website quality based on two instruments developed to measure website contents and website quality.



## Significance of the Study

“The nation’s continued investment in school-based technology has resulted in significant progress toward closing the digital divide”

(Judge, Pucket & Bell, 2006).

This research study is a examination of Long Island School District’s websites as a resource that can range from a basic general contact information to an elaborate display of educational resources forming a link between the schools, parents and the community at large.



## Research Question

Is there a difference between socio-economic status and school district website quality and its content?





## Sample

- Selected from the 127 Long Island public School districts
- **This research examined 50 school websites from the following distribution:**
  - 10 Districts from Lower Class (below 55k),
  - 15 Districts from Lower Middle Class (55k-67.499K),
  - 15 Districts from Upper Middle Class (67.5-79,999k)
  - 10 Districts from Upper Class (greater than 80k)

This sample represents 40% of the total school district population in the two counties.

The schools were grouped first by geographic location (Nassau or Suffolk County), then grouped by average family income to determine Social Economic Status.

Our study included a stratified random sample from each of the four socio-economic levels until the number of desired districts from each socio-economic level was chosen.



## Method

- After the 50 sites are randomly selected, they were reviewed independently by both researchers.
- Each of the two researchers reviewed the same 50 school districts, using the two instruments, and the data was cross-referenced.
- Research was compared and only websites for which there was a 90% agreement on the criteria between researchers was included in the analysis.



## Instrument One

- Developed from the review of previously published literature on the topic of quality school websites.
- The instrument consists of 17 Common Components in school websites.
- Each of the websites was examined for common components based upon the article's suggestion which states an effective school based website should consist of a minimum of **ten** of the components.

(Miller, S., Adsit, K., & Miller, T. article's *Evaluating the Importance of Common Components in School-Based Websites: Frequency of Appearance and Stakeholders.*)



## Instrument Two

- Our second instrument is tool developed by two professional educators whose goal is aligned with our research. This instrument assesses website quality to determine if the website provides useful information for classroom use, or student and parent use at home.
- This instrument measure four areas: **S**timulating features, **M**eaningful contents, **O**rganization and **E**ase-of -Use



## Procedure

- The 50 were identified by only a number.
- This was done by placing each of the school districts into a Microsoft Excel Spread sheet by name, socio-economic status and website URL.
- The status column was then removed and the districts were sorted by alphabetical order.
- As the researchers we then at different locations investigated the 50 websites, upon completion of the evaluations we caucused to compare our findings.



# Data Analysis Policy Information

Table 1: Percentage of research population having standard policy information

Item	Lower Class	Lower Middle Class	Upper Middle Class	Upper Class
Mission Statement	70%	67%	60%	70%
Rules & Policies	50%	53%	40%	50%
Internet Use Policy	20%	33%	33%	50%



Figure 1: Comparison of socio-economic status and standard policy information

Table 1 identifies the percentage of schools within the same socio-economic status that have the minimal policy information available to its users.

These policies include the district's mission statement, rules and regulations and the district's internet safe usage policy.

The data shows that many districts fail to have these three basic components.



# Data Analysis Curriculum

Table 2: Curriculum and Classroom Information pages

Item	Lower Class	Lower Middle Class	Upper Middle Class	Upper Class
Curriculum and Standards	4	5	9	7
Classroom Level Information Page	2	6	5	3

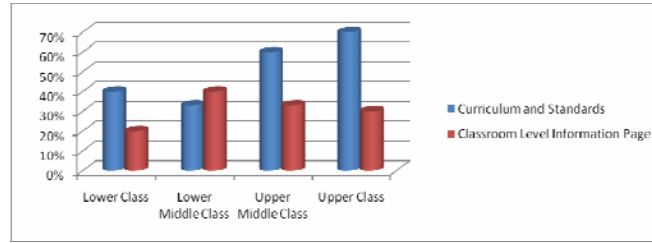


Figure 2: Percentages of schools within a SES that have curriculum and classroom information pages.

Through the use of a checklist we were able to next review the websites to identify the existence of links to curriculum related guidelines for parents and students alike.

In table 2 the findings included a distinct correlation between socio-economic status and distribution of curriculum information.

Seventy percent of those districts falling into the upper SES provided links to the state standards verse only forty percent of those falling in the lowest SES.



# Data Analysis General Information

Table 3: General information found at school district websites

Item	Lower Class	Lower Middle Class	Upper Middle Class	Upper Class
Teacher Information	8	10	9	7
Grade Level Information Page	2	2	4	5
School News	8	14	14	9
Breakfast and Lunch Menus	8	13	11	7
Student Work Samples	3	6	6	1
Physical Location of the School	10	15	15	9

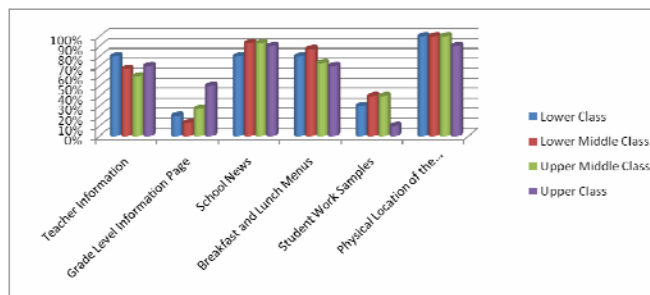


Figure 3: Percentage of schools general information found at school district websites

These items can include teacher information pages (who is teaching what grades), grade level information pages (supply lists and classroom calendar), school news and happenings, school calendar, breakfast and lunch menus and simply the physical location of the school.

One of the more disappointing findings was however, that regardless of SES school districts fail to promote students success through the display of student work.

Our belief for this startling finding is that many districts may fear that such actions may draw attention to the individual and may lead to legal issues.

In such situation the school can protect the individuals by only using first name when photos of the individual as associated with work.

While reviewing the data we have been able to identify that the most common component was all but one district identified the physical location of the schools within the district.





## Data Analysis Resources

Table 4: Resources made available for users

Item	Lower Class	Lower Middle Class	Upper Middle Class	Upper Class
Home School Organization Info	90%	80%	87%	70%
Homework Hotline	20%	27%	27%	20%
Links for Teachers	40%	53%	67%	50%
Links for Parents	50%	73%	73%	70%
Links for Students	70%	73%	67%	50%

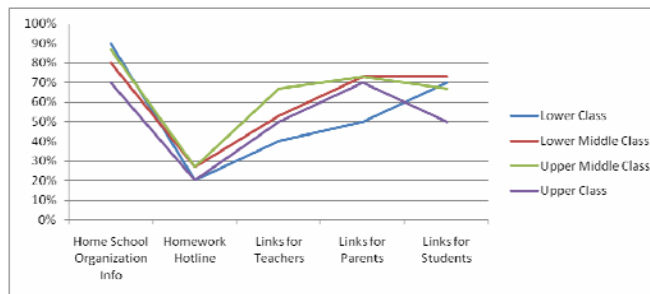


Figure 4: Percentage of resources made available for teachers, parents, and students.

School district websites can provide users unlimited resources.

School district website can include resources for parents, students, and teachers alike and it can provide instant feedback on tasks they may frustrate parents and students.

Under the heading of resources we looked at the availability of links for teachers, links for parents, links for students and the idea of a homework hotline.

The findings were startling few schools have the availability of online help for homework.



# Data Analysis

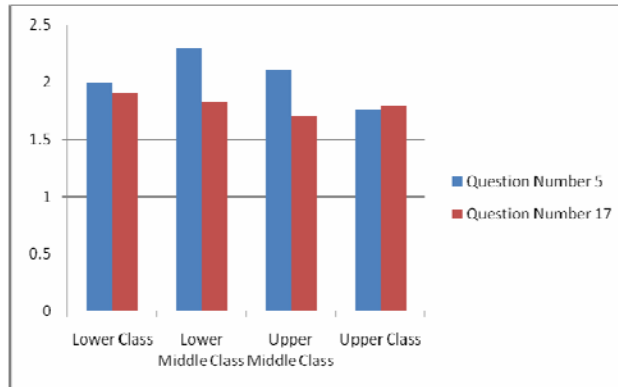


Figure 6 Average score for stimulating website aspects across the socioeconomic statuses.

Figure six compares the average scores on two of the questions that make up the stimulating construct. This comparison was in the form of question five were districts were judged on whether there is an eye-catching title and/or visual cue on the home page of this Web site that will attract the users' attention. In question 17 the school districts were judged on the variety of formats (e.g. text, images, sound) used to help to maintain the attention of the users. For the lower class socio-economic group the overview visual on the home page varied while the variety of formats was consistently positive with the exception of school 36. For the Lower Middle Class socio-economic level the district average score for the overall visual appeal was above average for most schools. School District 15 failed to meet the requirements for any stimulating attributes on their page. With regards to using a various type of media on their site, there seemed to be no consistent theme across the socio-economic level.



## Data Analysis

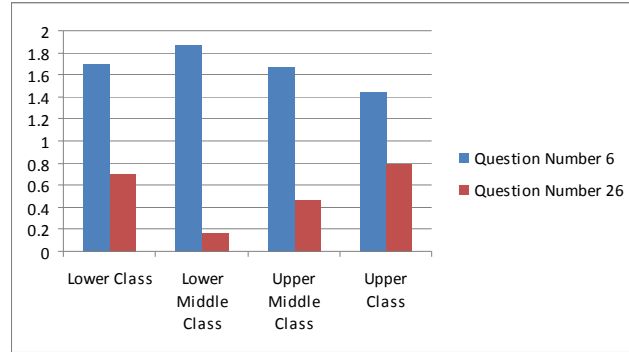


Figure 7 Average score for meaningful website aspects across the socioeconomic statuses.

. Question 6 asked if the websites provided valuable links to other useful websites and Question 26 wanted us to determine if the website provides opportunities for interactivity to engage users. While most of the school in the lower socio-economic level did provide links to valuable websites, several of the schools performed below average, with one school providing no links at all. With regards to engaging the students, only two schools in the lower SES showed to have been meaningful experience for us as the researchers.

## Data Analysis

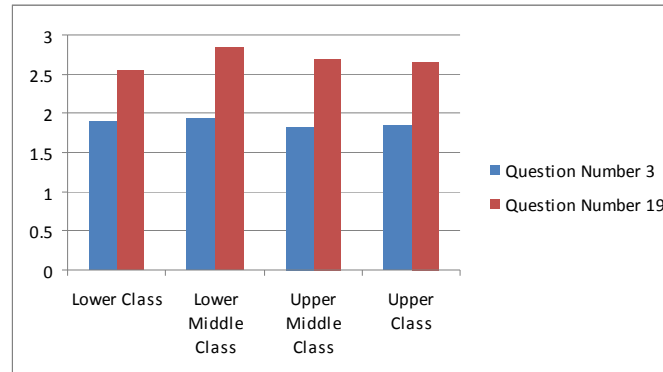


Figure 8: Average score for organizational aspects of district websites across the socioeconomic statuses.

Among the questions that were categorized as judging the organization of the website design were questions three and nineteen. The third question was comparable to question seventeen from the stimulating portion of the research which provided an opportunity to check the consistency of our research. Question 19 evaluated whether the websites presented information in a clear and consistent language and style. The results for the both the lower and upper class provided similar results in that among the two SES levels one a total of three schools had negative scores for the presentation of the website in clear and consistent language. Figure 8 identifies the average scores across the socio-economic statuses for district websites on questions 3 and 19.



## Data Analysis

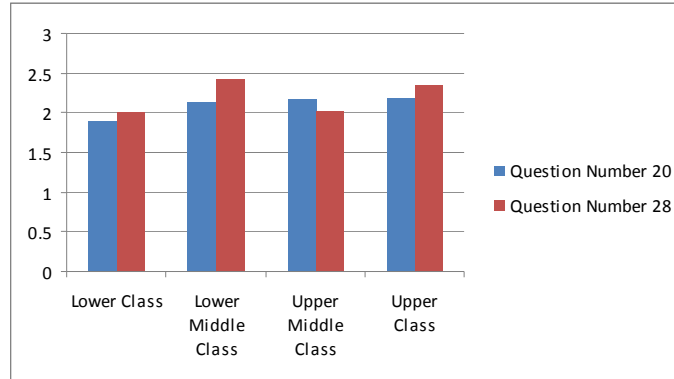


Figure 9 Ease of use average grades on questions 20 and 28 for lower class districts



## Cross Summary Motivation Analysis

- Similar to the results on question 17, question 3 resulted in a majority of positive responses but only a handful of districts receive the maximum score of three points because of the failure to provide audio and visual clarification tools to describe topics.
- In table 7 is the chi square comparison of the questions 3 and 17, results are similar with the lower grades on average going the more in depth question (question 3).



## Table 7

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	Stimulating	Organization
	17	3

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**School SES Level**

Lower Class	1.9	1.9
Lower Middle Class	1.83	1.93
Upper Middle Class	1.7	1.83
<u>Upper Class</u>	<u>1.8</u>	<u>1.85</u>

Table 7 Cross summary motivation analysis of stimulating and organization questions



## Research Findings

The findings suggest the importance of attending to personal, as well as, contextual motivators of parental engagement in their children's education as researchers and educators work to understand and enhance the effectiveness of parent-school relationships (Hoover-Dempsey, Jones, Reed, and Walker, 2000).

Teachers should find ways to extend invitations to parents for participation, and to provide parents information on course work and materials.

These findings hold implications for parents, teachers, principals, and policy makers interested in strengthening family-school partnerships and their influence on children's educational outcomes (Hoover-Dempsey, Jones, Reed, and Walker, 2000).





## Conclusions

- There is a need for the creation of a consistent template for school web site development or at least an agreed upon list of common components for school district web sites.
- There is no surprise that across the socioeconomic landscape some schools of greater means provide more valuable resources than others. These resources can include many variables such as technologies, experience and staffing but never the less all school districts at this point need to have a media outlet for communication of events, school happenings and students work.



## Recommendations for Future Studies

- Among the reasons for development of valuable school/classroom websites this research determined that it as a field educators need to develop meaningful websites where all uses can not only access information but also be directed to additional help and support.
- Further research should include investigation of individual school websites. Looking at the current effort at the school levels will help to identify the importance placed on the internet more so websites by school leadership as a tool in communicating with the community at larger.
- Individual school development of websites should be viewed as an opportunity for publication of student work and could be a motivating factor in student achievement.



## Summary of Study

- Review of the data gather from the instruments we used has shown that regardless of socio-economic status websites fail to provide such useful resources as homework hotlines for students, classroom level informational pages, an explanation of the district Internet Safe Usage policy and many district fail to promote student success by displaying the student work.
- While reviewing the data we have also identified that the most common component was all but one district identified the physical location of the schools within the district.



## References

Judge, S., Puckett, K. & Bell, S. M. (2006) Closing the digital divide: Update from the early childhood longitudinal study. *The Journal of Educational Research*, 100(1), 52-60.

Hoover-Dempsey, K., Jones, K.P., Reed, R., and Walker, J. (2000, April). Parents motivation for involvement in children's education: Testing a theoretical model. Paper presented at the annual conference of the American Educational research Association, New Orleans, LA. Retrieved October 9, 2007, from the ERIC database.