The Effect of Learning Management Systems on Parent Involvement

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Introduction

This research describes the effects of utilizing Learning Management System (LMS) in parent involvement of elementary school children. A child's education is always connected to the school and the teacher, but parent involvement is a factor which influences children's achievement. Parents engage in their children's education in order to help the children perform better. Hence, parents need to be in constantly informed about what their child is learning in school. However, parents cannot accompany their child in class every day. This situation becomes an obstacle for parents who wish to receive the information rapidly from school. Moreover, some parents may not have time to become involved in their child's learning. So, various researchers set out to investigate how to promote parent involvement in by using a LMS as part of the teachers curricula.

Several articles posit different findings on parental involvement. These articles mentioned in the literature review section of this report provide insight on the importance of parent involvement, its effect on a child's academic achievement, and how parent involvement can be conducted via a LMS. Indeed, these articles prompt the following research question: What are the effects of using a Learning Management System (LMS) on Parent Involvement? This study proposes several interview questions that can be used if an action research project were to be conducted and implemented in the future. The survey includes the methodology behind the instruments used, the research design, and data collection,

Thus, the proposed participants would be the parents of the elementary school children. The interview questions were organized and divided into three parts in order to collect the

following data: 1) how much time does a parent spend working with their child?, 2) the perception of parent involvement, and 3) the perception of LMS. Finally, this study focused on an analysis of parent feedback from these survey questions. Therefore, the effect of utilizing LMS in parent involvement can be determined.

Literature review

In their article "Parents' involvement in their children's education" Berthelsen and Walker (2008) set out to find the correlation between parents' involvement and their child's academic achievement. Children in a kindergarten cohort were recruited for the study. They found that children had higher academic achievement when: a) the parent was involved in school activities, and b) communicated regularly with school teachers. Researchers also found that the degree of parental involvement was related to the parents' socio-economic status (SES). Parents with lower SES were passively involved in their children's education, or not involved at all. Still, Bethelson and Walker (2008) found that regardless of SES, if the parent displayed a positive attitude they were more willing to actively participate with teachers and other parents, and voice their opinions about their child's education. Hence, it was established that children obtained a better education when teachers, and parents work in unison.

Cheung and Pomerantz (2015), conducted a similar study. They were concerned with finding if a correlation existed between parent involvement and student academic achievement and performance. Thus, they conducted a longitudinal study simultaneously in the United States and China. Cheung and Pomerantz (2015) found that there were two pathways for parent involvement which include: 1) perception-acceptance value development and, 2) experience-

value development. Conversely, their research data ascertained the hypothesis that parent

involvement had an effect on student achievement. Their research shed light on the fact that

parent involvement had a positive impact on the child's overall academic performance.

Consequently, the child was more engaged in school and this factor boosted their academic

achievement which allowed them to advance further with their grades.

DeMissie and Rorissa (2015) pointed out that Information Communication and

Technology channels such as learning community management system (LCMSs) do in fact

facilitate communication between parents and school personnel. According to the authors the

four core services of a LCMSs include: design and maintenance of district school and classroom

websites; solutions that allow for interactive classrooms; parent notification; and faculty

management. Hence, as stated by DeMissie and Rorissa "LCMSs play an important role in

redefining parents' involvement providing them with greater and more-valued means of

contributing to their children's academic experience" (2015). The researchers focused their

study on the use of Edline, a typical LCMSs used in a k-12 setting. Overall, the authors argued

that LCMSs are the principal facilitators of parental involvement. The authors concluded that

improving both quality and user satisfaction of parents could lead to higher levels of behavioral

intention to use an LCMSs in a k-12 setting.

A research article by Turner (2010) titled "Technology Use in Reporting to Parents of

Primary School Children," focused on the usage of a specialized report writing software for

home-school communication that mirrors an LMS. According to the author this special software

permitted teachers to inform parents about their children's educational attainments. However,

primary school teachers and parents were at odds with how the British Government viewed the

usage of Information Communication Technology in primary schools. Moreover, it was pointed

out by researchers that the use of technology as a communication tool between parents and

teachers overlooked the possible detrimental factors to communication. These detriments are

related to class, ethnicity, education, and use of English.

Conversely, Bessell (2003) focused on FamilyTech an LMS program designed to help

improve students' performance. The program provided strategies for researchers and educators

which can be used to inform families from different cultural backgrounds and financial levels on

the use of technology. Ten public elementary schools were selected for participation.

FamilyTech gave parents and their children an opportunity to learn basic computer skills which

enabled parents to help their child with their homework assignments. Parents were also able to

access information about what their children learned at school. The research outlined that

FamilyTech had a positive effect on the quality of parental involvement. Moreover, students that

participated in the FamilyTech program scored higher in their test in comparison to non

FamilyTech participants. Quantitative data revealed that FamilyTech participants scored above

the 50th percentile on the mathematics (57% versus 19%) and reading (44% versus 14%). This,

research showed that the use of technology has a positive impact on student performance and

parental involvement.

Similarly, Lewin and Lucking (2010), provided a historical overview of the technology

initiatives that were deployed in the UK in order to engage and increase parent involvement in

their child's education. The ICT Test Bed, and Homework Project initiatives were rolled out in

23 elementary schools and three community colleges throughout the UK over the course of four

years. Various technologies were incorporated both inside and outside the classroom in an effort

to increase parental engagement. The ICT Test Bed project provided parents with information

about their child's assignments, progress, attendance, and behavior. Qualitative data revealed

that certain technologies such as laptops, tablets, and smartphones helped improve the link

between home and school learning. Research also concluded that the integration of technology

closed the gap between parents, teachers, and learners. However, the researchers found that there

were several barriers that parents encountered during the take-up of technology, due to lack of

knowledge and resources, which in turn impacted parent involvement.

Unlike the former, Chairatchatakul, A., Jantaburom, P., & Kanarkard, W. (2012) set out

to examine the usage of social media channels to build communication and relationships between

parents and schools. The authors conducted the research using the social media site called

Facebook. While Facebook is not necessarily a LMS many schools throughout the world use this

platform in lieu of an LMS. The research was examined using Kindergarten Demonstration

School and Khon Kaen University in Thailand. The authors pointed out that the traditional

method (set of questions and answers) to measure parent involvement is an insufficient

measuring method to assess parental involvement. Instead, the authors analyzed the digital

behaviors and habits of parents using Facebook Insights. According to the findings made by the

authors using the social media platform Facebook was beneficial in engaging parents to become

more involved and aware in their child's school. The results of the research illustrate that parent

involvement in schools can be bridged using a LMS alternative such as social media.

The "Electronic Communication Between the School and the Home" article examines the

forms of communication between schools and families, and their effect on parent involvement.

According to Kosaretskii and D.V. Chernyshova (2013), two forms of communication have long

existed to keep parents abreast of their child's academic progress and the events occurring at

school. These types of communication include official and non-official forms of communication.

Official communication pertains to the child's academic achievement, whereas non-official

communication is concerned with programs of instruction, and classroom bulletins. Kosaretskii

and D.V. Chernyshova (2013) explain that non-official forms of communication are becoming a

less popular way of sharing information with parents. Thus, the research article looks at the

effectiveness of using the Internet as a tool for communicating with parents. Statistically

speaking, in the United States 73 percent of teachers nationwide use electronic correspondence to

inform parents of their child's progress. Thus, communicating frequently "has a tangible

influence on parents' involvement." Moreover, in terms of mediums, researchers found that

parents likened websites for static information, and emails for personal messages. Indeed,

parents and teachers alike agreed that communication via email help improve students' academic

progress because it provided parents with a platform for "meticulous completion of homework

assignments….enabling parents to take necessary measures." Still, one of the drawbacks of

electronic communication mentioned by the authors is the lack of Internet access, and or lack of

adequate competencies due to the social and economic status of the family.

Omstead (2013) evaluated if emerging technologies increased parent-teacher

communication and parent involvement. The technologies outlined in this study included among

other items website, emails, parent portals (LMSs), text messages, and social networking sites.

Olmstead used a mixed-methods approach in order to gauge the parents perception of these new

and emerging tools. 204 parents were invited to participate but only 89 participated. Survey

results highlighted that the use of technology as a form of communicating with parents is very

important. What is more, both parents and teachers shared that a child is more successful in

relation to parent involvement. Thus, Olmstead articulated that technology as a form of

communicating with parents could promote and enhance parent involvement.

Lastly, Selwyn, Banaji, Hadjithoma-Gartska, and Clark (2011) examined a variety of institutional strategies and devices that have been deployed in the UK over the course of several years to support parental involvement in their child's education. According to the researchers, various computer-mediated communication tools such as email, text messaging, and Learning Management System (LMS) platforms have been employed to extend the communication between teachers, students, and parents. Thus, the researchers examined what outcomes were achieved through the use of LMS platform technologies by conducting a comparative case study and collecting data from 30 elementary and middle schools throughout the UK. In-depth interviews were conducted with school administration, teachers, and parents. Qualitative data informed researchers that the use of LMSs were being used to encourage parents to ensure that the child's homework was completed on time. However, the qualitative data also revealed that the LMSs were unlikely to drive changes in parental involvement unless it was accompanied with a parent-centered approach. Many interviewees highlighted a range of technology-related issues including varying levels of parental access to the Internet, especially those in more economically deprived areas. Still. LMSs were proving to be an effective way of building upon pre-existing school/parent relationships and activities.

Research questions

The overall intention of this study was to investigate parent's perceptions of using LMS to engage children's learning. The purpose of the survey in this study was threefold: (1) to find the average amount of time that parents spend on their children's learning, (2) to understand the perception of parent involvement in children's education, and (3) to investigate the perception of using LMS in parent involvement. These three parts of the survey were coherent to the focus of

this study which led the following research question: What are the effects of the use of a

Learning Management System (LMS) on Parent Involvement? The research question served as a

guide for using LMS in parent involvement. Namely, the advantages and the barriers of using

LMS in parent involvement would be determined through this research question in order to

reflect and revise the way of using LMS in parent involvement.

This research study focused on the parents of elementary school children. Elementary

school children in this study cover k-6 grade. Children in these grades are in a position in which

they are not necessarily independent, rather they depend on their parents help.

Research Design

This research study utilized an exploratory mixed-methods approach. The research

question will be better explored and analyzed using a mixed-methods approach. The collection of

quantitative and qualitative data will provide a better understanding whether learning

management system have an impact on parental involvement. Quantitative data will be collected

first in order to explore parents perspectives about learning management systems. Parents of

elementary school children will be interviewed. This analysis will be followed up using

quantitative data. Quantitative data will provide supplementary information that will help inform

the narrative data collected.

Data Collection Descriptions

To answer the research questions, we will collect data from twenty two parents from a

4th grade class from Shadow Hills elementary school. Data will be collected from two sources

including parents' survey and interviews. Twenty two Parents will be surveyed. The surveys

were simplified in order to allow parents to answer the questions without any difficulty. Based

on the survey and interviews, we will email the parents with a link to an online survey (via

Google Form) that is designed to

draw out their views towards the survey. It will include closed response rating questions and

open-ended questions. We will conduct semi-structured interviews via Skype with the

participants. We will take notes during the interviews. After the interviews, the notes will be

reviewed and completed with the use of a voice recorder.

 The online survey can be accessed online via the following URL http://goo.gl/forms/sh00hfifFi .

In addition, the following set of questions will be used during the online interview. They are as

follows:

1. How many children do you have, what ages?

2. How do you know what is going on at school? (sources of information)

    a. What kind of information does the school or teacher provide? Is this enough?

    b. Have you ever contacted the school? How often and for what kind of reason?

    c. Is it easy for you to find how your child is doing in school?

3. What are some of the things you do at home to support your child's education?

    a. Example, reading stories ….so on

    b. What makes you do these things?

4. Do you do anything at the school to help your child? Example.

    a. Do you attend any meetings or events at the school? Why?

    b. Are these meetings helpful? If yes, how so?

    c. If you do not attend much, what prevents you from coming to school?

5. What are some ways that the school or the teacher has tried to involve you in your child's education at home? Is Learning Management System one of them ? how that is helpful?

6. Does the school provide enough information and help for you to know how to be involved with your child? (If not, what kinds of things would you like to know more about?)

7. How welcome, how comfortable do you feel at the school?If comfortable, what makes you feel that way? If not, why not?

8. Do you have any suggestions for how the school could be more comfortable for parents? Or how the school could be more helpful to families or help more parents get involved?

Data Analysis Descriptions

This study will count with a conductive analysis for qualitative data. It will also make use of use descriptive statistics for quantitative data. First, the narrative data will be analysed by exploring the narrative using a coding scheme technique to organize and categorize the data. Similar data will be categorized and placed under one theme. Then the results will be interpreted and written down. For example, in one of the survey questions participants were asked "How have teacher notifications informed you of your son/daughter's progress in school through LMS?" In order to analyze this question, similar responses will be grouped together. Then, a code will be generated for each of the main concepts compiled from the data, and they will be placed under the related theme. The next step will consist of describing the main features of each julp;.'/group of information. Finally, the all of the data will be interpreted accordingly. Descriptive techniques will be used to analyze quantitative data by using a spreadsheet program called Microsoft Excel. The program will be used to find the central tendency, the median, and

the mode. For example, in the multiple choice question, "My involvement in my child's education is important in the classroom." The survey taker gets to select from one of the following options: "always," "usually," "sometimes," and "never." In order to analyze this question quantitatively, researchers will select the mode since this is the value that appears most often within the data set.

Conclusion

Recent breakthroughs in technology have changed the way people communicate with one another. The emergence of new web applications have allowed people to become more interconnected. Social media sites, phone applications, and online Learning Management Systems are just some of the many tools that teachers are using nowadays to engage students and parents alike. This has afforded teachers the convenience of providing parents with a platform to actively participate in their child's education using real-time data. Numerous studies have focused on the effects of parent involvement and student academic achievement when technology is involved. Still, there is limited research regarding which aspects of parental involvement in k-6 children help boost parental involvement, and student achievement. Moreover, more research needs to be conducted on what components drive parent involvement and student achievement. Lastly, more research needs to be conducted in order to find if the use of Learning Management Systems have an impact on parent involvement in the child's education.

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