PRESERVICE TEACHERS IN SPECIAL EDUCATION: USING EDUBLOGS FOR TRANSITION COLLABORATION

By

JANICE SEABROOKS-BLACKMORE *   **KAREN B. PATTERSON ****

* Associate Professor, Program Director of Exceptional Student Education
** Chair and Associate Professor, Department of Exceptional Deaf, Interpreter Education

ABSTRACT

This was an exploratory study that examined the introduction and use of Edublogs as a collaborative communication tool in an undergraduate preservice special education course. Participants were enrolled in a course that addressed transition and the development of individualized transition education plans for students with disabilities. Pre-and-post surveys were given to determine participants' knowledge, feelings, and experiences with the use of Edublogs, as well as their attitudes before and after the introduction and use of Edublogs. Inferential and qualitative data analyses were used to analyze results. Using a 7-point Likert scale with multiple item pairs, results of pre-and post-survey ratings indicated that participants' attitudes were significantly different in five out of fifteen variable pairs. Post-survey comments on knowledge, thoughts, and experiences revealed overall positive themes about the use of this Web 2.0 technology for collaboration.

Keywords: Preservice Teachers, Individualized Transition Plans, Technology, Family, Edublogs, Collaboration, Social Media.

INTRODUCTION

The beginning of a new profession is an exciting next step for many new teachers. Current preservice teachers are very good at communicating and using online interactive technology. However, there is concern as to whether they are prepared to integrate these technologies into their future professional responsibilities (Lei, 2009). According to Clydesdale (2007), the current generation of college students may tend to be impatient with traditional ways of communicating. They are thought of as "plugged in," and technologically savvy. These students are oftentimes referred to as the "digital generation", because they were born in a world where communication and information technologies are inherent to their personal and social lives.

A critical professional skill for teachers, particularly teachers in special education, is to be able to communicate and collaborate with parents and other professionals about children's educational programs. Because of the popularity of social media and the high frequency of use by students, there is a potential value of Web 2.0 technologies (e.g., wikis, blogs, social networking, podcasting, media sharing, imessages, blogs) for teaching and learning. The need also exists for students to develop 21st century skills (Sadaf, Newby, & Ertmer, 2012). Although many teacher educators may believe that they provide all the necessary training so that their graduates can go out into the world with the best 21st century skills possible, studies have shown that teachers do not feel adequately prepared to integrate technology into their classroom instruction for studentcentered learning (Sutton, 2011). This is especially important for preservice teachers in special education, where technology is often used as a critical tool for student success, and where parent participation, collaboration, and communication are fundamental to successful outcomes of students. It is worthy to note that although technology is more accessible and is certainly used more often in classrooms today, most teachers and students still tend to use technology for basictasks (Sutton, 2011).

Major changes to the educational landscape by virtual worlds, mobile devices and applications to increase learning have made it necessary for educators to rethink not only the social academic work environments based on Web 2.0, but also the learning needs of students (Danciu & Grosseck, 2011). Social networking mediums that rely on Web 2.0 technology are growing and can be essential

tools in assisting teachers and other professionals in problemsolving and sharing educational issues and concerns. According to the Individuals with Disabilities Education Act (IDEA) (2004), teachers in special education are required to collaborate and consult with parents and other professionals in developing individualized education plans (IEPs) and transition plans. IEPs are developed for children with disabilities from ages 3-21. The inclusion of a transition statement is required within these plans by age 16, or younger. At this point, they are often referred to as individualized transition plans (ITPs). Collaboration over the duration of this process is critical for successful results of students' movement from high school to a variety of post school community environments. Therefore, the technological skills of preservice teachers could be channeled to hone skills needed for professional interactions and communication with parents about the educational needs of their children.

A tool that lends itself well to high collaborative interactions and collective problemsolving is a blog, which is short hand for the word "weblog". As an online, chronological collection of personal commentary and links (EDUCAUSE Learning Initiative, 2005), blogs provide options to address a variety of educational topics known as Edublogs (Ray, 2006). Edublogs can provide teachers in special education the opportunity to enhance their dissemination of information to students, parents, and other professionals through technology. More specifically, the use of Edublogs is a viable medium for developing quality IEPs for students with disabilities.

Successful outcomes in special education are strongly impacted by parents being involved in the development of their child's program. In fact, parental involvement is one of the corner stones of IDEA. Furthermore, Congress believed that access to a free appropriate public education (FAPE) for students with disabilities, in part, depended on parents' ability to advocate on their child's behalf (Yell, Ryan, Rozalski, & Katsiyannis, 2009). Despite its importance, developing and maintaining meaningful collaborative relationships with parents and guardians is not necessarily easy for teachers. This collaborative partnership is based on trust, which takes time to build and nurture, but is easily destroyed. Edublogs provide a safe and confidential way to communicate and share information during the education process. Through this shared process, parents can advocate on behalf of their children while engaging in purposeful and ongoing dialogue with classroom teachers.

The purpose of this study was then twofold: (i) to introduce the use of Edublogs as a form of communication and (ii) to examine participants' perception of the use for Edublogs for sharing information about transition related issues to others. Collaborating with peers provides participants an opportunity to practice professional skills in a safe environment and offers ways in which they could determine the benefits of including an ongoing dialogue with consumers about transition issues. Therefore, our research questions were: (i) After being introduced to and using Edublogs, will participants' attitudes related to using Edublogs in teaching and learning change; and (ii) After being introduced to and using Edublogs, will participants express a difference about their knowledge, feelings, and experiences with Edublogs for teaching and learning transition related issues?

Method

Participants

Twelve (11 females, one male) undergraduate students majoring in special education participated in this study at a university in the Southwest area of the United States. All participants were seniors in their final semester before student internship. Seventy-five percent reported they were Caucasian (n=9), seventeen percent, Hispanic (n=2), eight percent, African-American (n=1) (Table 1). Participants were enrolled in a course that addressed transition issues and planning for students with disabilities. A particular focus of the course was the actual development of an ITP.

Instrumentation

Survey. Part one of the survey requested demographic information from the participants, and asked them to respond to the following three questions: (i) Tell us what you know about Edublogs; (ii) Tells us what you think about Edublogs; and (iii) Tell us about your own experiences with Edublogs. The second part of the survey included a fifteen

multi-item, seven-point Likert scale where participants were asked to rate how they felt between pairs of adjectives about the use and benefits of using Edublogs for teaching and learning. The adjective pairs were: essential nonessential; familiar-unknown; useless-useful; important- unimportant; frustrating-easy to use; necessary-unnecessary; unproductive-productive; simple-complicated; inefficient-efficient; expanding-limiting; understandable-puzzling; worthless-valuable; confusing-clear; effective ineffective; and time consuming-time saving. The adjective pairs were presented in seven reverse and eight non-reverse format. The survey was adapted from Liaw's (2002) web attitude scale (WAS), which is a valid and reliable scale to measure individuals' perceptions towards web selfefficacy, liking, usefulness and behavioral intention to use and learn the web.

Procedure

In this exploratory study, a pre/post survey was given to an audience of convenience in an undergraduate course. A grading rubric was developed that included the major components in which to evaluate the Edublog and degree of interactions. Participants were asked to complete surveys at the beginning and end of a sixteen-week semester, prior to and after instruction and explanations about Edublogs.

Intervention

During the first two weeks of the semester, instruction and demonstrations of how to create and use Edublogs were provided along with other course information. Participant teams were responsible for creating an Edublog using www.blogger.com. To simulate collaborative interactions desired in schools, participants were grouped into three teams of four. Instructions were provided along with a grading rubric for communication on how teams were to interact over a period of ten weeks (See Appendix A). For example, teams had four required transition goal areas (Employment, Postsecondary Education, Vocational Education/Training, and Independent Living) as their focus areas for each week of postings. Additionally, six more goal areas were included to provide more choice options, all of which are recognized as transition goal areas (IDEA, 2004). The selection order for the discussion topic for each Edublog was the teams' choice. Prior to weekly postings,

teams had to determine each member's role and responsibilities. For example, teams needed to decide authors, editors and collaborators. The weekly postings format was as follows: (i) a general overview of the posting (goal area and target audience); (ii) A minimum of three information resources (e.g., book, video, website); and (iii) a brief description of each benefit of resource to individuals with disabilities. Once their information was posted, other teams had to make specific comments about the following: (i) their impressions of the resources;(ii) what they liked most about the postings; and (iii) how they might use the information as professionals. All comments had to be in a collective voice of "we", representing the team and not the individuals. At the completion of each week, the instructor graded Edublog interactions and provided feedback on how to continue or enrich communication activities. For example, if one team's comment were "We like your ideas!" the instructor would provide feedback that the team needed to be more specific about the information presented.

Data Analyses

Inferential analyses were used to address the first research question which investigated if there would be a difference in the participants' attitudes toward using Edublogs in teaching and learning related to transition following the 10-week period of intervention. Researchers cleared and reviewed data for coding errors and checked for statistical assumptions with respect to skewness and distribution. Analysis of the assumptions indicated that the data were not normally distributed. Therefore, non-parametric tests were used. Non-parametric tests require no assumptions about the distribution of scores and involve rank ordering to minimize the possible effects of outliers; and differences in the sample size between the groups can be

Respondent Characteristics	Participants N(%)
Race/Ethnicity	
African American	1(8)
Caucasian	9(75)
Hispanic	2(17)
Gender	
Male	1(8)
Female	11(92)
Academic Status: Senior	All

Table 1. Description Characteristics of Sample Demographic (N=12)

accommodated (Pagano, 2013). From the series of possible nonparametric tests, the analyses characterized significance via the Mann-Whitney U test. This non-parametric test was chosen because of the small sample size and the independence of the variables. The Mann-Whitney U two-tailed test is used with a level of significance of p < .05. Therefore, a series of Mann-Whitney U tests and Chi- Square analyses were used to compare pre- and post-ratings of the 15 multi-item variables. The adjective pairs were presented in reverse and non-reverse formats to participants. However, for the purpose of analyses and presentation, the multi-item pairs were reorganized so that they were consistent with a rating scale from 1 "strongly agree" to 7 "strongly disagree" in the manner according to Table 2.

Qualitative analyses were used for the second research question inquiring if there would be a difference in what participants expressed about their knowledge, feelings, and experiences with Edublogs before and after developing transition Edublogs. Participants' responses related to the three areas of this research question were grouped, and then examined for commonalities in each area. Conventional content analysis was used to generate categories of responses. Content analysis involves subjectively interpreting text by classifying, coding, and identifying themes (Hsieh & Shannon, 2005). An inductive approach to data analysis was employed, such that no preconceived theories were imposed on the data; rather, we attended to the themes that emerged from the data. We used the method of open-coding to identify statements related to Edublogs. This process yielded 65 total statements or phrases reflecting a variety of knowledge, thoughts and experiences of the twelve participants from both pre-and post-surveys. More specifically, 28 statements were noted in the pre-survey and 37 statements were in the postsurvey. Using the process of constant comparison, the statements from pre-and-post surveys were categorized by grouping together similar statements and phrases into themes, respectively. Categories were examined in relation to each other, resulting in a hierarchical structure. Codes and themes were determined to reduce data into the final categories.

Results

Quantitative

Comparisons between pre- and post-ratings related to participants' feelings about their use of Edublogs for teaching and learning yielded five significant variable pairs. Nonparametric tests of significance (Mann-Whitney U, p < .05, two-tailed) were used to test for differences. Of the 15 multi-item pairs, the following pairs were found to be significant at the .05 level with pre-and post-survey ratings (Table 2). Productive –Unproductive: pre (M=4) and post (M=2); U (198.50), p = .0046; Important-Unimportant: pre (M=4) and post (M=2); U (191.50), p = .0155; Useful-Useless: pre (M=3.5) and post (M=1); U (203.50), p = .0016; Efficient- Inefficient: pre (M=4) and post (M=2.5); U (185.00), p = .0417; and Essential-Nonessential: pre (M=4) and post (M=3); U (186.00), p = .0363. According to these findings, post-survey median ratings of the participants are significantly lower than their pre-survey ratings. Therefore, participants perceived an Edublog as a productive, important, useful, efficient, and essential tool for communicating teaching and learning ideas. These analyses revealed that there is not enough evidence at the .05 significance level to determine that the participants' feelings changed after the 10-week intervention period, with respect to the other ten variable paired items.

Qualitative

The analyses of the data in the pre- and post-survey revealed a variety of themes related to the participants'

Variables	Pre-Median	Post -Median	U	P-value
Time-saving – Time-Consuming	4	4	141.00	.6093
Easy-to-Use - Frustrating	3.5	3	166.50	.3380
Effective – Ineffective	3.5	2	173.00	.1825
Clear – Confusing	3.5	3	155.50	.7593
Understandable - Puzzling	3.5	3	170.50	.2367
Productive - Unproductive	4	2	198.50	-0046*
Important - Unimportant	4	2	191.50	-0155*
Useful – Useless	3.5	1	203.50	-0116*
Familiar – Unknown	4.5	3	178.00	.1076
Expanding – Limiting	2	1.5	162.00	.4856
Efficient – Inefficient	4	2.5	185.00	.0417
Necessary - Unnecessary	4	3	177.50	.0933
Simple – Complicated	4	3.5	166.00	.3566
Valuable -Worthless	3	2	180.50	.0744
Essential - Nonessential	4	3	186.00	.0363

Note†= Based on 7-point Likert 1 "strongly agree" to 7 "strongly disagree"
*p=value < .05

Table 2. Results for Mann-Whitney U-Tests for Variable of Interest

knowledge, thoughts, and experiences of their use of Edublogs. Following are the major pre- and post survey themes from these questions with examples of participants' responses that support each theme.

Pre Knowledge

The two emerging themes were: (i) Unknown and (ii) Similarity to other Social Media as indicated by the following quotes:

"I do not know much about Blogs. I have never really taken the time out to look at one."

"Other than Facebook, blogs will be new to me. Other than people posting thoughts, and asking for advice, I do not know much about the process."

"Unfortunately, I do not have any knowledge about blogs. I have never used one, unless you consider Facebook"

"I know that with blogs one can pose their feelings or about themselves. I know that blogs are usually made for a specific purpose. I'm not too sure what edublogs are."

"I believe that blogs are places on the Internet, kind of like websites, specifically written by a person. That person that creates that blog talks about their day or week and has pictures posted. I guess that there also be informational "educational" blogs."

Post Knowledge

The major emerging theme from this category was that an Edublog is a pathway for learning and sharing information. Participants indicated:

"I know what a great tool it is, how to create one and actively use one. I also know how to find other blogs, and interact with like learners."

"It is a great way to learn more from other people and groups. It is also a great way to share information. I learned a great deal (resources) from others."

"Edublogs are a great resource for gathering and sharing information; there are so many archives to explore and the topics of information are limitless. Edublogs are definitely a great way to integrate technology into the classroom as well."

Pre Thoughts

The following theme emerged from this category: (i) An effective way to communicate and share ideas. As indicated by the following:

"I think blogs are a good way to get information across to several individuals by making one post."

"I have never had a blog but I think they are beneficial in some ways such getting certain feelings out or spreading the word about certain events and other related resources to help others.

I think blogs are a good way to get information across to several individuals by making one post."

"I think blogging is a great way to share ideas in a quick and meaningful manner."

Post Thoughts

The major theme that emerged from this category was that an Edublog is a good educational resource.

"I think they are important and a great tool for student."

"Very well needed. It is a lot of informative that you can find out at our own leisure time."

"I think all school districts should start one to help parents, students, and professionals."

Pre Experiences

The only emerging theme was that participants had no experience with the use of Edublogs as indicated by:

"I have never experience writing a blog, but I have had experiences reading several blogs.

I think using this method could be effective and different strategies used in the class."

"I do not have any current experience with blogs."

"I have never had a blog like the one we are going to do in class but I have had experience with online journaling."

Post Experiences

The emerging theme from this category was an Edublog is a positive experience. All comments related to experiences of using Edublogs were generally positive ranging from being fun and useful to an effective resource for sharing information in future classrooms.

"Before this blog, I had only heard what they were exactly. Now that I have made my own blog, I will continue it through my teachings."

"This is the only semester I have used edublogs. I would like to see them more inclasswork; they provide great resources to keep."

"I thought it was very helpful/ useful for the course. I gained a lot of new information and resources for my future classroom."

"I really enjoyed making our edublogs; it was especially neat to see people outside of our classroom sharing and participating with us."

Discussion and Conclusion

In this study, the teaching and use of Edublogs and the impact on the preservice teachers' knowledge, thoughts, experiences, and attitudes over a ten-week period were examined. In particular, participants' perceptions of the Edublog's use for communicating transition related information was explored. The research questions of this exploratory study were: (i) After being introduced to and using Edublogs, will participants' attitudes related to using Edublogs in teaching and learning change and (ii) After being introduced to and using Edublogs, will participants express a difference about their knowledge, feelings, and experiences with Edublogs for teaching and learning transition related issues? Analyses of the data revealed significant differences between pre-and post-survey results.

In response to the first research question, out of the 15-multi-item pairs, five pairs were significant at .05 level (i.e., Productive-Unproductive; Important-Unimportant; Useful-Useless; Efficient-Inefficient; Essential-Nonessential). It is worthy to note that the five significant changes were evident in some of the most relevant concepts for powerful collaborative teaching and learning interactions. As preservice teachers begin their professional practice, they must hone their communication skills when working with families and other professionals to ensure their students with disabilities have the highest quality ITPs as possible. By valuing the use of a virtual tool, like an Edublog, teachers can break the barriers that oftentimes get in the way of actively involving desired stakeholders, particularly parents and students, in decision-making of a child's educational program. Garriott, Wandry, and Snyder (2000) emphasized that quality teacherparent collaboration in an IEP meeting, needs to go beyond federal compliance, or satisfying a checklist. IDEA (2004) requires school districts to be involved in meaningful parental involvement, or active participation in the process—this is not a suggestion! It is imperative for teacher education programs to prepare preservice teachers on how to develop and maintain true collaborative relationships with parents and other stakeholders. Using a tool like Edublogs can offset parents' feelings of alienation in the decision-making process, because through this communication tool, they can be true mutual partners in the relationship. Traditionally, parents are not actively involved in many aspects of special education processes, but rather their roles have been limited to being recipients of information and to signing documents. The use of Edublogs provides an ongoing avenue for this process to change.

In response to the second research question, before being introduced to the use of Edublogs, participants had little to no knowledge of their use. Once participants were introduced to the use of Edublogs, reflections of their knowledge, thoughts, and experiences changed. The researchers were hopeful that favorable changes would occur, and based on the responses, the changes confirmed our desire. As mentioned earlier, the participants' attitudes changed after having to develop and use Edublogs. Additionally, their reflections on knowledge, thoughts, and experiences were more in-depth and specific in post responses after engagement with Edublogs. This is behavior that is to be expected. Of more importance is the consistent positive changes that were noted as participants went from knowing very little about Edublogs to suggesting Edublogs be a continuous part of the learning process. Based on the information participants gained from the responsibility of maintaining and interacting in an Edublog, they felt the learning activity helped them gain professional insights that were initially unforeseen.

Although participants were familiar with the social media technology of blogging, they had no experience using Edublogs in particular. Furthermore, they were learning new

content about transition planning and how collaborative interactions could occur through the use of an Edublog. Consequently, they were also being evaluated on the application of content and use of this technology. Even though participants were faced with course restrictions and guidelines (e.g., grading rubric, specific timeframe, netiquette rules, grammar, etc.) that would not necessarily be in place, when blogging in another social media context, their responses were still positive and insightful. For example:

Participant 1, Pre-survey-Think: "I think they are a great way to communicate and it allows for people all over to share ideas."

Participant 1, Post-survey-Think: "This task was very time consuming, but provided me with great satisfaction when I completed it and when I saw others respond to my research topics."

The introduction of an Edublog as an intervention was important because the researchers wanted to expose preservice teachers to a form of social media that could be used in a professional setting. As with many Web 2.0 technologies, blogs are used primarily in social contexts that are also applicable in other settings. Edublogs, however, are specific to educational views, needs, and issues. Because of the flexibility of this tool, it provides a diverse platform for enhancing the professional skills that are badly needed for communication among teachers, families, and other professionals. The experience, although held to specific course requirements, was expressed as a beneficial learning opportunity beyond the social media. Cook, Garside, Levinson, Dupras, and Montori (2010) emphasized that the different approaches available by web based learning permit the creative application of online learning for many objectives, contexts and learners. Whereas, we do not contend that Edublogs is the single entity or a panacea for effective collaborative interactions, instead it is a viable, readily available, easy to use, well-familiar resource that demands serious consideration.

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ABOUT THE AUTHORS

* *Associate Professor, Program Director of Exceptional Student Education*

** *Chair and Associate Professor, Department of Exceptional Deaf, Interpreter Education*