

Visual Representations in High School Edublogs

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Abstract: *Visuals speak a language of their own. In fact, they can have more impact than words. When prepared intuitively, they have the power to overcome regional barriers, in terms of comprehensibility of verbal language. Easily available at an affordable cost, smart phones with high megapixel cameras have made everyone turn into a photographer. In contrast with the difficulties faced in the analog world, today it is way easier to click, confirm and document experiments or to click photographs to support the topics being blogged about. Besides, the intuitive interfaces of graphic and video editing softwares allow even amateurs to be able to do the basic editing. Social media is saturated with photographs, videos and graphics. However, blogging for educational purposes is yet to take benefit of this. A survey was conducted to find the preference of educational bloggers from the high school environment, which included the students, teachers, and other educational stakeholders, in terms of using verbal or visual content for writing their blogs. Edubloggers preferred to make their blogs unique and interesting through verbal content than by using graphics or photographs. The edublogs by students exhibited much more creativity and experimentation with color as compared to the edublogs of senior bloggers.*

Keywords: *Visual Communication, Visual Representation, Edublogs, High School Blogs, Contemporary Educational Environment*

I. Introduction

Visual representation of content transcends the language barriers. New media tools and technologies have scaled the walls of inhibition posed by the erstwhile education system. Instead, the contemporary classrooms train and equip the students to master these technologies, to be prepared for the ubiquitous digital world.

Smart classrooms are replacing the chalk-and-board teaching. Proactive learning is elicited by usage of synchronous and asynchronous methods and tools of teaching. The offline and online interactions for educational purposes, facilitate sharing, constant learning, and evolution of newer ideas. Students are expected to exhibit constructivist learning attitude and are required to prepare assignments that build on the knowledge gained from the classroom teaching.

Blogs are being used widely in the contemporary teaching-learning environment so as to promote constructivism through individual and group oriented knowledge-building activities and assignments. These blogs, which are used for the educational purposes are known as edublogs. Blogs are ideal for usage in the educational system as they are mostly free-of-cost and are rather easy-to-update and maintain. Besides, they are connotative of a medium that offers freedom of expression [1], which entails that bloggers are at discretion to articulate their thoughts and learnings visually or verbally, as per their convenience.

“Pictures rule new media, not words” [2]. With smart phones available at affordable costs, the social media is saturated with photographs and video recordings. Easy to use graphic and video editing softwares allow even the amateurs to be able to create simple graphics and to edit their photographs and video clips. It has been found that visuals are useful in making hard concepts appear simple and aid in organizing and sequencing one’s thoughts better [3], [4], [5], [6], thus improving the grasp of information. Literature also supports that even though visuals have an edge over words [6], [7], [8], most effective communication requires an optimum combination of both [9], [10], [11].

The importance of visuals in edublogs cannot be emphasized enough. There is a marked difference in the way bloggers of different age groups write and make their blogs presentable. The weightage they give to different elements in their blogs is also varied and invariably experience and age specific. This research paper provides an insight into visual representations used in the high school edublogs.

II. Research Approach

Snowball technique of non-probability sampling was used to elicit the maximum responses from the survey being conducted on bloggers from the high school environment. The response rate to the survey was 36.09%. This response rate is reasonably high, considering that the response rate range for the Internet survey

click-through rate in a survey is 1% - 30% [12]. Persistent efforts and follow-ups with the participants contributed to getting this response rate for the survey.

The survey was undertaken to understand bloggers' views on making their blogs more visually appealing and accessible. Information was also collected on the bloggers' practices and knowledge.

The format adopted for the web-based questionnaire was such that the bloggers could provide answers and navigate through the tool very intuitively. A mix of close- and open-ended questions were posed to the bloggers through a web-based questionnaire. The number of multiple-choice or close-ended questions posed was kept more so that the survey could incorporate more number of questions.

III. Findings and Discussion

3.1 Profile of survey respondents

Teachers formed the majority of respondents to the survey (54%), followed by the other educational stakeholders (26%), and high school students (20%). High school students were selected for the survey as they are quite conversant with technology and also because most of them are required to write group or individual blogs for school activities and assignments. Besides, students of this age group are aggressively hooked on social media networks [13].

79% respondents mentioned English as the language that they spoke the most. These respondents were living in United States, United Kingdom, Canada, Australia, and India. Living in an advanced nation, this could also be reflective of getting a chance to work on the latest tools and technologies in the teaching-learning process.

Data was also collected to be aware of the experience of bloggers in using the Internet, which could give an insight on their understanding of the medium while writing or designing their blogs. The older respondents (42%) mentioned using the Internet two decades ago for the first time. Some respondents (31%) mentioned using the Internet for the first time, less than two decades ago. 12% respondents started using it a decade ago, and 15% respondents reported using the Internet for the first time less than a decade ago. The age-group 20-35 years is amongst the more frequent users of the Internet, as per the responses received on the survey. Some respondents access the Internet more than once a week (31%). 10% respondents use the Internet once a day, while 18% use the Internet more than once a day.

None of the respondents mentioned having written the first blog more than 10 years ago. Most of them (66%) mentioned having written their first blog between 5 to 10 years ago. The remaining respondents (34%) wrote their first blog less than 5 years ago. There was a wide variation in the frequency with which the respondents blogged. While most respondents blogged only once a month (44%), 1% respondents blogged once a day and more than once a day. A similar percentage reported blogging only once a year. Maximum number of the infrequent bloggers belonged to the above 36 years' age-group.

The survey participants were asked about their blogging experience and also about how often they read blogs written by others because more the experience of browsing, better would be their judgment on what contributes to make an appealing and interesting blog. 2% read blogs written by others more than once a day, 3% read once a day, 15% more than once a week, 28% once a week, 29% more than once a month, 18% once in a month, 3% read more than once a year, and 1% reported reading blogs written by others once in a year. One respondent (1%) mentioned 'Never' for reading blogs written by others.

Most of the respondents found the blogs of their interest using search engine (Google, Yahoo!). Almost half the respondents got reference from a friend; others found the blog of their interest while doing homework, while playing games, by 'other' ways, like research work, and links from other blogs. The respondents liked their selected blogs for well-referenced content, unique content, creative graphics, photographs, videos, animations, quizzes and surveys, feedback and comments, and others (see Table 1).

Table 1. How often the bloggers read blogs written by others

Well-referenced content	2%
Unique content	3%
Creative graphics	15%
Photographs	28%
Videos	29%
Animations	18%
Quizzes and surveys	3%
Feedback and comments	1%
Others	1%

Some respondents wrote individual blogs (55%), while others blogged as a group (45%). Most of the teachers and educational stakeholders reported having individual blogs. Group blogs were reported to be maintained by most of the students, and some teachers and educational stakeholders.

A majority of respondents did not blog beyond the classroom requirements (66%). One student and some of the teachers and educational stakeholders blogged beyond the classroom requirement (34%).

3.2 Reasons to blog

The most frequent users of the Internet are the respondents who access it for preparing their lecture notes (45%). The other respondents used the Internet for doing their homework (17%), and for social networking (38%). As per the profile of the respondents, the results seem to be convincing.

The respondents were also asked about their reason to blog. Most of the group bloggers were among the ones who mentioned using blogs for homework (4%) and project work (7%). The other reasons to blog were mentioned as teaching (27%), for imparting knowledge beyond the curriculum (24%), for class activities (21%), and as personal diaries (15%). Four responses were also received for other reasons, which were given as: Conveying new educational and school policies, Child psychology, Parenting and education blog, and Showcasing talent.

Most of the respondents of the study were bloggers themselves (97%). A few replied that they did not blog themselves (3%). Hence, some portions of the questionnaire, relevant only for those who wrote their own blogs, were not presented to these respondents.

The respondents were asked to select only one subject that they blog the most about. Science (33%) topped the choice, narrowly followed by Technology (30%). Besides the most blogged about subject, the respondents were also asked the other subjects they blogged about. They responded with the following choices: Science (31%), Technology (26%), Social Studies (14%), Languages (9%), Astronomy (8%), Maths (6%), and Politics (2%). Other responses included Economics (2%), Child Psychology (1%), and Physical Education (1%). The topmost subjects blogged about remained Science and Technology here as well.

The respondents were asked what kinds of blogs they visit the least. They did not like to visit blogs on politics (75%), maths (10%), social studies (9%), languages (4%), and technology (2%).

3.3 Presentation Matters

The bloggers were asked to comment on what features made their blogs unique. Unique content and well-referenced content topped the list. These were followed by creative graphics, photographs, feedback and comments, videos, and animations (see Table 2).

Table 2. Features the bloggers comment that make their blogs unique

Unique content	27%
Well-referenced content	22%
Creative graphics	14%
Photographs	14%
Feedback and comments	9%
Videos	8%
Animations	6%

The blogs of those subjects that the respondents felt can be made visually most appealing and interactive are: Science (90%), Astronomy (6%), Technology (2%), Maths (1%), and Fine Arts (1%).

According to the survey findings, the most prominent features that make Science blogs unique and interesting are unique content (21%) and well referenced content (23%), and by using creative graphics, photographs, animations, quizzes and surveys, videos, feedback and comments. The respondents rate the unique and well referenced content above the visuals for defining the most prominent feature that makes their blog unique and interesting.

All respondents affirm that Good Content and Interesting Graphics describe an interactive blog. A few also mentioned Videos, Podcasts, Games, and Interactive Activities as contributors towards making a blog interactive.

All respondents accede to have used visuals, self-clicked photographs and audio-visuals in their blogs (see Table 3). 39% respondents confirm using audio-visuals in their blogs. The stark difference in the acknowledgement pattern could be because visuals can be modified and used as one’s own more easily as compared to editing an AV.

Table 3. Use of visuals, self-clicked photographs and AVs

	Prepare on their own	Outsourced	Acknowledge the source
Visuals	56%	63%	22%
Self-clicked photographs	75%	55%	21%
Audio-visuals	44%	28%	75%

The respondents were asked about the types of audio-visuals used in their blogs. The respondents mentioned using Animated Videos, Live Feeds, Graphic Animations, Pecha Kucha Presentations, Prezi Presentations, PowerPoint Presentations, and YouTube Videos (see Table 4).

Table 4. Types of audio-visuals used in the blogs

Animated Videos	51%
YouTube Videos	20%
PowerPoint Presentations	13%
Prezi Presentations	7%
Live Feeds	5%
Graphic Animations	2%
Pecha Kucha Presentations	2%

3.4 Efforts for Accessibility

The survey respondents were asked if they did anything special to make their blog user-friendly. 97% bloggers chose ‘No’ as response to this question. For the sake of making their blogs user-friendly, three bloggers who responded to this question mentioned adding a feedback space, providing captions to all graphics and providing related links to the content, and giving excerpts of the articles and free video tutorials for understanding the lessons.

In terms of doing something special to make their blog disable-friendly, only one respondent mentioned: “I give good contrast to the graphics and link colours on my blog.”

Just a handful of respondents were a little aware of the ways to make their blogs more user oriented, leaving the accessibility of blogs to be addressed by the blog’s template.

IV. Conclusion

From the survey on bloggers from the high school environment, it has been found that even though blogs have been integrated as pedagogical aids, their potential is not being exploited fully. Words are still being preferred over visuals when it comes to writing one’s blog. Even though the respondents accede that visuals can make the blog posts more appealing and interactive, they give higher importance to the content for making their blogs unique and interesting.

With the wide array mentioned in usage of types of audio-visuals, it appears that in comparison with the teachers and other educational stakeholders, the high school students are more experimental and explorative in terms of using the latest in technological aids and techniques to be used for making their blogs more creative and interesting.

The respondents did not put much weightage to making their blogs accessible for differently-abled or for making them more user-friendly. They depended entirely on the blog’s template to take care of accessibility of the blog.

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