Projected Media Facilities: It's Impact on The Academic Engagement Time of Sped Students

[1][*]Shane Bryan C. Bactong, [1]Delia G. Del Rosario

[1]Bukidnon National High School
[shanebryan2021@gmail.com, deliagamao@gmail.com](mailto:shanebryan2021@gmail.com)

ABSTRACT

Presently, multi-media are used most often for drill-and-practice activities, tutorials, and educational games instead of as a learning tool that complements the teacher's lesson. Placing computers in the classroom, where they are readily available, allows students to use them as a tool. Students need to use multi-media as a tool to solve problems as part of the learning process. The children are known to be an "active" learner. They must create knowledge through bringing meaning into their own experiences. Teachers should utilize the iNtegrating Technology for inQuiry, NTeQ, model to discover approaches on how to create an open-ended learning environment by examining the roles of the teacher, the student, the computer, the lesson, and the classroom environment. When the NTeQ model is used successfully the teacher acts as the designer, manager, and facilitator while the students are actively engaged in the learning process. This experience allows the student to become technologically competent. The multi-media is used as a tool to enhance learning by relating it to real-world data in order to solve problems. The lesson is student-centered and authentic while the classroom environment includes a variety of resource-rich activities.

Keywords: Multi Media, Academic Engagement, Inclusive Education

Introduction of Best Practices

According to Neo and Neo (2005), using technology in the classroom also increases parent involvement and encourages communication. The teacher could develop a class web site where students and parents could go to read postings or discussions, ask questions, and find homework assignments. Multi-media technology allows the students to extend their learning beyond the classroom by becoming connected with their community, other schools, and people and sites from around the globe. Students can research the community through email and through investigating local newsgroups, and local businesses' web sites. The teacher should provide the students with the opportunity to connect with students from other schools, either local or distant. Students can learn about each other's culture and geographical location, and can share their work with one another. Certain Internet sites provide teachers with the resources they need to contact authors, illustrators, or other important people through email so students can interact with them.

Furthermore, according to Sife (2007), the use of multi-media technology in the classroom is growing and changing each year. With this change, teachers need to be educated on how best to utilize this technology. Most importantly, multi-media should complement a teacher's lesson and not be the lesson. The integration of multi-media

into the curriculum and the classroom allows for the development of real-life skills and knowledge on the students' behalf. Teachers need to facilitate and encourage this development so students will be successful in all aspects of their education, as well as in their future. At Bukidnon National High School, Malaybalay City Philippines, facilities like classrooms were provided with few instructional facilities such as ceiling fans, air conditioners, audio-visual materials, as well as black and white boards. However, it was found out that some teachers have limited multi-media instructional facilities to use during their class times. Hence, it came up with this research in order to help our beloved teachers of Bukidnon National High School Special Education Program. Multimedia access to knowledge is one of the possibilities of information and communication technology that has tremendous impact on learning. The instructional media have emerged in a variety of resources, and equipment, which can be used to supplement or complement the teachers' efforts in ensuring effective learning by students.

Justification of Best Practices- Implementation

The DLP Projectors lies in the fact that it is multi-sensory, stimulating the many senses of the audience. It is also interactive, enabling the end users of the application to control the content and flow of information. This has introduced important changes in the educational system and impact the way we communicate information to the learners (expressed that multimedia technology adds new dimension to learning experiences because concepts were easier to present and comprehend when the words are complemented with images and animations. Stating further that it has been established that learners retain more when a variety of senses are engaged in impacting knowledge; and the intensity of the experience aids retention and recall by engaging social, emotional and intellectual senses. The evolution of multimedia has made it very possible for learners to become more involved in their work. With multimedia technologies, they can create multimedia applications as part of their project requirements. This would make them active participant in their own learning process, instead of just being passive learners of the educational content.

Multimedia involves processing, storage, generation, manipulation and retention of multimedia system, and the resources could include text files, pictures, video, audio, databases, archives, library catalogues, course notes, relevant links to various websites and easy access to search engines available on the Internet. A study supports the view that multimedia resources facilitate access to all human knowledge, anytime, and anywhere in a friendly, multi-modal, efficient and effective way, by overcoming barriers of distance, language and culture, and by using multiple Internet-connect devices. It is important to say that the use of multimedia technology has great significance in colleges, universities and research institutions in the Western countries. In these countries, the technology is being seen as a key player to development in all ramifications and essential component of education. However, Babajide (2003) identified different types of multimedia communication, some of which include computer hardwares, computer softwares, public address systems, slides, overhead projectors, opaque projectors, videos, cassettes, audiotapes, cassette recorders, flip, time sequence, still motion pictures among others.

Multimedia in education has been extremely effective in teaching individuals a wide range of subjects. Multimedia is changing the way we communicate with each other. The way we send and receive messages is more effectively done and better comprehended. While a lecture can be extremely informative, a lecture that integrates pictures or video images can help an individual learn and retain information much more effectively. Using interactive CD-ROMs (Compact Disc, read only memory) can be extremely effective in teaching students a wide variety of disciplines, most notably languages and music. A multi-sensory experience can be created for the audience, which in turn, elicits positive attitudes towards its application. Multimedia has also been shown to elicit the highest rate of information retention and result in shorter learning time (Ng and Komiya, 2000).

On the part of the creator, designing a multimedia application that is interactive and multi-sensory can be both a challenge and thrill. Multimedia application design offers new insights into the learning process of the designer and forces him or her to represent information and knowledge in a new and innovative way (Agnew et al, 2006).

Objectives of Implementation

The objectives of best practice implementation are:

1. Capacitate classroom Instruction as tool for Children with Special Needs.
2. Strengthens competency to align and to connect academic engagement.

Best Practices Implemented

Capacitate

Special technology allows increasing the independence of a particular student freeing him from the constant need for direct teacher involvement. As a result, a student can choose the speed of learning that is convenient for him which leads to more personalized learning. When a student doesn't inhibit the learning process for the whole group, it allows reducing the anxiety level which plays a significant role in education as well. Implementation of technologies in special education allows simplifying the communication and improve the academic skills of students with disabilities.

In the modern world, we're witnessing the gradual erasure of borders. This process is related not only to business or politics but to the academe as well. Nowadays, almost any person despite their citizenship of physical state can get better education or educational services all around the world. To regulate such relationships between a person and international organizations.

The educational standards claim that students with disabilities should be provided with opportunities to realize their potential. They should participate in education and training on the same basis as students without disabilities and that they are not subject to discrimination. Due to the progress in the IT industry, digital

technologies are easily accessible and widespread which allows using them for providing students with new opportunities.
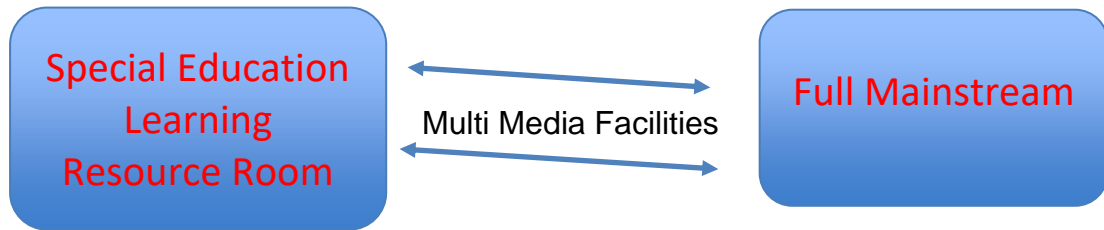
Academic Engagement

Students want and need work that permits them to express their autonomy and originality, enabling them to discover who they are and who they want to be. Unfortunately, the ways schools traditionally focus on creativity actually thwart the drive toward self-expression. There are several reasons for this.

First, schools frequently design whole programs (art, for example) around projects that teach technique rather than self-expression. Second, very often only students who display the most talent have access to audiences, thus cutting off all other students from feedback and a sense of purpose. Finally, and perhaps most destructive, schools frequently view creativity as a form of play, and thus fail to maintain the high standards and sense of seriousness that make creative work meaningful. Connect creative projects to students' personal ideas and concerns. For example, in teacher education, you want to make sure that your students can plan and teach age-appropriate lessons, manage busy classrooms on a daily basis, and relate well to both children and adults

Impact of Best Practices Implemented

Computer network technology has great promise for enhancing deaf students' literacy practice in school. Typically, this technology has software programs for word processing, for group conferencing, for sending and receiving electronic mail (e-mail), and for data storage and analysis (database programs). The integration of this technology into subject matter areas makes it possible for deaf students to share their thoughts and ideas with teachers and other students in writing, and thus to experience written language as a tool for communication and thinking in the context of meaningful learning activities. This kind of approach towards learning reading and writing has been advocated by educators of the deaf, and its effectiveness has been demonstrated by both cognitive and educational research. Even though network technology has great potential for enhancing literacy development and subject matter learning in deaf students, the impact of this, and other educational technologies ultimately depends on the social and instructional contexts in which they are used. For instance, teachers' goals and strategies for integrating the technology into their curricula are important factors that mediate its impact on students' learning. Little is known yet about the specific conditions of network use that are most effective in enhancing the literacy development of deaf students. Therefore, an important step in the development of a network supported curriculum for deaf students is to experiment with different implementations of the technology and compare the impact of these implementations on students' literacy development.

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│  Special Education   │ ◄─────────────────────►  │                     │
│      Learning        │   Multi Media Facilities │   Full Mainstream   │
│   Resource Room      │ ◄─────────────────────►  │                     │
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Multimedia activities encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their own work, and construct knowledge. The advantages of integrating multimedia in the classroom are many. Through participation in multimedia activities, students can learn:

- Real-world skills related to technology
- The value of teamwork
- Effective collaboration techniques
- The impact and importance of different media
- The challenges of communicating to different audiences
- How to present information in compelling ways
- Techniques for synthesizing and analyzing complex content
- The importance of research, planning, and organization skills
- The significance of presentation and speaking skills
- How to accept and provide constructive feedback
- How to express their ideas creatively

There are, however, some constraints to using multimedia in the classroom, including:

- Technological resources, both hardware and software
- Technological skills, for both the students and teacher
- Time required to plan, design, develop, and evaluate multimedia activities

Table 3
Prevailing Condition of the Different Multi-Media Instructional Facilities present at the aforementioned in a SPED Classrooms

Multi-Media Instructional Facilities	Available and Very Adequate (AVA) (3)	Available and Adequate (2)	Not Available but highly urgently needed (1)	Ave. Weighted Mean	Verbal Description
Printed and Duplicated Materials					
1. Books	145	30	10	2.73	AVA

2. Magazines	**148**	**27**	**10**	**2.75**	**AVA**
3. Newspaper	**156**	**24**	**5**	**2.82**	**AVA**
<mark>**Non-Projected Display Materials**</mark>					
1. Chalkboards and Whiteboards	**170**	**12**	**3**	**2.37**	**AVA**
2. Flannel boards and Magnet Boards	**60**	**80**	**34**	**2.02**	**AMA**
3. Realia and Models	**50**	**78**	**57**	**1.96**	**AMA**
<mark>**Still Projected Display Materials**</mark>					
1. Overhead projector	**13**	**34**	**138**	**1.32**	**NAUN**
2. DLP projectors	**10**	**15**	**160**	**1.11**	**NAUN**
3. Video and Tape recorder	**12**	**38**	**135**	**1.34**	**NAUN**

It could be gleaned in the aforementioned Table that teachers and students in the SPED programs had used a three (3) types of multi-media instructional facilities in their teaching-learning process, that is, the printed and duplicated materials, non-projected display materials and still projected materials.

The Table further revealed that in the Printed and Duplicated Materials namely: "Books," *"Magazines," and "Newspaper,"* in the aforementioned SPED classrooms were perceived by respondents as ***"Available and Very Adequate"*** with an average weighted mean of 2.73, 2.75 and 2.82, respectively, that this particular these particular multi-media instructional facilities are extremely available and sufficient, useful, serviceable, and ably working at the SPED classrooms.

However, in the Non-Projected Display Materials, "*Chalkboards and Whiteboards," "Flannel Boards and Magnet Boards, "and "Realia and Models"* were perceived by the respondents with an average weighted mean of 2, 37, 2.02r and 1.96 or "***Available and Moderately Adequate***" respectively, that this particular multi-media instructional facilities reasonably available and sufficient, useful, serviceable, and ably working on hand at the SPED classrooms.

On the other hand, in the category of Still Projected Materials, the respondents perceived the "*Overhead Projectors," "DLP Projectors," and Video and Tape Recorder*" with an average weighted mean of 1.32, 1, 11 and 1.34 respectively had been perceived by the respondents' as "***Not Available but Urgently Needed***" that is, these particular multi-media instructional facilities are not available at the SPED classrooms but necessary and essential now.

It could be implied somehow that these missing classroom instructional facilities indirectly affects the mood of the learners and teachers in their learning and teaching process.

Hence, it was imperative that these "multi-media instructional facilities" should be made present and available at the SPED Classroom for the convenience and comfort of the teachers and at the same time provide better learning environment for the students

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