



Dexterous Support Materials in Grade Six Curriculum in Relation to Cognitive and Affective Development of Learners

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ABSTRACT

This study was conducted to determine if significant relationships exist between dexterous support materials and cognitive and affective development of the learners according to teachers' perceptions using the quantitative-descriptive and correlation methods. This was participated by 49 grade six teachers from the nine schools of San Roque District, Davao City. Results showed that the dexterous support materials in grade six curriculums were perceived evident in terms of printed materials, audio-visual and visual aids. The cognitive development and affective development of learners were also perceived evident. Therefore, significant relationship existed between dexterous support materials and students' cognitive and affective development. It was also found out that dexterous support materials had significant influence to students' cognitive and affective development.

Keywords: Affective development, cognitive development, dexterous support materials

The Problem and Its Setting

Education consists of two components, inputs and outputs (Haynes, 2005). Inputs are the human and material resources while outputs are goals and outcomes of the educational process. Both the input and output form a dynamic organic whole and if one wants to investigate and assess the educational system in order to improve its performance, effects of one component on the other must be examined. Part of the inputs that teachers use is the different dexterous support materials in enhancing students' totality.

Dexterous support materials include equipment and resources that are carefully chosen by the curriculum planners and implementers as part of the efforts in increasing the quality of childcare programming experienced by young children in schools (Roberts, 2016). Learning is a cognitive change that results from formal teaching. The development of each learner affects their cognitive and affective growth. Learning can mean getting, memorizing and reproducing knowledge, acquiring and applying procedures and personal growth. Learning therefore should not only promote rote learning but should also encourage active construction of knowledge that can result to meaningful experiences. The goal of teaching each learner is to develop a holistic learning task so that the learners will be able to respond according to the needs of their environment in different situations.

The economic austerity in recent times, coupled with the need for expansion of access to education, have combined to present educational planners worldwide with increasingly difficult choices in the allocation of available resources in improving students' total learning. According to Department for International Development (DFID) in (Guidance note, a DFID practice paper, 2007) research evidence confirms that the most consistent characteristics in improving student's cognitive and affective performances are the availability of textbooks and supplementary Teaching and Learning Materials (TLM) aside from well trained, prepared, supervised and motivated teachers and adequate physical facilities. DFID further asserts that most African countries like Malawi and Zimbabwe continue to suffer with monopolistic state primary textbook provision for TLM in enhancing the totality of the students because these books focus only on the academic learning of the students and do not include the integration of learning to students' social and affective awareness.

According to the National Center for Children in Poverty, between 9.5 to 14.2 percent of children with age group of 5 years or younger have emotional problems that affect their development and functioning enough to interfere with readiness to start school (Secor, 2016). In the Philippines, public school education is focused on academics alone and sadly loses sight on other important dimensions of child development. A child is expected not only to master reading, writing and arithmetic but also to grow healthy both physically and emotionally. Society requires not only critical thinking but also affective skills as well. And since character especially self-control is correlated with better learning, a child whose physical, emotional and social needs are met is more likely to do well in academics.

This is one of the important elements in the Philippine Education that is given less attention in most cases.

Availability of teaching and learning resources (TLR) enhances the effectiveness of schools as these are basic things that can bring about good academic performance in the students. Dexterous support materials such as printed materials, audio-video teaching materials and visual aids are integral components of teaching-learning situations. It is not just to supplement learning but also to complement its process. This is the very reason why teachers should learn to incorporate and integrate appropriate dexterous support materials within the curriculum.

Careful planning of the curriculum should focus first on the child as a total person and it must deal with the emotional, mental, social and physical development of the child. To enhance the development of the child, the teacher should assess and develop the five domains, namely, the adaptive, cognitive, communication, physical and affective/emotional domains.

Printed materials, audio visual, visual aids or instructional teaching materials are important since these enhance the students' interest in learning. The use of voice clips as teaching aid in teaching varied literatures is another vital material in teaching because it could help students to understand the meaning and the message of the selections better. Apart from that, the insertion of animation of texts and graphics in the web-based multimedia will also be a tool to teach literature and therefore increases students' interest in learning and reading literary texts.

In Davao City, the social development among grade six learners are not fully given a priority. The schools mostly develop the 3Rs, and it becomes a must to everyone instead of developing the personality through socialization. There is a need for a thorough evaluation on intensifying the program and introducing new programs that can further enhance the existing practices. The problems usually exist behaviorally, and the challenge is on how schools can integrate initiative programs that will focus on the development of both cognitive and affective skills of the students. Evaluating the cognitive and affective development of selected schools with their developing stage learners can become a springboard in formulating school readiness initiatives. Thus, the conduct of this study is very necessary.

Padilla (2012) stressed that creative teaching aid has become a necessity in order to cater the excellent reading performance of the teachers as well as academic achievement of the pupils in three subject's areas. In addition, the enhancement of the said program will greatly affect the academic achievement of the pupils in Mathematics, Science, and English. Further, this program will hopefully hone our students to be well rounded individuals and become effective individual in the society.

The above problem encourages and decides the researcher to conduct this study in order to investigate and evaluate the level of dexterous support materials in grade six curriculums in relation to cognitive and affective development of learners in selected schools and how these materials can make a big influence and transformation in the school performance particularly in the students' outcome.

REVIEW OF SIGNIFICANT LITERATURE

This chapter includes relevant readings related to dexterous support materials in grade six curriculum and the cognitive and affective development of learners. It details factors affecting children's cognitive and affective

development and their coping mechanism. Moreover, this chapter presents the literature that supports the theory of the study related to the present investigation.

Dexterous Support Materials in Grade Six Curriculum

Dexterous support materials are aids to maximize individual student success, while at the same time serve as a screening process for students who may be in need of specialized education services (Roberts, 2016).

The goal of dexterous support materials is to provide students with the skills, resources, and experiences needed to succeed in school. For Niagara University (2016), dexterous support materials provide resources and assistance to faculty and administration in the design and implementation of student learning outcomes assessment, promote active learning and the scholarship of teaching and learning, encourage the appropriate integration of instructional technology in the classroom, and work toward the overall goals of faculty development and improving the quality of teaching.

According to Roberts (2016), dexterous support is a positive, success-oriented program which uses specific assessment and intervention techniques to help remove educational or behavioral stumbling blocks for all students in the regular classroom.

Almy (2012) cited that students need a nurturing environment where they feel secure about learning, where the goal is success for every student and where students are confident that they will receive mentoring and encouragement to prepare their future.

Furthermore, Almy (2012) said that to truly give every student the opportunity for a college- and career-ready education, we must also do a better job of supporting our teachers through robust performance evaluation and relevant professional development.

On the other note, Lalunio (2011) contend that the basic dexterous support materials are tools which contain instructions to learners/teachers and which specify for each increment of learning the content to be learned, the techniques of presentations, practice, and use of that content, and the modes of learning/teaching associated with those techniques. Wambui (2013) added that the dexterous support materials are made up of objects such as printed, audio, visual that aid in the successful delivery of lesson.

Further, Voltz, Sims and Nelson (2010) explained that dexterous support materials are critical for a successful teaching in any classroom, especially in diverse and inclusive classrooms where students' skill levels, learning styles, and interests are more varied. There are many exciting options that can help teachers meet the instructional challenges they face.

Moreover, Purcell (2016), pointed out that grade six children who enter school with a wide range of literacy skills should be exposed in teaching emergent literacy. It is also an appropriate practice because each child is encouraged to work at his or her level of comfort and pacing.

There is strong evidence that the choice of instructional materials has large effects on student learning effects that rival in size those that are associated with differences in teacher effectiveness. But whereas improving teacher quality through changes in the preparation and professional development of teachers and the human resources policies surrounding their employment is challenging, expensive, and time-consuming, making better choices among available instructional materials should be relatively easy, inexpensive, and quick.

To bolster this idea, Moulton, (2003) stressed that student learning occurs primarily through interactions with people (teachers and peers) and instructional materials such as textbooks, workbooks, instructional software, web-based content, homework, projects, quizzes, and tests. The contexts within which these interactions occur are surely important. The effectiveness of teachers, the behavior of peers, and the instructional materials with which students have the opportunity to interact are affected by layers of influences that range from circumstances in the home, to leadership in the school, to the international macro-economy and everything in between. But students do not engage in instructional interactions with the governance mechanism for their school or with state standards or with a school district's evaluation system for teachers or with collective

bargaining agreements or with the leadership qualities of their school principal they learn by engaging in cognitive processes that are triggered and shaped by interactions with people and instructional materials.

In a related study, Awobodu (2000) has noted that teacher utilization of relevant equipment, materials and tools in teaching electricity facilitates learning and enhances student achievement. Ezeji, (1993), highlighted that teacher' utterances, actions, leadership styles, knowledge of the subject and skills in teaching were all considered important factors in student learning. That is, acquisition of the knowledge needed for effective utilization of basic electricity equipment during teacher training will help teachers to subsequently impart knowledge in their implementation of the curriculum.

Somehow, Anini (2011) agreed that intermediate education is better prepared for primary school education where they would acquire some pre-reading skills, counting skills and fine motor and social skills during their learning process level of education. In this case, it is important to use multifunctional material whenever possible. It may not be feasible to use multifunctional material for every lesson you teach, but as the teacher vary present information in the classroom; the students will be more engaged in the learning process. Teachers need to consider at all times that improved student engagement will result to improved achievement (Voltz, Sims and Nelson, 2010).

In addition, Ertmer, Ottenbreit-Leftwich and York, (2007); Parker, Bianchi and Cheah, (2008) wrote that the teacher should choose the educational materials to be used during instruction according to educational objectives and planned learning outcomes. Some authors specifically emphasize that the effectiveness of educational materials significantly depends on the already existing that is, prior knowledge of learners.

In the grade six setting, children interact with their peers and engage in a wide variety of activities, their cognitive and interpersonal development is stimulated and should be properly handled by their teachers (Anini, 2011)

In similar concern, by Wambui (2013) said that the environment plays a critical role. The richer the environment the more concrete opportunities for learners to learn by interacting with dexterous materials. The teacher's role is to create an environment that invites learners to observe, to be active to make choices and to experiment. Anini (2011) added that children are seen as active learners, and learning and teaching are seen to be reciprocal processes where often the teacher learns and the child teaches.

According to Wambui (2013), the materials and equipment presented in grade six setting should be chosen to provide many and varied opportunities for learners to practice and master familiar skills through a variety of materials. Similarly, Anini (2011), said that most child psychologists pay greater attention to the intermediate age because this is the most important period when human beings establish the foundation for their subsequent physical, mental, emotional, social and intellectual building.

Printed Materials. Printed materials such as books have been a staple in classrooms for a very long time. They have been used to teach nearly everything on the schools' curriculum. Books have strengths that have helped them survive: they have a simple user interface and are easy to use almost anywhere. With the development of ICT and the emergence of new technologies, however, the status of the book as the learning material of choice suddenly seems less than obvious. Granted, the book will not lose its foothold overnight, but its position can be challenged. This is possibly the biggest change and challenge in teaching material that has happened in a very long time (Seisto et al. 2010).

Peter (2012) states that a well-planned school plan will gear up expected outcomes of education, that will facilitate good social, political and economic emancipation, effective teaching and learning and academic performance of students. Asiabaka (2008) added that schools exist to serve socio-economic and political needs of the ever-changing society; consequently, they are in constant interaction with their external environment.

Notably, they receive inputs from the external environment in the form of human and material resources, and then process them into the society as finished products and services. The quality of the products bears a direct relationship with the quality of the facilities deployed in the process of the production.

Moreover, school facilities help improve students' performance in achievement tests, improve attendance and reduces dropout rate, improve student's attitude to learning, increase retention rate and boosts teaching effectiveness (Peter, 2012).

The layout and design of a facility contribute to the place experience of students, educators, and community members. Depending on the quality of its design and management, the facility can contribute to a sense of ownership, safety and security, personalization and control, privacy as well as sociality, and spaciousness or crowdedness (Lackney, 2016). Asiabaka (2008) cited that the quality of education that children receive bears direct relevance to the availability or lack thereof of physical facilities and overall atmosphere in which learning takes place.

Similarly, Lyons (2001) mentioned that students require a higher level of acoustic quality than adults and to attain the good speech recognition necessary for optimal comprehension and learning, classrooms must limit background noise, carefully manage reverberation of sounds, and keep outdoor noise to a minimum. When planning, designing, or managing the school facility, these facets of place experience should, when possible, be taken into consideration (Lackney, 2016).

Audio –Video teaching material Support. Korte, Werner Hüsing, Tobias (2010) agreed that using audio -visual has long been used as a top-rated strategy to arouse curiosity and sustain interest in lesson presentations. Both seen and heard, audio-visual media never fail to attract the young and instantly motivate them to react, either positively or negatively. Audiovisual media are integral components of all teaching-learning activities. While presenting a new lesson or topic in science, some attractive real objects like potted flowering plants or colored photographs of the landscape tacked on the front board could surely make the students' eyes open up wide accompanied with high anticipation of an interesting lesson. The media can be used as take –off point for planned learning activities. They are used to represent or bring to the classroom historic events, scenic landforms or huge machines. Viewing via television or films can show them as they are.

According to (Anzaku, 2011) the term audio-visual materials is commonly used to refer to those instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language. Thus, according to the above definition, a text book or a reference material does not fall within this grouping of instructional materials but an illustration in a book does. Some audio-visual components are in the nature of process and experience, for example, dramatizing an event or a procedure or making diorama. Some of the audio-visual materials like the motion pictures require the use of equipment to release their latent value. Some do not need equipment at all like an exhibit or a study print. This term designates in common usage both material things as well as processes such as field trips.

Anzaku further stated that audio-visual materials include materials and equipment alike, that materials are considered to be system, or body of content of potential value when put to work, while equipment or instructions, often referred to as hardware, components, are the means of presenting such content. The importance of audio-visual materials in the teaching and learning processes cannot be over emphasized. Below are some of the roles of audio-visual materials.

Gopal (2010) stressed that audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter. That is to say, with audio-visual materials, the barrier of communication and distance is broken. The culture and climatic conditions of other countries can be brought into the classroom with the aid of slides, films, filmstrips and projectors. This is important because once the phenomenon is visualized, the picture and knowledge become very clear and permanent.

In addition, Christophy and Wattson, (2007) mentioned that traditional chalkboard method of teaching involves only the learning sense of hearing and the easily loss of interest after some time. However, the utilization of instructional audio –video teaching material support in teaching and learning situation involves not only the sense of hearing but also the sense of sight and touch, looking at educational practices. Some schools were beginning to make use of interactive whiteboards, which allowed the teacher a very flexible use of his/her resources. Many teachers were still exploring the potential of this technology. Some involved pupils

effectively in exploiting the interactive possibilities. This was an area of significant potential in that it allowed pupils to take more of a lead in the learning process as they interacted with the information on screen.

In the same vein, Korte, Werner Hüsing, Tobias (2010) recommended the use of audio –video teaching material support in schools for effective teaching and said further that premium should be paid on the use of audio-visual aids in teaching in order to stir the spirit of observation, inquiry, experimenting and findings out facts. In his conclusion, he recommended the adoption of problem-solving method of teaching in preference to chalk and talk.

In related development, Mekeanshiel (2008) asserted that his attempting to assess teaching effectiveness have led him to think that availability of teaching resources more than any other thing in learning process is more effective. Consequently, Adeniyi (2011) declared that the purpose of using teaching aids and material is to communicate more permanent information that are incidental to the process of teaching because facts and information are retained better when supplemented with aids. He further added that it is most certain, that if materials are carefully selected and skillfully used, they make learning more meaningfully.

Ajodo (2002) concluded that instructional materials in teaching ensure more effective learning since the learner not only hears but also sees and does. Instructional materials in teaching play a very big role in teaching and learning process as enumerated: It helps the tutors to provide his students with meaningful sources of information; help the tutors by providing him with means of wildering his students of information; being experts with learning resources in the classroom; allow members of a group or class to share equally the same teaching experience; and provide the tutors means of exposing the students to a wide range of learning activities.

Meanwhile, Okwudiba (2005) highlighted the function of instructional materials in teaching in the promotion of learning, such as: provide increased interest in learning; hold the leaner's attention; provide the leaner with opportunities of interacting with their social and physical environment (excursion); offer learners opportunity for independent and individualized learning; supply concepts basis for conceptual thinking; offer opportunities for learner to develop their abilities and skills; and promote the acquisition and longer retention of knowledge.

Indeed, Students respond to information differently. Thus, it is often to our advantage as teachers to use many different formats and modes to teach the subject matter of a lesson. This is why teachers normally use some combination of lecture, text and hands-on laboratory for conveying information. With the advent of the Internet and the multiple formats that can be communicated over the World Wide Web, we now have several new and exciting ways to present information. The Web allows the incorporation of animation, moving pictures, and sound into lessons, which extends our abilities to present materials that encourage student interaction with the subject matter. Pictures and animations help bring to life scientific principles, and multimedia allows students to take a more active role in learning: they can watch experiments in action, see microorganisms up close, and use a mouse or keyboard to navigate images, simulations and interactive material. One of the advantages of using multimedia is to convey information quickly and effectively to all students and keep them interested in learning (Reddi, 2009).

According to Zimmer (2010) who stated school-purchased multimedia such as videos and CDs work well, to help the students understand the science lesson but these can be limited by school budgets. Another drawback of these tools is that given the hectic schedule teachers are often forced to keep, it can be a significant strain on time to review multimedia materials and seamlessly incorporate them into lesson plans. Somehow, Kubota, Yamamoto, and Morioka (2009) stated that the teachers have little appreciation of the use of ICT because of lack of computers attributed by the lack of funds for operations (school maintenance of computer, purchase of supplies and software) and lack of fund for internet connection.

To synthesize, learning materials in teaching are not only expected to be available to sufficient level to enable teaching and learning to properly take place. In other words, instructional materials in teaching can be available but not adequate enough to cater for the teaching and learning process that leads to expected learning outcome. Somehow, Tinio (2004) said that the program has been supplemented over the years by information communication technology-related initiatives of other national government agencies, local government units,

non-government organizations, private firms, foreign governments, and international aid donor agencies. However, Seameo-Innotech (2002) asserted that the computer class is still in the planning stages, and only few staff are using the computers for their daily performance.

Visual aids. Visual aids have an effect on student emotions and assist in comprehension and at the same time students should be guided through the process of learning to recognize and respond to the visual aids. The new generation of teachers should become more and more aware of the change, and prepare themselves to supplement the present teaching activity with new techniques. Thus, in a changing world of higher education, the teacher ceases to be a “lecturer” but transforms into an agent of change (Gangwer, 2009).

Visual literacy in the classroom has become increasingly important since more and more information and entertainment is accessed through technology. Development in the area of visual literacy has focused on the growth and expansion of educational programs that stimulate students’ abilities as well as enhancement of students’ reading and writing skills through the use of visual aids.

Gangwer (2009) argued in his book that visual teaching focuses on a template for instructional strategies. That is, visual teaching works as a guide for educators to teach by means of instructions using visual aids. Moreover, the visual teaching focuses on the learning process of students, by giving them the opportunity to use images to understand messages and communicate. As Gangwer claimed, the new generation of students are different, and they learn more visually thanks to the stimulation in edutainment, television and software that are based on images, which make teachers rethink the way they teach and consider using the visual teaching as a coming up concept in today’s world.

Gangwer, (2009) added that visual teaching can be conceived as a relevant pedagogical instrument as it takes advantage of the visual stimulation that children encounter in their everyday life. As Gangwer mentioned in his book “It is hard to ignore that the generation of children now moving through our educational system is by far the most visually stimulated generation that system has ever had to teach. Again, Gangwer emphasized in the possibilities that visual teaching offers to the field of education in the current society. Therefore, visual teaching is presented not as an innovative strategy, but as a relevant template for today’s education. Taking into account that visual teaching embraces other topics as “types of intelligences” and “visual learning”, it is necessary to give definitions of these two other topics that are enclosed in this construct. Therefore, one of the important points that are implicit in visual teaching is multiple intelligences being that students develop a different way to understand their surroundings. Multiple intelligences refer to the multiple ways in which a learner could understand information that is presented based on how they are able to process it.

Armstrong, (2009) suggested that intelligence has more to do with the capacity for solving problems and fashioning products in a context-rich and naturalistic setting. He also argued that, although we all have different combinations of the eight intelligences such as verbal, visual, bodily, intrapersonal, logical, musical, interpersonal and naturalist, people only develop one that helps them understand better their environment.

Cognitive Development

According to Csomai and Mihalcea (2007), studies in cognitive development, an important aspect of the understanding and learning process is the ability to connect the learning material to the prior knowledge of the learner. The amount of background knowledge necessary for a satisfactory understanding of an educational material depends on the level of explicitness of the text. However, it is almost impossible to create pedagogical materials that will simultaneously serve the needs of both low- and high-knowledge users. Cognitive development is thinking about thinking. More specifically, Taylor (2009) defines cognition as “an appreciation of what one already knows, together with a correct apprehension of the learning task and what knowledge and skills it requires, combined with the ability to make correct inferences about how to apply one’s strategic knowledge to a particular situation, and to do so efficiently and reliably.

On the other hand, Schluessner et al. (2004) pointed out that cognitive development in the foundational domains of naïve physics, naïve biology and naïve psychology reflects the learning mechanisms discussed in Section 1 above, along with the active construction by the child of causal explanatory frameworks about the

structure and action of systems. The idea that knowledge is actively constructed by the child is one of the central tenets of Piagetian theory. Piaget's related notion of stage-based change, that children think and reason in different ways according to their stage of cognitive development, has been undermined however. Nevertheless, his idea that action (physical interaction) with the world is a critical part of knowledge construction has been supported. The basis of cognition is indeed in sensory-motor learning, as Piaget proposed. However, sensory-motor representations are not replaced by symbolic ones. Rather, they are augmented by knowledge gained through action, language, pretend play and teaching.

In the study of Strauss, (2000) revealed that teachers believe that once content gets through, it must somehow connect up with already-existing knowledge by means of analogies, associations, familiar examples, and so on. This corresponds to an elaborative-processing model. Accordingly, teachers believe they should facilitate connection-making between new and old knowledge. If there is no existing knowledge to get connected to, the new knowledge can get driven into memory through repetition, rehearsal, and practice. This new knowledge now becomes part of already-learned knowledge. How does the new knowledge affect the prior knowledge? Teachers believe that there are changes in the amount and organization of prior knowledge, the prior knowledge gets broadened and generalized, it is at higher levels of abstraction that what was in previous knowledge, and more

Similarly, Marzano et al., (2006) posited that more students are aware of their thinking processes as they learn, the more they can control such matters as goals, dispositions, and attention. Self-awareness promotes self-regulation. If students are aware of how committed or uncommitted, they are to reaching goals, of how strong or weak is their disposition to persist, and of how focused or wandering is their attention to a thinking or writing task, they can regulate their commitment, disposition, and attention. However, if students were aware of a lack of commitment to writing a long research assignment, noticed that they were procrastinating, and were aware that they were distracted by more appealing ways to spend their time, they could then take action to get started on the assignment. But until they are aware of their procrastination and take control by making a plan for doing the assignment, they will blissfully continue to neglect the assignment.

Somehow, Commander and Valeri-Gold (2001), defined that explicitly teaching study strategies in content courses improves learning. Research also shows that few instructors explicitly teach study strategies; they seem to assume that students have already learned them in high school—but they have not.

Furthermore, McKeachie (2005), agreed that rote memorization is the usual learning strategy—and often the only strategy employed by high school students when they go to college. Study strategies are diverse and do not work in every context. For example, reading for information acquisition would not work in a literature course and would not work if students are supposed to critically evaluate an article. But students who have learned only the strategy of reading to pass a quiz on the information will not go beyond this strategy. Study strategies don't necessarily transfer into other domains. Students need to know they have choices about which strategies to employ in different contexts. And students who learn study skills in one course need to apply study strategies in other contexts than where they first learned it. Students need to monitor their application of study strategies. Metacognitive awareness of their learning processes is as important as their monitoring of their learning of the course content. Meta cognition includes study skills and thinking skills as essential component.

Study Skills. Research on the correlation between study and students' academic achievement has for long received attention from scholars and educational agencies. For instance, the national Assessment of Educational Progress (NAEP) in 1994 conducted a study to find out the relationship between study habits and academic performance of the students. Findings of the study revealed a positive correlation between study habit and academic achievement. Similarly, Onwuegbuzie (2001) conducted a series of studies to find out the relationship between academic success and study habit and reported positive relationship between the two variables.

Study skills are approaches applied to learning that are generally critical to success in school, considered essential for acquiring good grades, and useful for learning throughout one's life. There are arrays of study skills, which may tackle the process of organizing and taking in new information, retaining information, or

dealing with assessments. Studying is a skill. Being successful in school requires a high level of study skills. Students must first learn these skills, practice them and develop effective study habits in order to be successful. Very often the study habits and practices developed and used in high school do not work for students in college (Freund, 2000).

Study habits may be taken for granted, particularly in developing countries. In Africa, there is widespread reading in all scholarly fields, but less is being achieved in writing and publication. Efficient study habits can strengthen writing. Professors in the developing countries, such as those in Nigerian universities, should attempt to equip graduates with high level of analytical skills, the capacity for critical reasoning, self-reflection and conceptual grasp and ability to learn autonomously and exercise flexibility of mind (Simmons 2003). Study habits are actually improving because of the advent and wide use of the Internet, hypertext, and multimedia resources (Liu, 2005).

Thinking Skills. Carter (2008) emphasized that to increase reading comprehension it takes time and effort. To extract the gist of the literature one has to read critically to come up with greater comprehension. Take advantage of the title, heading and subheading that indicate important concepts. Make every sentence clear and understandable.

The article published by Church (2008) reiterated that it has been demonstrated that university students who read hypertext out-performed those reading a paper text in carrying out a multiple-concept task, but not in recalling a single fact. Moreover, there were no performance differences between the media groups in the tasks in which synthesizing of text information from different articles was needed. Indeed, the hypertext version was found to be significantly slower than the paper version in these learning tasks. Consistent with the ideas of Lawless and Brown (2009), it can thus be argued that technology is not effective learning in and of itself, but it merely provides a forum for learning from text.

Austin (2002) pronounced that there are different approaches to learning. He also stated that students who normally adopted a surface and externally regulated learning approach expected more difficulties in finding information than the less surface- and externally-regulated students. This was the case both when learning from a paper text and learning from hypertext. These results are compatible with the broad pattern of findings emphasizing the role of independent responsibility for one's own deep-level learning what works for one student will not necessarily work for another. This poses challenges for teachers in creating new opportunities for enhancing the quality of learning.

Brogden (2008) cited that the effectiveness of spontaneous study strategies is based not only on the quantitative question. Studies showed that generative learning outcomes are better than strategies less generative in nature. The latter included, for example verbatim note taking, underlining or reading only. These results were consistent when the learning outcome was measured as concept defining, comparison tasks, and a task that required knowledge application in practice.

Moreover, Tsui, (2000) Emphasized the development of thinking skills has positive implications for the immediate learning environment as well. Students who are exposed to classroom environments that foster critical thinking skills begin to see themselves as active contributors to the learning process. Exploring viable solutions to complex problems with peers and constructing knowledge alongside professors and instructors allows students to situate themselves within the learning process thereby encouraging development of higher order cognitive processes and mastery of subject matter. Thinking is inherently linked to effective learning. Being able to think about what one is learning while interpreting and making relations is an important part of the learning process (Paul, 2005). Critical thinking skills allow students to more quickly assimilate subject-specific course content and also provide a framework that allows students to engage and respond to less-well defined problems (Tsui, 2000; Tsui 2002).

Giancarlo and Facione, (2001) asserted that institutions should stress the importance of including critical thinking as measure of student learning at the graduate and undergraduate level. Due to the complexity of the task, an operational definition of critical thinking is essential to framing the assessment of critical thinking

skills. Halpern, (2001) affirmed that course objectives and goals targeted at development of critical thinking should be a key component of the curriculum as well as the assessment process.

Analysis. It is a skill to examine methodologically by separating into parts and studying their interrelations. Considering in detail and subjecting to an analysis in order to discover essential feature or meaning (Online Dictionary, 2008).

Analysis involves taking apart piece of knowledge, the investigation of parts of a concept. It can only occur if one has obtained knowledge of and comprehends a concept. We can analyze the elements of a whole, the relationship between elements and the whole and different elements of the same whole. We can also analyze the underlying organizational principles of an analysis, sort of a meta-analysis. It's the deductive process. The student examines, classifies, hypothesizes, collects data, and draws conclusions. It is deconstruction (Howard Rotterdam, 2000).

Analysis according to Benjamin Bloom as cited by Auer (1995) is yet a more advanced form of application of knowledge, requiring skills in organizing and structuring components of a solution, and ensuring that the overall solution works. Analysis is broken down into elements of a solution, and combination of those elements. Analysis of elements requires recognition of unstated assumptions, understanding the difference between facts on the one hand and hypotheses or opinions on the other, and understanding the relationship between a conclusion and the steps to arrive at a conclusion.

Acero et al. (2000) stated that analyzing involves separating a whole entity into its meaningful parts and understanding the relationships among those parts. Manipulating part/whole relationships helps learners understand the underlying organization of ideas. Analyzing knowledge domains involves skills such as: recognizing patterns of organization; classifying objects into categories based on common attributes; identifying assumptions, stated or unstated, including suppositions and beliefs that underlie positions; identifying the main or central ideas in text, data, or creations, and differentiating core ideas from supporting information; finding sequences or consecutive order in sequentially organized information.

Affective development

Wood (2009) said that our belief is that emotional and social domain goes hand in hand. If children learn to be emotionally literate or emotionally intelligent, then they will be able to handle social interactions with others more effectively. An important benefit of teaching social and emotional literacy is that it can greatly help to improve a child's self-esteem and self-empowerment. Children with these skills tend to feel a lot better about themselves and their ability to respond with confidence to a range of social situations. The development of effective, healthy social and emotional expression has become increasingly neglected in our society. There appear to be less opportunity in our society to learn the skills of communicating with and relating to others in healthy, positive ways. Children are not necessarily learning these skills in their school environment or even at home.

Hence, according to Matthews, a socio-emotional competency is a social process that takes place in a social setting, is something that is never really achieved, and has to be seen in conjunction with others. This indicates that key components of emotional competencies, which is a continual process, includes dialogue, acceptance of ambiguity and the ability to reflect. Judgments are made on a person's individual-in-group socio-emotional literacy. He argues: socio-emotional competencies involve factors such as people understanding their own and others' emotional states; learning to manage their emotions and to empathize with others.

It also includes the recognition that emotional competencies are both an individual development and a collective activity and are both about self-development and the building of community so that one's own sense of social and emotional well-being grows along with that of others, and not at their expense. Socio-emotional competencies involve connections between people and working with their differences and similarities while being able to handle ambiguity and contradiction. It is a dynamic process through which the individual develops emotionally and involves culture and empowerment. For example, it includes understanding how the nature of social class, 'race' and gender (sexism and homophobia) impinge on peoples' emotional states to lead

to an understanding of how society could change. Hence it incorporates an understanding of power exchanges between people and a challenging of power differentials.

On this view, emotional competencies are developed to help people understand themselves, others and the power connections between them. Matthews links socio-emotional to equality and social justice. Socio-emotional competencies are not just to be "nice", but also to know when to stand up for viewpoints and fight for a case. It is not about more control over people, but less.

Self-awareness. Swearer and Cary, (2007) stated that self-awareness is accurately assessing one's feelings, interests, values, and strengths/ abilities, and maintaining a well-grounded sense of self-confidence. Recognize and manage emotions in order to respond to conflict in calm and assertive ways. In order to handle conflicts effectively, children need to be able to recognize when they are getting angry, and learn to calm themselves before reacting. Children who frequently bully others tend to have trouble managing anger and to strike out aggressively.

To bolster this idea, Bosworth, Espelage, and Simon (1999) found that children who are the angriest are the most likely to bully others. Children report that the need to relieve stress and having a bad day are the primary reasons they bully others. A recent study found that students expressing higher levels of sadness and emotional instability are more likely to be bullied (Analitis et al., 2009). Hyperactivity and emotional outbursts are the two factors most likely to annoy and provoke peers. Such provocation increases the likelihood of being victimized and not supported by peers over time (Rodkin & Hodges, 2003).

Self-regulated. It refers to regulating one's emotions to handle stress, control impulses, and persevere in overcoming obstacles; setting personal and academic goals and then monitoring one's progress toward achieving them; and expressing emotions constructively.

Research suggests that many victims (43 percent) respond to being bullied in an aggressive, retaliatory, or emotionally reactive manner that both prolongs and escalates the bullying episode (Wilton, Craig, & Pepler, 2000). These victims lack effective emotional regulation skills and may yell, scream, or cry in response (the least effective ways to stop bullying), thereby rewarding the aggressor (Goldbaum et al., 2006; Salmivalli, 1999) and making themselves more vulnerable to further victimization.

The cited studies are related to the present study both in content and method. Content wise, they dealt partly with different support materials and its relation to cognitive and affective development of the students; method wise they made use of descriptive and correlation methods like the present study. Moreover, the variables of the present study are related to the cited literatures, thus previous researches about support materials to students learning were included and identified.

Theoretical and Conceptual Framework

This study is anchored on the implementing rules and regulations of DepEd order no. 31, s. 2012, otherwise known as "The Policy guidelines on the implementation of grades 1 to 10 of the K to 12 Basic Education Curriculum which started in the school year 2012-2013.

This study is also anchored on social development theory by Lev Vygotsky in 1962 which primarily explains that socialization affects the learning process in an individual. It tries to explain consciousness or awareness as the result of socialization. This means that when we talk to our peers or adults, we talk to them for the sake of communication. After we interact with other people, we tend to internalize what we uttered.

In addition, this study is also guided by the cognitive model of Garcia, (2008) who stressed that when people have the skill to socialize, they tend to be more highly productive and effective in whatever they undertake. Social awareness refers to recognizing the emotion and feelings of other people that can build empathy and emotional self-awareness which are considered as fundamental skills. These attributes kindle altruism.

Further, the theory of Erikson in 1959 supports social development. His psychosocial theory of personality development emphasized the interplay between the social and emotional domains. Erikson highlighted the

importance of the person resolving a series of conflicts where interpersonal relationships play an important role. In infancy, the conflict is “Trust versus Mistrust”. Erikson hypothesized that an infant will develop trust through interaction with a warm, available, and responsive caregiver or the infant will develop mistrust through interaction with a negative or unresponsive and unavailable caregiver. Subsequently, it is this development of trust in infancy that allows an individual to succeed in the next stage of toddlerhood called “Autonomy versus Shame and Doubt.” In this stage, the toddler is more likely to develop a sense of his independence and control over his own behavior and environment if she has the base of trust in a caregiver developed in the first stage.

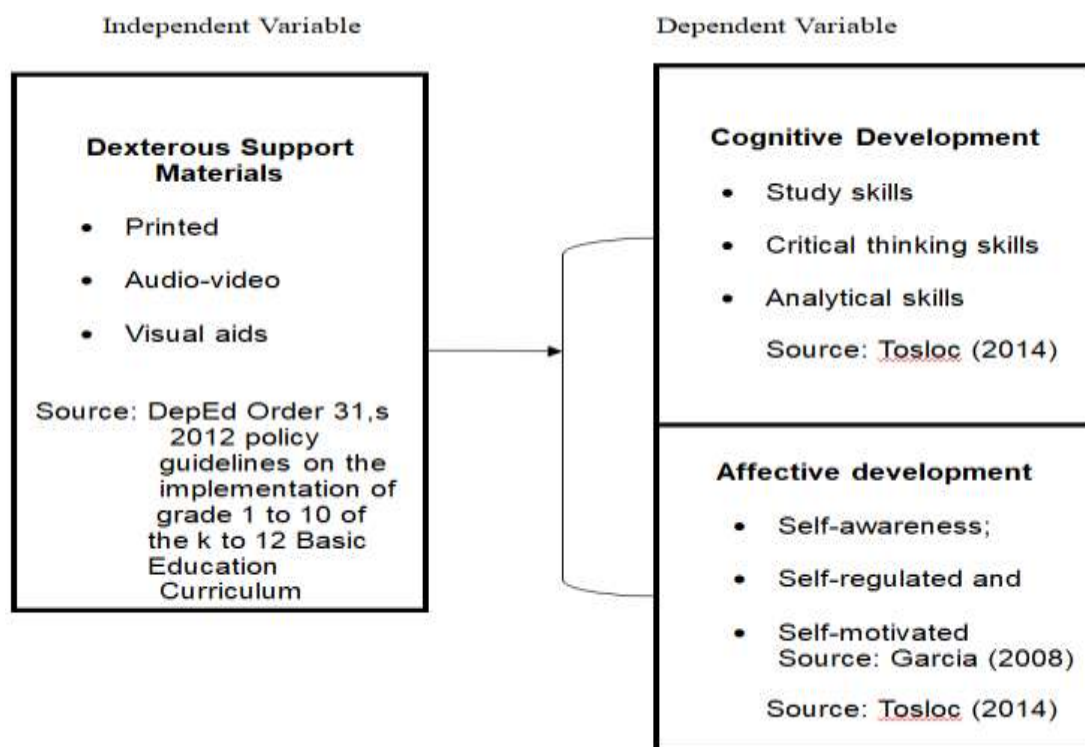


Figure 1.Theoretical/ Conceptual Framework of the study

The next two stages, the development of Initiative versus Guilt and Industry versus Inferiority are especially critical for educators. Children must learn to integrate their interest in personal exploration and the use of their imaginations with working with others involved in the same task.

For elementary aged children, the task of integrating personal interests and needs with those of others becomes even more complex. They must learn to follow rules and “get things right” while at the same time learning to take the perspective of others and work with others in group projects. Failing in either of these stages leads to children being at-risk for an inability to take action on their own and/or developing a sense of inferiority, unproductiveness, and feelings of incompetence in regards to their peers and their social roles and abilities (Huitt and Dawson, 2011).

Moreover, this is also supported by attachment theory of Seefeldt in 2010. This theory explains that children who enjoy a secure attachment relationship with their parents and caregivers use this relationship as a support to venture out and explore their environment. They reach out to others and venture out again, going further into the world of social relationships. As the child confidently wanders out to test the social waters, he enlarges his social world, expands his social contacts, and is more likely to learn from experience in social interaction.

Lastly, the Collaborative Service Delivery Model Dushi (2015) is another theory that supports this study. This is considered a transdisciplinary approach because it represents an attempt to overcome the boundaries of individual disciplines. The independent variable in this study is the dexterous support

Materials in grade six curriculum which includes the following indicators: printed materials, audio-video and visual aids. The dependent variable is the cognitive development of learners which includes the following

indicators: study skills, critical thinking skills, and analytical skills while affective development is comprised of the following indicators self-awareness; self-regulated and self-motivated.

It is then conceptualized in this study that dexterous support materials in grade six curriculum are vital in developing the learning of the students particularly in cognitive and affective domain. The level of utilization of dexterous support materials in grade six curriculum will have a great impact to the students' development.

Statement of the Problem

This study was conducted to determine the relationship of dexterous support materials in grade six curriculum and the cognitive and affective development of the learners in the nine schools of San Roque District, Division of Davao City. Specifically, it sought to answer the following:

1. What is the level of dexterous support materials in grade six curriculum among the selected schools in terms of:
 - 1.1 printed materials;
 - 1.2 audio-video; and
 - 1.3 visual aids?
2. What is the level of cognitive development of learners among the selected schools in terms of:
 - 2.1 study skills;
 - 2.2 critical thinking skills; and
 - 2.3 analysis skills?
3. What is the level of affective development of learners among the selected schools in terms of:
 - 3.1 self-awareness;
 - 3.2 self-regulated; and
 - 3.3 self-motivated?
4. Is there a significant relationship between dexterous support materials in grade six curriculum and cognitive development of learners among selected schools?
5. Is there a significant relationship between dexterous support materials in grade six curriculum and affective development of learners among selected schools?
6. Do dexterous support materials in grade six curriculum significantly influence the cognitive and affective development of learners?

Hypothesis

The null hypothesis in this study was tested at 0.05 level of significance.

H₀₁ : There is no significant relationship between dexterous support materials in grade six curriculum and cognitive development of learners.

H₀₂ : There is no significant relationship between dexterous support materials in grade six curriculum and affective development of learners.

H₀₃ : Dexterous support materials in grade six curriculum do not significantly influence the cognitive and affective development of learners.

The findings of this research study would be beneficial to the following:

Students. This study is useful to improve the behavioral patterns and character of the students towards cognitive and affective skills development. It also enlightens them on the main purpose and the advantages of the school's initiatives towards social development of the learners.

Faculty and Staff. The results of this study give them information on the advantages and disadvantages of the program initiatives that develop and enhance the cognitive and affective concept of the learners. It serve as an avenue for them to enhance further the cognitive and affective skills of students and to develop and strengthen the dexterous support in schools.

School Administrators. The result of this study can give the school heads an overview and further understanding why the school should allocate greater budget on the needs of the students in terms of academic and why they should create school-based trainings for teachers on developing dexterous support materials. This serves as the basis for evaluation on the dexterous support materials of the school towards the teaching and learning process of the learners. This study also helps them design program initiatives concerning social development of the learners using the data on the dexterous support materials which are helpful to explore other dimensions of development programs in selected schools.

Future Researchers. The findings of this study may serve as the take off point for other researchers to conduct researches which are similar in nature.

The following terms were defined operationally to understand further the nature and the association of some terms used in this study.

Dexterous Support Materials in Grade six Curriculum. This refers to the resources and assistance to faculty and administration in the design and implementation of student learning outcomes assessment in order to promote active learning and the scholarship of teaching and learning. It also refers to the appropriate integration of instructional technology in the classroom to improve the quality of teaching.

Cognitive development of Learners. This refers to the emergence of the ability to think and understand. A large portion of research has gone into understanding how a child imagines the world.

Affective development of learners. This refers to the emergence of a child's experience, expression, understanding, and regulation of emotions from birth through late adolescence. It comprises how growth and changes in these processes concerning emotions occur. It is also the ability to correctly recognize and identify a range of emotions, as well as adequately respond to them. It is something that both develops naturally and is learned over time.

METHOD

In this chapter, the researcher describes the method used specifically the research design, respondents, instrument, data gathering procedure and data analysis.

Research Design

This study employed the non-experimental quantitative research method employing descriptive- correlational method to determine the relationship between dexterous support materials in grade six curriculum and the cognitive and affective development of learners from the nine schools of San Roque district. The descriptive method is designed to determine if two or more variables are associated with each other. It describes and interprets *what is*. As cited by Pal et al., and Masig (2013), it is concerned with the conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing.

This statement supported by Fawcett, (2000), added, that descriptive category includes correlational studies that are conducted in natural setting and that involve no attempts to introduce something new or to modify or control a phenomenon. It is for this purpose that the method was used since the focal point of this two-variable research study is to measure the degree of relationship between the independent variable which is dexterous

support materials and the independent variables which are the cognitive and affective development of the students. Calderon and Gonzalez (2010) said that there is a measure of association of variables with varying level of measurement. In certain cases, two variables become related because they are related to, or caused by another variable.

Further, as cited by Ardales (2001), descriptive-evaluative research design is appropriate in behavioral sciences. The reason for this is the fact that behavior of interest to the researcher can be systematically examined and analyzed as it happens in its natural setting. Moreover, the researcher cannot arrange or manipulate situations, or if they can, still expect people to behave in their natural way.

Research Respondents

This study was conducted in San Roque District, five kilometers from the City of Davao proper wherein the respondents of this study are the teachers of San Roque District for the School Year 2016-2017.

The study employed the simple random sampling technique in the selection of respondents which include the teachers who were teaching in the grade six level since they had direct contribution and influence toward dexterous support materials of the school and the development of young learners. Simple random sampling was used due to the number of teachers in the public schools. Moreover, in selecting the respondents, the researcher identified the population of the grade six teachers who were requested to be the respondents of the present study. A simple random sampling was done to identify the 20 percent of the total population. By this, 49 teachers were chosen and was acceptable as the minimum sample size in the research study.

Schools	Actual Population of Teachers (N)	Sample 20%	Percentage (%)
San Roque Central Elem. School	52	11	23
Elpidio Quirino Elem. School	15	4	8
Don Julian Rodriguez Sr. Elem. School	34	6	12
Ubalde Elementary School	20	4	8
Jose L. Porras Elem. School	41	8	17
Jose P. Laurel Elem. School	6	1	2
San Juan Elem. School	29	6	12
Lapu-lapu Elem School	29	6	12
Don Francisco Dizon Elem. School	16	3	6
Total	242	49	100%

The researcher identified the number of respondents through random sampling technique. As explained by Gay and cited by Sevilla, Ochave, Punsalan, Regala, and Uriate (2004), descriptive research should have a minimum of 20 percent of the population as acceptable sample size of the study. This is further supported by Realino (2012) who stressed that the used of 20 percent sampling technique is scientifically effective in determining the sample size.

Research Instrument

This study employed survey questionnaire that focused on dexterous support materials and was administered to the grade six teachers. Similarly, the research instrument on dexterous support materials was adapted from the study of Dajal, et.al. (2012). Moreover, that said instrument was modified to suit and jive to the present study.

The survey questionnaire was composed of three parts which covered the dexterous support materials in grade six curriculums, the level of cognitive and affective development of learners. The questionnaire was evaluated by three expert validators. A standard evaluation tool was given to them to rate, comment, and suggest for the improvement and development of the questionnaire. The result of the validation was made as bases in the improvement of the questionnaire. The ambiguous items were deleted; the weak items were strengthened and enhanced. After the correction and refinement, the research instrument was then finalized.

The independent *variable* which is found in the first part of the questionnaire used the five-point Likert scale responses with the following interpretations of the data.

Range	Scale	Descriptive Rating	Interpretation
4.20 – 5.00	5	Very Highly Extensive	This means that the dexterous support materials in grade six curriculum is evident to the fullest extent.
3.40 – 4.19	4	Highly Extensive	This means that the dexterous support materials in grade six curriculum is evident to a great extent.
2.60 – 3.39	3	Moderately Extensive	This means that the dexterous support materials in grade six curriculum is evident to an average extent.
1.80 – 2.59	2	Less Extensive	This means that the dexterous support materials in grade six curriculum is evident to a quite extent.
1.0 – 1.79	1	Not Extensive	This means that the dexterous support materials in grade six curriculum is not evident at all.

The Dependent *Variable* which was written in the second part of the questionnaire utilized the five-point Likert scale responses with the following interpretations of the data.

Range	Scale	Descriptive Rating	Interpretation
4.20 – 5.00	5	Very High	This means that the cognitive and affective development of grade six learners is evident to the fullest extent.
3.40 – 4.19	4	High	This means that the cognitive and affective development of grade six learners is evident to a great extent.
2.60- 3.39	3	Moderate	This means that the cognitive and affective development of grade six learners is evident to an average extent.
1.80 – 2.59	2	Low	This means that the cognitive and affective development of grade six learners is evident to a quite extent.
1.0 – 1.79	1	Very Low	This means that the cognitive and affective development of grade six learners is not evident at all.

Data Gathering Procedure

The researcher had taken these steps in conducting the study on the following parameters: An endorsement letter to conduct the study was secured from the Dean of the Graduate School of Rizal Memorial Colleges. It was attached to the request letter made by the researcher to the office of the Superintendent of Davao City. After the permission was granted, the researcher personally appeared to the office of the District Supervisor for the approval to conduct the survey. When the request was approved, the researcher went to the different public elementary schools listed above to administer the survey instruments to the identified respondents. A systematized scheduling on the conduct of data gathering was duly disseminated among the schools specifying



the date and time of the visit of the proponent. Retrieval was done immediately after the administration of the questionnaire.

The data generated from the survey was collated, tallied and submitted to the statistician for statistical treatment. After which, the researcher analyzed and made the necessary interpretations.

Data Analysis

The following statistical tools were used in this study: *Weighted Mean* was used to determine the level of dexterous support materials in grade six curriculum. This was also used to quantify the specific level of cognitive and affective development of learners in the nine schools of San Roque District, Davao City.

Pearson Product Moment Correlation (Pearson-r) was used to measure the significant relationship between dexterous support materials in grade six curriculum and affective and cognitive development of learners among the nine schools.

Linear Regression Analysis was used to determine the influence of dexterous support materials in grade six curriculums to cognitive and affective development of learners.

RESULTS AND DISCUSSIONS

Presented in this chapter are the results and discussions of the findings for every datum presented, as well as its analysis corresponding to the statement of the problem. Implications are also included to provide the reader with information that will serve as a springboard for action.

Results of this study are presented and discussed under the following subheads: (1) the dexterous support materials in grade six curriculum among the schools in terms of printed materials; (2) the dexterous support materials in grade six curriculum in terms of audio video; (3) the dexterous support materials in grade six curriculum in terms of visual aids; (4) the summary on the dexterous support materials in grade six curriculum; (5) the cognitive development of learners in terms of study skills; (6) the cognitive development of learners among the schools in terms of critical thinking skills; (7) the cognitive development of learners among the schools in terms of analysis skills; (8) the summary on the cognitive development of learners; (9) the affective development of learners among the schools in terms of self-awareness; (10) the affective awareness of learners in terms of self-regulation; (11) the affective development of learners in terms of being self-motivated; (12) the summary on the effective development of learners among the schools; (13) the relationship between dexterous support materials and cognitive development of learners among the schools; and (14) relationship between dexterous support materials and affective development of learners among the schools.

Dexterous Support Materials in Grade Six Curriculum among Schools in Terms of Printed Materials.

Printed Materials. Printed materials as used in the study refer to any publication, document or record including textbooks, curriculum guides, modules, daily lesson logs and other related materials utilized by the teachers during classroom instructions. Table 1 presents the data on the levels of the dexterous support materials in grade six curriculum among the schools in terms of materials that are *printed*. The dexterous materials in terms of *printed* was described based on averages per item and per category.

Table 1. The Dexterous Support Materials in Grade Six Curriculum among Schools in Terms of Printed Materials

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Providing a guide for the selection of dexterous support materials that meet required standards like books and daily lesson log (DLL).	3.67	High

2	Developing printed curriculum materials	4.01	High
3	Using prototype of modules provided by the DepEd.	3.89	High
4	Including sample documents applicable to the selection and adoption process.	3.88	High
5	Using appropriate printed guide as an instruction for aligning curriculum to DepEd standards and in the selection of appropriate dexterous support materials to support the teaching and learning of those standards.	4.07	High
Overall Mean		3.90	High

Based on the statements, the results revealed the following: *uses appropriate printed guide as an instruction for aligning curriculum to DepEd standards and in the selection of appropriate dexterous support materials to support the teaching and learning of those standards (4.07)*; and *provides a guide for the selection of dexterous support materials that meet required standards like books and lesson log (3.67)*. All items in this indicator yielded a mean rating of **(3.90)** with a high descriptive equivalent.

This means that the dexterous support materials in grade six curriculum among the schools in terms of *printed materials* is relatively evident or oftentimes manifested. This also means that printed materials are still effective and utilize by many teachers mostly in the local area. However, teachers should still be guided in choosing materials for their daily lesson log as well as books for reference.

This is related to the Reports of Education Bureau in 2009 where they stressed that printed learning materials are still relevant, are preferred and are as efficient and effective as compared to electronic learning materials. These materials cannot negate the researches about the effect of multimedia as learning materials to the achievement of the pupils.

The Cognitive Theory of Multimedia Learning (CTML) of Mayer (2001) as cited by Baker, Thierstein, Fletcher, Manpreet, and Emmons, (2009) is useful in this context. This theory states that textual information enriched with graphical materials is superior to text alone. This “multimedia” principle has influence generations of designers and developers of learning materials to enrich textual materials with well-designed graphics. Additional design principles - such as the spatial contiguity principle – build on this basic principle, but reiterate the key issue: the adequate selection of information from the learning materials can be fostered by a careful graphical design. The latter principle puts forward the idea that it is better to link the text to the right part of the graphical representation: integrate text and graphics. In many ways, this can also be realized online or on a computer. But this does not question the relevance of printed learning materials; it simply indicates that next to text, also electronic delivery media can play a role.

The above statement was supported by Hooser (2009) who stressed that instructional materials is vital in the learning of the learners, more over it will provide support in learning things. Learning classrooms should provide a variety of audio, visual and print input methods depending on student’s need; allow students the flexibility to communicate their knowledge in ways that displays their true learning.

Dexterous Support Materials in Grade Six Curriculum among Schools in Terms of Audio Video

Audio-Video. As utilized in the study, audio-video refers to those sensory objects or images and auditory materials which initiate or can stimulate learning. The statements in the indicator are logically presented with concentration on the highest and the lowest mean rating obtained namely: *Encouraging information-sharing feature of multi-media to enhance students' learning experiences (4.01)*; and *providing multimedia equipment and compatible materials such as assistive technology (3.60)*. All items under this indicator garnered mean results with descriptive equivalent of high.

The overall mean of **3.80** with the descriptive equivalent of high means that the dexterous support materials in grade six curriculum among schools in terms of *audio video* is relatively evident or oftentimes manifested. However, there is still a room for improvement in terms of providing assistive technology such as multimedia

equipment. Furthermore, the finding reveals that the teacher's use of *audio video* as instructional tools to support the learning development of the students is significant to the learners' learning.

Table 2. Audio Video

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Encouraging information-sharing feature of multi-media to enhance students' learning experiences	4.01	High
2	Engaging students in multi-media presentation	3.79	High
3	Using audio presentation in the classroom discussion	3.92	High
4	Utilizing audio-video to improve students' creativity	3.66	High
5	Providing multimedia equipment and compatible materials such as assistive technology.	3.60	High
Overall Mean		3.80	High

This finding is supported by Bassey (2002) who stressed that instructional media as system components may be used as parts of instructional processes which are used to disseminate information, messages, and ideas which make effective communication possible in the teaching-learning process.

With the same context, Bowen, (2007) stressed that there are a number of benefits in using audio-videos in teaching literature. These benefits are of paramount importance in maintaining a good momentum of reading interest among students and in enhancing student's understanding of the selections given.

This is also congruent to the idea of Tinio (2004) that the programs in schools have been supplemented over the years by information communication technology-related initiatives. However, Seameo-Innotech (2002) asserted that the computer classes where Audio-visual materials are present are still in the primary stage of implementation and only few staff are using the computers for their daily activities. Further, computers have not been used effectively by students and teachers because of the lack of budget, human resources, computer defect and infrastructures.

Dexterous Support Materials in Grade Six Curriculum among Schools in Terms of Visual Aids

Visual Aids. Visual aids refer to materials that can stimulate learning when seen by the students. The presentation is focused on the highest and lowest ratings obtained, namely: *using colorful visual aids in presenting new lesson (4.01)*; and *using cartolina and manila paper for classroom lecture (3.77)*. All items in this indicator yielded ratings with a descriptive equivalent of high.

Collectively, this has gained an overall mean of **3.94** with a descriptive equivalent of high which means that teachers encourage students to use improvisation of instructional materials for economical reason and development of creativity. However, the use of cartolina and manila paper for classroom lectures is a factor to be improved.

The author added that such skills are only realizable through well-planned training program on improvisation.

Table 3. Visual Aids

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Using colorful visual aids in presenting new lesson	4.01	High

2	Using cartolina and manila paper for classroom lecture	3.77	High
3	Using tarpaulin of diagrams and cycles showing lessons in science.	4.01	High
4	Encouraging the students to use visual aids to work the student's project.	3.93	High
5	Using recycling paper visual aids in making assignment.	3.96	High
Overall Mean		3.94	High

With this, the use of creative visual aid will make the learners more interested to the topic and can potentially influence student's cognitive and affective development.

The findings of the statements in the survey are parallel to the point of view of UNESCO (2006). They explained that teachers are the most important factor in determining the quality of education that children receive. Teachers' ability to select and provide the best visual aid contribute to the learning of the students.

Summary on the Dexterous Support Materials in Grade Six Curriculum

Presented in Table 4 is the summary of the results gathered about the dexterous support materials in grade six curriculums. The over-all mean of the data in this table is 3.97. The two indicators are presented with corresponding mean: *Printed Materials* (3.90), *Audio Video* (3.80), and *Visual Aids* (3.94). All of these indicators are with descriptive equivalent of High.

The high mean rating in this table indicates that the Dexterous Support Materials in Grade Six Curriculum plays a significant role in the teaching and learning process it supports the students' development. This finding is congruent with the statement of Chant, Jenkinson, Randle and Russell (2002) that teachers who take the time to provide instructional materials and options that take into account the different ways students receive and express knowledge, are more likely to see their students succeed.

Table 4. The Summary on the Dexterous Support Materials in Grade Six Curriculum

Indicators	Mean ($\bar{x}$)	Descriptive Equivalent
Printed Materials	3.90	High
Audio Video	3.80	High
Visual Aids	3.94	High
Overall mean	3.97	High

This finding is supported by Bassey (2002) who stressed that instructional media as system components may be used as parts of instructional processes which are useful to disseminate information, messages, and ideas or which make communication possible in the teaching-learning process.

Similarly, with the same context, Bowen, (2007) stressed that there are a number of benefits in using visual aids in teaching literature. These benefits are of paramount importance in maintaining a good momentum of reading interest among students.

The finding is also parallel to the point of view of Zywicka and Gomez, (2008) when they mentioned that providing appropriate materials is the best way to help students in supporting them to face the world. Furthermore, they stressed that one way of doing is by using real objects in real life situations for instructions. Where real life situation are not possible, the alternative is to use representations of real-life situations. These representations are materials, devices and techniques that could help teacher to make realistic approach in teaching. Whether real or substitutes, these representations have a common goal of enhancing learning.

Cognitive Development of Learners among Schools in terms of Study Skills

Study Skills. This refer to the approaches applied to learning and are critical to the success of the respondents in their studies. Shown in the Table 5 are the data on the cognitive development of learners among schools in terms of *study skills*. The Presentation is focused on the highest and the lowest mean ratings obtained: *signifying that reviewing is helpful to overcome the implication of decline or loss of recall of information (4.00)*; and *suggesting that reviewing article investigates the encoding and storage functions of note taking (3.58)*.

This has gained an overall mean rating of 3.82 or high which means that the *study skills* are oftentimes observed. All items in this indicator are with high descriptive rating. Moreover, the finding reveals that cognitive development of learners among schools in terms of *study skills* is the primary option of the teacher for the students to effectively learn and increase recollection of the lesson. However, a factor still to be considered is in reviewing articles about new steps in encoding and storage functions of note taking.

The use of indigenous materials could help science teachers convey the intended message effectively and meaningfully to the learners so that the learners receive, understand, retain and apply the experience gained to reach the overall educational goals.

Table 5. The Cognitive Development of Learners among Selected Schools in terms of Study Skills

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Demonstrating is the process of using other activities in retaining relevant and confusing information.	3.87	High
2	Signifying that reviewing is helpful to overcome the implication of decline or loss of recall of information.	4.00	High
3	Providing materials that lead in the development of useful ways on reviewing.	3.79	High
4	Suggesting that reviewing article investigates the encoding and storage functions of note taking.	3.58	High
5	Believing that working and finishing my task in simple research is a lifetime achievement.	3.88	High
Overall Mean		3.82	High

This is complimentary to the statement of Villarva, (2001) posited that many people used study skills in everyday life in order to learn. Studying is supposed to lead to learning. The knowledge gained from studying depends on the quality of study time. It is not the number of hours spent on studying but on how it is done. Success in study does not depend on the ability and hard work but effective study method.

This finding is parallel to the statement of Luster (2006) who believe that parents influence what a child brings to school and how well a child acquires school related skill throughout the school years such as working with a child on homework and this can influence other behaviors such as study habits that will affect the child's achievement. Children's study habits and the degree of parental involvement in studying seem to show differences in how they learn and how serious they are about learning. Some examples of what can influence children and their scholastic achievement are if their parents' study with them.

This is advocated also by Lee, (2007) who cited that to facilitate comprehension; the reader must know the technique of note taking which include jotting down of main points and organizing them into an outline. Information as a whole through organization of thoughts can easily be understood. When there is full

comprehension, information can long be forgotten because they are stored in a long-term memory for easy recall. This is possible when there are no mental and emotional distractions in remembering.

Cognitive Development of Learners among Schools in terms of Thinking Skills

Thinking skills. This refers to students' mental processes when they seek to make sense of their experiences. Shown in the Table 6 are the data on the *students' thinking skills*. The statements in the indicator are logically presented from the highest to lowest mean rating obtained namely: *understanding that critical thinking needs comprehension to summarize the whole information (4.08)*; *encouraging students to indulge self to develop an independent-type of learning (3.98)*. All items under this indicator garnered mean results with descriptive equivalent of high.

Table 6. Thinking Skills

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Understanding that critical thinking needs comprehension to summarize the whole information.	4.08	High
2	Learning that critical thinking is an approach that would help me in making decisions.	4.01	High
3	Relating to the idea that critical thinking is a structured mechanism that serves as data base in the learning environment.	3.99	High
4	Encouraging students to indulge self to develop an independent-type of learning.	3.98	High
5	Helping students to think a loud and encourage to express their ideas	4.01	High
Overall Mean		4.00	High

The overall mean of **4.00** with the descriptive equivalent of high on cognitive development of learners among schools in terms of *critical* means that the critical thinking skills of the students are relatively evident or oftentimes manifested. It suggests that the critical thinking skills should be developed and deepen in order for the students to absorb the important ideas that are useful to them in facing life challenges. Likewise, critical thinking skill is vital in the learning process. However, students still need to be encouraged to indulge self to develop an independent-type of learning.

This is complimentary to the statement of Carter (2008) who emphasized that to increase reading comprehension, it takes time and effort. To extract the gist of the literature one has to read critically to come up with greater comprehension. Briggs (2008) supports the idea of the latter when he explained that academic writings and scientific studies found in journal articles needs critical analysis of the readers. To understand the substance of the construct the readers must digest the implicit and explicit idea embedded in the composition. He must synthesize his readings to make the information useful.

According to Fothergrill (2006), critical thinking is the process of actively analyzing, evaluating, and synthesizing information gathered from a variety of sources, using a framework designed to lend structure and clarity to the thinking process. As children think, they use their background knowledge, as well as information gathered from other sources, to draw their own conclusions. One of the challenges when teaching critical thinking skills to English language learners (ELLS) is helping them develop adequate background knowledge and adequate vocabulary to support this type of higher order thinking.

Bowell & Kemp (2002) stressed that there is a great deal of latitude in regard to definitions of critical thinking and how those definitions are applied, several commonalities exist. Throughout the literature, critical thinking is defined as an active process which goes beyond basic acquisition and memorization of information and that

it requires the ability to recognize and rationally consider multiple concepts or elements which constitute a body of thought. New information is compared with currently held assumptions and assimilations so that one can make reasonable deductions or devise a plan of action.

Further, Tsui, (2000) emphasized the development of critical thinking skills as positive implications for the immediate learning environment as well. Students who are exposed to classroom environments that foster critical thinking skills begin to see themselves as active contributors to the learning process. Exploring viable solutions to complex problems with peers and constructing knowledge alongside professors and instructors allows students to situate themselves within the learning process thereby encouraging development of higher order cognitive processes and mastery of subject matter.

Cognitive Development of Learners among Schools in terms of Analysis Skills

Analysis Skills. This refers to the abilities of the respondents to visualize, articulate, conceptualize, both complex and uncomplicated problems by making decisions that are sensible given the available information. Shown in Table 7 are the data on the *analysis skills* of the students.

Table 7. Analysis Skills

No.	Statement	Mean ($\bar{x}$)	Descriptive Equivalent
1	Teaching the learner on the relevance of problem solving.	3.67	High
2	Facilitating sense-making and meaningful learning on the part of individual who solve problems and those who use it.	4.07	High
3	Integrating in the lessons the art of using problem solving in the process of learning.	3.89	High
4	Modeling how to use the construct of problem solving.	4.01	High
5	Stimulating the learners the ability to organize new ideas, information and enhancing cognitive skills.	4.07	High
Overall Mean		3.90	High

The presentation is focused on the highest and lowest mean ratings obtained: *stimulating the learners the ability to organize new ideas, information and enhancing cognitive skills (4.07)*; and *teaching the learner on the relevance of problem solving (3.67)*. All items in this indicator yielded a mean rating of 3.90 with a high descriptive equivalent.

This means that the cognitive development of learners among selected schools in terms of *analysis skills* is relatively evident or oftentimes manifested. This finding means that the analytical skills should be properly addressed to effectively achieve the desired outcome. However, teaching the learner on the relevance of problem solving is a factor to be improved.

This statement is collaborated by Rotterdam (2000) that incompetency of teachers may lead to poor performance of the learners. Jaffar (2004) stressed that when students are exposed to group activities, they develop their analysis. Through analysis, the students learn how to interpret data. This is conformance with the statements of Kemp (2002) that in-appropriate method of teaching would lead to poor analysis skills of the students, conversely, teachers utilize student centered strategy would arouse the interest and analysis skills of the students.

Summary on the Cognitive Development of Learners among Schools

Table 8 shows the summary on the cognitive development of learners among schools. As can be gleaned on

the table, the overall mean is 3.87.

The three indicators are presented with their corresponding mean rating namely: *Study habits*, 3.90; *Critical thinking*, 4.00, and *Analysis Skills* with 3.90. All of these indicators are with descriptive equivalent of high.

Table 8. The Summary on the Cognitive Development of Learners among Schools

Indicators	Mean ($\bar{x}$)	Descriptive Equivalent
Study habits	3.82	High
Critical thinking	4.00	High
Analysis Skills	3.90	High
Overall mean	3.87	High

The finding is parallel to the point of Strauss, (2000) who revealed that teachers believe that once content gets through, it must somehow connect up with already-existing knowledge by means of analogies, associations, familiar examples, and so on. This corresponds to an elaborative-processing model. Accordingly, teachers believe they should facilitate connection-making between new and old knowledge. If there is no existing knowledge to get connected to, the new knowledge can get driven into memory through repetition, rehearsal, and practice. This new knowledge now becomes part of already-learned knowledge. Teachers believe that there are changes in the amount and organization of prior knowledge, the prior knowledge gets broadened and generalized, it is at higher levels of abstraction than what was in previous knowledge.

The above finding is also supported by the statement of Johnson and de Haan, (2011) when they reported that the infant's brain has a number of powerful learning mechanisms at its disposal, even prior to birth. The fetus can hear through the amniotic fluid during the third trimester, and memory for the mother's voice is developed while the baby is in the womb. Fetuses can also learn to recognize particular pieces of music. These responses seem to be mediated by the brainstem (Joseph, 2007).

Similarly, Schluessner et al. (2004) describe the cortical activity is also present within the womb. There are functional hemispheric asymmetries in auditory evoked activity. The majority of the brain cells comprising the mature brain form before birth, by the seventh month of gestation. This means that the environment within the womb can affect later cognition. For example, certain poisons have irreversible effects on brain development.

Affective Development of Learners among Schools in terms of Self Awareness

Self-awareness. This refers to the conscious knowledge of one's own character, feelings and motives. Presented in Table 9 are the data on *self-awareness*. The respondents in this indicator yielded the following ratings: *believes that self – understanding affects judgment and decision* obtained a mean rating of **(4.06)** as the highest, and *maintains alertness at times of extreme situations*, **(3.99)** as the lowest among the perceived items.

This has gained an overall mean of 4.02 with the descriptive equivalent of high and interpreted as oftentimes observed. This further suggests that the respondents believe that their learners in school somehow are highly aware of their emotional intelligence and also believe that self – understanding affects judgment and decision.

Table 9. The Affective Development of Learners among Selected Schools in terms of Self-Awareness.

No.	Statements	Mean ($\bar{x}$)	Descriptive Equivalent
1	Knowing himself/herself and is sensitive to other's feelings.	4.03	High
2	Determining self-limitations in performing his/her duties and responsibilities	4.02	High

3	Maintaining alertness at times of extreme situations.	3.99	High
4	Recognizing the need to monitor the weak and strong points as keystone of emotional intelligence.	4.01	High
5	Believing that self-understanding affects judgment and decision.	4.06	High
	Overall Mean	4.02	High

The emotional quotient of school heads in terms of self-awareness is oftentimes observed. This means that the teacher respondents believe that their learners are practicing self-consciousness at work. However, alertness at times of extreme situations is a factor that needs enhancement.

The finding conforms with the statement of Salovey and Sluyter (2001) who said that social and emotional learning (SEL) involves the processes through which children and adults acquire and effectively apply the knowledge, attitudes and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

In addition, this finding supports the statement of Carnicer (2011) who stated that emotional competencies are the ability of understanding and managing one's emotions and learning. This impact the choices they made, the relationships they have and their outlook in life. It refers to the acquisition of the understandings and specific skills that are at the heart of a child's academic, personal, social and civic development. Socio-emotional learning is critical not only for success in school, but also in life. SEL enables individuals to recognize and manage emotions, understand their personal values, develop caring and concern for others, make responsible decisions, establish and maintain positive relationships and handle challenging situations effectively.

This is supported by Rendon, (2011) who said that academic and social integration is a key for students to make connections with others. This was supported by Jalomo (2000) who found that positive aspects of social behavior in school success were making learning interesting, ability to acquire relevant information, making friends and meeting new people.

Affective Development of Learners among Schools in terms of Self- Regulation

Self-regulation. This refers to the ability of the learners to independently perform a task and without any intervention from external bodies. Table 10 conveys the learners' *self-regulation skills*. This has gained an overall mean of 3.94 with the descriptive equivalent of high and interpreted as oftentimes observed. Teacher respondents rated the following statements with individual scores: behavior of their students demonstrates *or adapts goal-oriented cognitions and self-regulatory behaviors (4.01)*.

This simply means that respondents agreed that their students could smoothly handle responsibilities, tasks, commitments, and careful in their work while *showing conscientiousness in pursuing his/her learning objectives in life (3.78)* and is the lowest among the items.

Table 10. Self- Regulation

No.	Statements	Mean ($\bar{x}$)	Descriptive Equivalent
1	Adapting goal-oriented cognitions and self-regulatory behaviors	4.01	High
2	Promoting effective self-regulated learning	3.96	High
3	Handling emotion to facilitate individual task on hand	4.00	High

4	Showing conscientiousness in pursuing his/her learning objectives in life	3.78	High
5	Delaying personal gratification to pursue learning goals in the class	3.93	High
	Overall Mean	3.94	High

This also means that their learners are strong in this behavior and effective in solving problems. However, learners still need to be conscientious in pursuing his/her learning objectives in life.

The result is parallel to the study of Morrison (2007) which stated that managing one's emotion is very important in the process of fulfilling own task to succeed. Handling feelings are appropriate abilities that build on self-awareness. Panting anxiety, gloom, or irritability and the consequence of failure at these basic emotional skills may lead to the unsuccessful career path. People who are poor in this ability are constantly battling the feeling of distress while those who excel in it can bounce back far more quickly from life's setback and upsets.

This is supported by Banzon (2009) who cited that remaining calm under stress or during crises which is an obvious aspect of self-management. Losing control during the tough times is at best confusing to employees and, at worse, can make them fearful and anxious.

Affective Development of Learners among Schools in terms of being Self-Motivated

Self-motivated. This refers to the ability of the learners to do or achieve his academic goals because of their own enthusiasm and interests without needing pressures from others. Shown in Table 11 are the data on *the* affective development of learners among selected schools in terms of being *self-motivated*. The respondents in this indicator yielded the following ratings: item 3, *feels needed and valued in supporting family decision* (**4.04**) as the highest; and item 5, *Motivates oneself to study in order to gain rewards* (**3.86**) as the lowest among the items.

Table 11. Self-Motivated

No	Statements	Mean ($\bar{x}$)	Descriptive Equivalent
1	Feeling the sense of fulfillment in doing school assignment and school task	3.88	High
2	Emphasizing that the school assignment is part of future development	4.02	High
3	Feeling needed and valued in supporting family decision	4.04	High
4	Working home chores to gain attention from the family	3.89	High
5	Motivating oneself to study in order to gain rewards	3.86	High
	Overall Mean	3.94	High

It obtained a mean of **3.94** with the descriptive equivalent of high. It means that the affective development of learners in terms of Self-motivation is oftentimes observed. This further suggests that the teacher agreed that their learner is self-empowered to perform home and school task. The teacher believes that their students have individually and naturally possessed this intelligence to motivate oneself. However, learners still need to motivate oneself to study to reap lifetime rewards.

This finding is supported by Elliott and Higgins (2004) who averred that children interaction with their family supports the students' emotional and social behavior, likewise, family support has the greater role in the child's success. Elliott and Higgins (2004) believed that the primary source of human emotional experience is the extended family unit.

This statement is also supported by Maltz (2001) who said that family relations and family attitudes and orientations are the main components of the environment. Excessive concern for family is apparent in the use of one's office and power as a means of promoting interests of the family. This is supported by Matthews (2004) as cited by Coquilla, (2012) who mentioned that socio-emotional competence is a social process that takes place in a social setting, is something that is never really achieved, and has to be seen in conjunction with others. This indicates that the key components of emotional literacy, which is a continuous process includes dialogue, acceptance of ambiguity and the ability to reflect and make judgments and are made on a person's individual-in-group socio-emotional literacy.

Summary on the Affective Development of Learners among Schools

Table 12 shows the summary on the affective development of learners among schools. The results are discussed in the following manner: *Self-Awareness (4.02)*; *Self-Regulation (3.94)*; *Self-motivation (3.94)* and *Social awareness (3.74)*.

Collectively, the overall mean of 3.96 with a descriptive equivalent of High means that the emotional quotient of the learners is oftentimes observed. Further, it revealed that grade six pupils are showing better socio-emotional learning that made them self-aware, self-managed, and self-regulated. Moreover, the learners are emotionally active in the indicators *namely self-awareness, self-regulation, self-motivation and social awareness*.

Table 12. The Summary on the Affective Development of Learners among Schools

Indicators	Mean ($\bar{x}$)	Descriptive Equivalent
Self-Awareness	4.02	High
Self-Regulation	3.94	High
Self-Motivation	3.94	High
Overall mean	3.96	High

This was supported by Langdon as cited by Elias, Zins, Weissberg, Frey, Greenberg, Haynes, Kessle, Schwab-Stone and Shrive (2012) who stressed that raising knowledgeable, responsible, and caring children is recognized nearly by everyone. Few realize, however, that each element of this challenge can be enhanced by thoughtful, sustained, and systematic attention to children's socio-emotional learning.

Moreover, finding is congruent with the statement of Shriver and Weissberg, (2006) who stressed that promoting social and emotional development in children is the missing piece in efforts to reach the array of goals associated with improving schooling. There is a rising tide of understanding among educators that children's SEL can and should be promoted in schools. Although school personnel see the importance of programs to enhance students' social, emotional, and physical well-being, they also regard prevention campaigns with skepticism and frustration, because most have been introduced as disjointed fads, or a series of wars against one problem or another. Although well intentioned, these efforts have achieved limited success due to a lack of coordinated strategy.

The Relationship Between Dexterous Support Materials and Cognitive Development of Learners Among Schools

Table 13 presents the relationship between dexterous support materials and cognitive development of learners among schools. The computation of the dexterous support material and cognitive development of learners had resulted to an r-value of 0.72. The result indicates high degree of relationship or substantial relationship. The p-value of 0.00 which is lesser than 0.05 at level of significance also suggests that the null hypothesis is rejected.

It is clear that in this study, dexterous support materials and cognitive development of learners among schools have significant relationship. Meaning, the dexterous support materials is related to the cognitive development of learners. The higher the dexterous support materials, the higher the cognitive development of learners.

Table 13. The Relationship Between Dexterous Support Materials and Cognitive Development of Learners Among Schools

Variables		r-values	Degree of Correlation	P value	Interpretation	Decision
Dexterous Support Materials (x)	Cognitive Development of Learners (Y)	0.72	High	0.00	Significant	Rejected

Note: Significance when $P < 0.05$

This is related to the result of the study of Turner and Patrick, (2004) that student learning should begin with the child's natural thinking or cognitive ability where they are trained to compose their own strategies for problems that they are unfamiliar with. This was a component of instruction in this research study. Students were, at times, given an unfamiliar or new problem and asked to find a way to solve it.

This finding is in conformance with Peterson and Hughs (2011) and Picklo and Christenson (2005). They point out the common assumption is that students who are dropped just need more time to develop and learn. This assumption ignores many other factors that interfere with successful learning at school. It also contributes to situations where students just encounter the same learning experiences from the previous year and do not receive other supportive interventions.

Relationship between Dexterous Support Materials and Affective Development of Learners Among Schools

Shown in table 14 are the data on the relationship between the dexterous support materials and affective development of learners. The computation of the dexterous support material and affective development of the learners had resulted to an r-value of 0.26 which is also interpreted as significant. Further, this denotes negligible relationship or small relationship. The p-value of 0.00 which is lesser than 0.05 at level of significance also suggests that the null hypothesis is rejected. This means that dexterous support material is also a contributory factor in the affective development of the learners.

Table 14. Relationship between Dexterous Support Materials and Affective Development of Learners among Schools

Variables		r-values	Degree of Correlation	P value	Interpretation	Decision
Dexterous Support Materials (x)	Affective Development of Learners (Y)	0.26	Low	0.00	Significant	Rejected

In this study dexterous support materials are directly related to affective development however, there some cases in which affective learning take place. In affective domain, the most important skills that should be acquired by the learners for empathy is found. The finding is similar to the study of Brown (2000) who said child development includes the emotional development which is very important to children to get a better life. Without the part of that development, the student or child cannot gain knowledge, movement, communication and social interaction effectively.

The above result is also supported by Banzon (2009) stressed that competency includes two of the most important skills that mediators acquire for empathy: active listening and reading non-verbal cues. The hope is

that feeling empathy for the parties will be a guide for parties to feel empathy for each other.

The findings corroborate with the study of Swearer et al., (2008) who pointed out that building on these findings and other social emotional learning research, the following strategies can help schools apply social emotional learning framework to bullying prevention. Creating opportunities for students to interact with one another in cooperative, positive, and inclusive ways can help generate cohesion and compassion among students and encourage them to apply the SEL skills they have been taught.

The Influence of Dexterous Support Materials of Learners to Cognitive and Affective Development of Learners

Table 15 shows the result of significant influence of Dexterous Support Materials to cognitive and affective development of learners. Through the use of Analysis of Linear Regressions, the f ratio is equal to 4.204 with the probability value of 0.00 which is greater than 0.05 at level of significance, this suggests that the null hypothesis is rejected. Meaning, the dexterous support materials significantly influence the cognitive and affective development of learners.

This dexterous support materials consequently predict the cognitive and affective development of the students. So, the students who are exposed in dexterous support materials are expected to perform the school tasks well.

Table 15. The Significant Influence of Dexterous Support Materials of Learners to Cognitive and Affective Development of Learners

Model	Sum of Squares	Degrees of Freedom	Mean Square	F	P value	Finding	Decision
Regression	98.700	1	98.700				
Residual	1103.462	47	23.47791489	4.204	0.000	Significant Ho	Reject Ho
Total	1,202.262	48					

In the same vein, the finding conforms with the statement of Low (2000) who pronounced that cognitive strategies of teachers significantly contribute to the classroom discipline of students. The way teachers manage class activities determine how students behave in various situations.

Further, Potter (2005) affirmed the results by stressing that experience and expression are unique to each teacher and student. No one else thinks, expresses feelings, chooses behaviors, and acts in the same way. Emotional intelligence is defined as a confluence of developed abilities to: know and value self; build and maintain a variety of strong, productive, and healthy relationships; get along and work well with others in achieving positive results; and effectively deal with the pressures and demands of daily life and work.

CONCLUSIONS AND RECOMMENDATIONS

Presented in this chapter are the conclusions and recommendations of the study. The focal point of this study was to determine the relationship between dexterous support materials, cognitive development and affective development of the learners among selected schools of San Roque District, Davao City during the school year 2016-2017.

Conclusions

Based on the overall findings of this study, the following conclusions were drawn:

The level of dexterous support materials in grade six curriculum is generally evident to a great extent in terms of printed materials, audio-video materials and visual aids. However, audio video materials obtained the lowest mean among the three indicators of dexterous materials.

The level of cognitive development of learners according to the perceptions of the teachers in terms of study skills, critical thinking skills, and analytical skills among the schools is highly evident. However, the study habits garnered the lowest mean among the three indicators of the student's cognitive development.

The level of affective development of learners according to the perceptions of the teachers in terms of self-awareness, self-regulation and self-motivation is also perceived highly evident. However, self-regulation and self-awareness having the same mean obtained the lowest mean on the indicators of student's affective development.

Dexterous support materials and cognitive and affective development of learners have significant relationships. It implies that dexterous support materials are related to students' cognitive and affective development.

The dexterous support materials have a significant influence to the cognitive and affective development of learners. It suggests that the learner support materials could affect and has a bearing to student's cognitive and affective development.

Recommendations

In the light of the findings and conclusions, the following recommendations are offered for consideration:

The Department of Education may provide adequate materials for learners or a guide for the selection of dexterous support materials that meet required standards like books and daily lesson logs and may encourage other agencies to support the teachers and educators in providing useful teaching instructional materials for them. The Department also should provide trainings for empowering and equipping teachers to create and innovate different useful instructional materials that are relevant to their lessons. In case these instructional materials are not available, government and stakeholders should assist schools financially so that these teaching aids, and other instructional materials may be purchased. In situations where ready-made instructional materials are insufficient, these should be supplemented with improvised instructional materials. Specifically, support on audio-video educational materials may be intensified

Teacher should continue to utilize dexterous support materials such as printed materials, audio video and visuals aids since these are proven to be very vital in the cognitive and affective development of the learners.

Likewise, the teachers must create and implement effective interventions that can encourage students to perform academically and to sustain their interest in learning necessary for their cognitive and affective development.

School Administrators may prioritize and purchase meaningful educational learning materials and other instructional materials as a support to the teachers and students. They should allocate a greater portion for the learner's materials in the utilization of the School's Maintenance and Other Operating Expenses (MOOE).

Future researchers may conduct the same study in wider scope, different research design and method, different setting and participants. Specifically, future research should consider mixed-method approaches, combining quantitative data with qualitative insights from students and teachers to better understand how instructional materials influence learning experiences. However, they are requested to cite the findings of this study. Dissemination of the findings of the study is suggested to motivate schools and share lessons learned.

Finally, similar studies on dexterous support materials and the total personality development of the students may be conducted to enrich the literature on the topics under study.

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