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Teachers' perspectives on the integration of information and communication technologies (ICT) in school counseling

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ABSTRACT

This qualitative study presents the different perspectives of teacher-participants from selected areas in Luzon, Philippines on the use and application of ICT in guidance counseling and the school counselor's advocacy role. Certain property of story-telling or conversation (*kwentuhan* or *pakikipagkwentuhan*) was employed. This ethnographic technique is a naturally occurring phenomenon/process of sharing and telling stories among the individuals to figure out or to make sense about their world and their experiences. A snowball sampling technique was used that required the participants to recommend others who are into ICT integration. The open-ended format or interview schedule was utilized to investigate the different (a) uses of ICT [e.g. internet, e-mail], (b) problems/issues/gaps on the use and application of ICT or computer technology, and (c) innovative ways in using/applying ICT in school counseling.

Results indicated that the views of the teacher-participants on ICT use generated the themes on (1) storing, encoding and preparing of materials/documents, (2) retrieving, distributing and utilizing data/information related to school counseling, and (3) other uses for entertainment, leisure and recreational activities. As to the potential uses of ICT, the subjects generated various uses as what they practice and what they have learned from their graduate courses on technology in education and knowledge management in education. The issues and problems mostly relate to the economic aspects, costs, administrators' attitudes towards the use of ICT, quality of information and on the issue of commercialism. Innovative programs presented dealt on the individual needs of the pupils and on the career services, but not on the ways to improve the professional capabilities of the guidance counselor.

It was recommended that continuous re-training and establishment of a well-defined capacity building programs for guidance counselors focusing on individual skills of the counselors as to the other uses and application of ICT should be undertaken. On future research, accountability of administrators on ICT integration in school counseling can be carried out as well as more empirical studies on the different perspectives of administrators on ICT integration were noted. Furthermore, inquiries related to assessment/evaluation on reliability of information can be done by looking into the research outputs of students and faculty with the online materials cited on the bibliography. School counselors are to be guided through school-based in-service training and education ministry or government - sponsored programs on capacity building by putting emphases on the benefits of ICT use as well as case presentations of the various experiences of counselors in the Philippines about ICT integration in the implementation of the school guidance programs.

Keywords: ICT, guidance and counseling, ICT and education, teachers, Philippines

INTRODUCTION

The 1987 Philippine Constitution clearly states that Science and Technology (S &T) are essential for national development and progress. The State shall give priority to research and development, invention, innovation, and their utilization; and to S & T education, training, and services. It shall support indigenous, appropriate, and self-reliant, scientific and technological capabilities, and their application to the country's productive systems and national life (Section 10 of Article IV). Moreover, Section 17 of Article XIV from the 1987 Philippine Constitution mandates the State to give priority to education, S&T, Arts, Culture and Sports with the goals of fostering patriotism and nationalism, accelerating social progress, and promoting total human liberation and development (de Leon, 2002).

In realizing the aforementioned statutes and national policies, the Philippine Department of Education (DepEd) stresses that Information and Communication Technologies (ICT) must be an integral part of all learning areas, both hardware and software. Hence, according to the education department of the country, e-learning and the use and application of ICT must be employed in all subjects because this is now the most viable intervention in educational reform.

One of the areas in the various services being provided by the school is guidance services or the school counseling services. Through the implementation of the school guidance program various goals and objectives of developing and honing young children to become good and productive citizens of the country could be attained. Thus, our qualitative study on the perspectives of teachers on the use and application of ICT in guidance and counseling was carried out in order to outline the various ways in which the school can be cognizant to the statutes and policies of the State as to the benefits of ICT. Through the efficient and effective use of ICT, school counselors are in a better position to provide administrators, teachers, parents, and students the appropriate timely information needed to help all students to set ambitious goals and to realize their goals. The benefits of using ICT in school counseling are so great that there is no need for more justification as to why there is an urgent need to undertake our study on integrating ICT in school counseling for the basic education. Several scientists of the National Academy of Science and Technology (NAST) of the Philippines have attested the significance of ICT in the development of the country (NAST Annual Meeting of 2002; Ocampo, 2002).

The Human Development Report of the United Nations Development Program or UNDP (2001) states, "ICT is a pervasive input to almost all human activities. It breaks barriers to human development in at least three ways: by breaking barriers to knowledge, by breaking barriers to participation and by breaking barriers to economic opportunity." Even in the daily lives of teachers and guidance counselors, the rapid advances in ICT can create new things such as storing information, retrieving information, handling, distributing and utilizing information. The advancement of ICT according to Ocampo (2002) is intertwined with globalization and together creates a new paradigm called the network age.

The above scenario tends to create the same ripples in the area of school counseling, and more specifically on the job of the guidance counselor in trying to perform its role in the changing environments of the schools today. There is no doubt that ICT is becoming a pivotal tool for advancing Philippine S & T (Curley, 2002), engineering (Ablaza, 2002), the academe (Vea, 2002), in governance (Gueco et al., 2002, see related and parallel works of Liu, 2008 and Chunxiang, 2008) and in re-imaging Philippine education (Rapatan & Bernardo, 2002).

In the Philippines and other countries, school counselors are increasingly recognizing the benefits of using computer technology to increase their efficiency, to assist in the supervision of counseling interns, to aid in delivering developmental guidance lessons, and to facilitate individual counseling areas such as bibliotherapy (Offer & Watts, 2000). Adoption of computer technology

into developmental guidance programs is moving toward, however, the use of technology in the school counselor's role of social advocate has been largely unexplored and underutilized. This is according to Lee & Walz (cited by Offer & Sampson, 1999) who tried to examine how school counselors can use computer technology to fully participate in eradicating institutional and environmental barriers which impede students' academic success.

Martin (1998) describes the school counselor of the future as one who will be prepared in a preservice program to possess pro-active, socially critical behavior and skills needed to strategically plan to challenge the status quo in systems where inequities impede students' academic success. Moreover, Offer & Watts (2000) presents the current use of ICT in relation to relevant forms of personal information, advice, and guidance leading to personal development for young people aged 13 to 19. It also reports that 150 items of software relevant to career education and quidance (CEG) are currently available. There are hundred of websites that offer help and advice. and connections are delivered through ICT by having a website, and by sending a CD-ROM version. Different issues are discussed including but not limited to access, involving young people, and confidentiality. This paper published in the UK identifies the measures needed to assure accessibility, impartiality, confidentiality, and quality of technically-mediated services. In a much earlier paper, Offer & Watts (1997) reviewed the state of the art of application of the Internet in career guidance and counseling. It describes how the Internet works and the main services offered, such as e-mails, electronic news groups, etc. Several issues are also presented in their review that is related to the internet as to the equity, which is also a very important issue in the Philippine schools. This issue is more popularly referred to as the "digital divide".

Few studies are available for the review of ICT integration in school counseling. In exploring the internet, some studies are somehow related to the problem pursued in the present study. In an earlier paper, Offer & Samson (1999) examine problems relating to standards of quality in computer-based guidance, including the internet. It stresses the need for the integration of many resources into a supportive context. It gives importance to the value of preliminary diagnosis of needs, together with some principles of design in the content and use of computer-based guidance and relevant websites. In the Philippines, several papers tackle on various topics related to ICT use in education, e-learning and the integration of ICT in the classroom. These studies are presented in the succeeding paragraphs. Tinio (2003) emphasizes that the program on e-curricula for high schools of FIT-ED, aimed to develop interactive, multimedia courseware for Mathematics, Science, Filipino and English for use in the public secondary schools. Moreover, Tan (2004) noted that e-learning fosters interaction among students and instructors which stimulates understanding and the recall of information. An issue on the integration of ICT is about the 21st century skills according to Tinio (2003) which includes digital-age literacy consisting of (a) functional, (b) scientific, (c) technological, (d) information literacy. These are the skills needed by guidance counselors in order to fully integrate ICT in the school counseling program of the schools in the country.

Teehankee (2003) and de Leon & Genova (2003) stress that integrating e-learning to the T & L that ICT can be integrated by embedding the use of the web in different levels for all classes. In this case, the teacher and the guidance counselor must choose his/her way in integrating ICT to T & L or the over-all duties and responsibilities of the counselor. In Canada, the Manitoba University (1997) model known as the Interdisciplinary Middle Years Multimedia (IMYM) was a product of several researches. This model is a curriculum - based model, interdisciplinary, action research designed to demonstrate how to integrate technology in the classroom. This model supports teachers in integrating ICT tools in middle-year classrooms, using best practice to add value to teaching, learning, and assessing.

In another aspect of ICT integration in education, the papers of Masagca et al. (2004) and Masagca (2002) report that the accountability of the school administration in integrating ICT in the

school curriculum must be greatly considered so that effectiveness and efficiency could be ensured. It is viewed that every action or any effect rendered will be the concern of the administrator. Likewise, it is worthy to note that Hopkins (1997) discusses on the support of administrators in proper planning and upgrading of telecommunications [ICT] infrastructure in schools that can support state-of-the-art data, voice, and video applications will help teachers in integrating electronic tools in T & L.

Furthermore, Bradshaw (1995) observes that over one-third of high school students in Canada are dropping out from schools. However, this researcher believes that the advent of multimedia computer technology has increased the potential of career interventions, particularly at-risk youth. A program known as Knowledge for Youth About Careers (KYAC) is one of the interventions that capitalize on the multimedia computer technology by trying to assist the Canadian government in addressing school dropouts. This program is anchored on the attribution theory and the selfefficacy theory. Its video scenes model career development skills like information interviewing. networking, and other strategies. Students who are with KYAC are allowed to select one or two main characters and then follow the character as he or she ages from 17 to 28 years old by touching their chose character's face on the computer screen. The interactive and computer mediated situations will allow the students to look for better ways to solve problem with learning math, reading, and other skills. During the interaction, students are allowed to select from the thought balloons that will appear on the screen which are said to be related to the characters depicted on the screen earlier. Ultimately, students are able to find out good reasons to finish high school among other findings. The aforementioned intervention is heavily based on multimedia of computer technology.

Theoretical Framework

Although there are some works on the problem of ICT integration in the basic education and whether elementary or secondary schools in the Philippines are now ready to use and apply ICT in school guidance, there is no specific conceptual, theoretical, or empirical work on the efficiency and effectiveness of ICT in the school counselor's advocacy role in the Philippines. Similar with the study of Blase & Blase (2002), this particular study used Symbolic Interactionism as a theoretical framework. This perspective is anchored on the three major premises, namely: (a) individuals act toward things and people on the basis of the meanings that things have for them; (b) the meaning of such things are derived from, or arise out of the social interaction that individuals have with one another, and (c) these meanings are handled in, modified through, an interpretive process used by individuals to deal with the things and other people they encounter (Blumer, 1969). The symbolic interactionism perspective views the individual as a social product who is influenced by others but also maintains distance from other and is able to initiate individual action (Blumer, 1969 and Mead, 1934). In contrast to some qualitative applications (Blase & Blasé 2002), the notion of Blumer-Mead (1969; 1934) focuses on the examination of human subjectivity. Briefly, their notion examines perceptions and meanings that people construct in their social settings. Several authors have used this view of Blumer-Mead such as the inquiry of Bogdan & Biklen (1982), Morse (1991), Schwandt (1994), Taylor & Bogdan (1998) and others. Our study was also supported by the perspective of Meltzer et al. (1975) on symbolic interaction employed on "what goes on inside the heads of humans" (p.55).

Congruent with the Blumer-Mead (1969; 1934) notion of symbolic interaction, the present study as also noted in the work of Blase & Blase (2002) employed an open-ended theoretical perspective designed to focus on the meanings teachers constructed on 1) the various uses of ICT in the day-to-day work of the guidance counselor, 2) issues related to the use of ICT in guidance and counseling and in developing guidance programs, and 3) what innovative programs in school guidance can be proposed for the efficient and effective use and application of ICT.

METHODOLOGY

Research Design

This study recognized that the values and educational institutions of any given society were viewed to have an internal logic. It is a legitimate notion amongst us that the integration of ICT in school counseling could be studied well from inside by the immersion of the researchers. Our study applied the gualitative- ethnographic or fieldwork research, which aimed to determine the perspectives of teacher participants on the use and application of ICT in guidance and counseling and the school counselor's advocacy role or the day-to-day activities in the school particularly in the implementation of the guidance program. We were practically concerned with the interconnectedness of the life of the guidance counselor in the advent of ICT revolution in the Philippines by having fieldwork or community study of a group of professionals in school counseling. Certain property of story-telling or conversation (kwentuhan or pakikipagkwentuhan) was employed in the present study. This ethnographic technique is a naturally occurring phenomenon or process of sharing and telling stories among individuals to figure out or to make sense about their world and their experiences. According to Javier (2004) kwentuhan (or storytelling in the Filipino language) is an occasion for exchange of information, ideas, insights and individual experiences. This is basically a lively and always a happy group discussion in which the participants are actively involved (such as in the classroom, over meals and while resting in the workplace).

Participants and Sampling

Participants of the study are teachers of public and private schools who are currently enrolled in the master's program of colleges and universities. These participants have experience as elementary grade teachers, as guidance counselors, and as teacher in-charge/principals. Clearly, the study uses a qualitative approach by hiding the actual identities of the participants. To actually conduct our study in numerous schools, we would normally be required to identify the people concerned. However, we assumed that the other schools did not allow us to conduct the study, so that identities are not being considered here.

The study employed a snowball sampling technique (Blase & Blase, 2002) that requires others to recommend teachers who they believe can have experience about the integration of information technology, ICT or computer technology in teaching and counseling. We tried to contact by telephoning school heads and faculty members from different colleges and universities for referrals in order to help us select the teacher–participants. Initially, the purpose of our study was explained to those whom we contacted and discussed with them about participation in our study by fieldwork.

Several authors (Glaser, 1978; Strauss & Corbin, 1998; Taylor & Bogdan, 1998) claim that snowball sampling techniques are useful in grounded theory research that attempts to draw samples from a variety of settings. It is known that this technique maximizes variation in the database to generate a larger number of categories that describe the phenomenon under study.

Instruments of the Study and Data Gathering Procedure

After identifying the teacher-participants, some were approached personally during their free time of the usual Saturday sessions in the graduate schools. We then contacted (by landline phones or mobile cellular phones) those who had expressed interest to participate in this qualitative research. We explained our study, addressed questions and concerns, discussed our backgrounds and generally got to know the teacher. Teachers in the elementary grades who lack experience as guidance counselors were excluded from this study.

In the absence of policies and procedures on research dealing with human subjects (in our college) that may deal with controversial or conflicting views, we decided to just remove, erase and completely destroy the audiotapes and other records.

In total, 20 teachers participated in our study over a 3 – month period. The sample consisted of male (n=4) and female (n=16) teachers from rural (n=4), sub-urban (n=5) from urban (n=11) school locations. The average age of teachers was 28; the average number of years in teaching was 9. Degrees earned by these teachers included AB/BS (n=14), MEd/MA/MS (n=4) and EdD/PhD (n=2).

We used an open-ended format to investigate the different questions and developed an interview guide rather than pre-determined schedule consisting of the threes topics: (a) uses of ICT [e.g. internet, e-mail], (b) problems/issues/gaps on the use and application of ICT or computer technology, and (c) innovative ways in using/applying ICT in school guidance.

The succeeding sentences are modifications from the work of Blase & Blase (2002). Interviewbased protocols were essential in the present study. During the course of the study, some interviewees/participants present idealized versions of themselves and their situations as guidance counselors and graduate students in school guidance/school counseling. In order to address this variation, the inductive-generative approach was employed for reliability and analysis. In regard to trustworthiness, reliability and consistency in the responses of the participants, we pursued multiple interviews with each teacher-participant and tried to detect certain inconsistencies in the data provided. We also compared available information from their colleagues about official duties and responsibilities as guidance counselor and checked the availability of internet connectivity and other ICT resources of the schools concerned. In the analysis, the inductive-generative approach was applied by emphasizing on the meanings and notions from the idealized responses and then compared to the existing literature about ICT use and application in other fields. There are possible similarities in the concepts generated by other inguiries related to e – learning and ICT use such as that of Javier (2006) and Liu (2008), but we tried to be vigilant about the inappropriate inclusion of the responses. We attempted to carry – out a line-by-line analysis and discuss amongst the researchers the connections of the said specific data set to the over-all or entire data set. In this way, we were able to resolve certain conflicting or contradictory views.

RESULTS AND DISCUSSION

Views on the current uses and application of ICT in the work of a guidance counselor.

In essence we tried to organize the various uses of ICT from our database according to the dialogues, discussion and interviews of the teacher-participants.

Table 1 presents the different uses and application of ICT as viewed by the teacher-participants. Three themes were generated on the uses and application of ICT in school counseling, namely: (a) storing, encoding and preparing of materials/documents related to school counseling, (b) retrieving, distributing and utilizing data/information related to school counseling, and (c) other uses on entertainment, leisure and recreational activities. As can be gleaned from the table, majority of the uses given by the participants are mostly focused on encoding or typing the materials needed in counseling work of the teachers. There are uses which are seemingly of lesser value in the educational setting for the teaching and learning and policy formulation. Although, the said uses are too simple, we tried to consider here how these teacher-participants view about ICTs value or importance in their lives.

Contrastingly, the teacher-participants appear to have more knowledge about the potential uses of ICT in the future. Perhaps these participants could have learned much from their graduate classes in Technology in Education or Knowledge-based Management in Education classes.

Table 1: Uses and Application of ICT in School Counseling

Storing, encoding and preparing materials/documents related to school counseling
Typing papers, letters, research work, reports, complaints Encoding materials being asked by the superiors Writing letters to the principal, e.g. endorsing a certain complaint Answering letters of parents, barangay officials and teachers Sending e-mails to teachers, parents and students Preparing referral slips and complaints Computing and determining the over-all performance of students Informing colleagues through the internet groups Preparing announcements or brochures for the peer counseling
Retrieving, distributing and utilizing data/information related to school counseling
Looking for data about students information Finding telephone numbers, addresses and whereabouts of parents Transferring files to other teachers Determining the address of the parents work through the web
Other uses on entertainment, leisure and recreational activities
Dealing with birthdays of students Designing cards, invitations for school activities Playing on the computer for relaxation Video-music relaxation Getting places to visit through the internet

Aside from the fact that access to information is the most important use and application in their schools, they were saying that in due time ICT use and application in school counseling and school guidance will deal with most advance uses such as their direct access to computerassisted guidance systems and one-on-one or individual guidance at a distance through e-mails and chatting. These are found in some readings which were included in their syllabus such as those materials found in peer – reviewed professional journals.

According to some teacher-participants (with doctorate degrees), the aforementioned uses are now common to them. The other uses and application can be seen in Table 2. This table presents the over-all answers of the teacher respondents as to the other or potential uses and application of ICT in school counseling or school guidance.

Table 2: Potential uses of ICT in school guidance and counseling

Getting information for student records through the LAN and the portal Direct access to computer-assisted guidance systems on the web Individual guidance at a distance for pupils with problems Group working through e-mails and newsgroups for colleagues on the net Community extension programs at a distance with multimedia The appointment of teachers and staff by electronic mails and videos School campaign, school marketing and orientation with videos Associations, groupings, networking and support for counselors Career guidance using interactive multimedia technology

The aforementioned teachers who stressed that student records can be accessed through the LAN (local area network) will require a lot of infrastructure support. A LAN which is being referred to by the teacher-participants (with doctorate degrees) refers to a group of personal computers and other devices, such as printers or serves, that are located in a relatively limited area, such as an office, and can communicate and share information with each other. According to them, this is quite costly on the part of elementary or secondary school located in the rural areas.

Whether we like it or not... our schools today must be equipped with the internet or with a LAN... some principals are so worried about the cost... but if our schools will not try to consider this by having access to the net, then our schools in the country will remain isolated... (A teacher-participant with a PhD degree)

Similar with the Canadian program, KYAC (Bradshaw, 1995), the Philippines can have a comparable project to be carried out in cooperation with the numerous internet cafes or shops that mushroom near our schools. There are a lot of pupils and students in the country today who are said to be confused or in the state of dilemma on what careers to pursue. The said teacher-participant somehow would like to stress that as we try to tolerate our youngsters to enjoy computer games, then it would be worthwhile to at least integrate career guidance or orientation in their gaming sessions. This entry point is an important component of the intervention proposed here.

Different issues, problems and gaps as to the use and application of ICT in guidance counseling, particularly on the development and implementation of the school guidance program in the elementary and secondary school

As revealed by the teacher-respondents, the various issues and problems are shown in Table 3. The problem of inequality to Internet access was very common among the teacher-participants. Although most of them have readily available internet access, they were saying that there are a lot of teachers or guidance counselors in their schools who are still problematic about access. As an economic-related problem, it appears that the school administrators and government officials of the education departmentmust seriously take note of this concern. Other support infrastructures such as electricity, telecommunication services and support shops that focus on vending or sale of gadgets are also included.

The lack of IT skills is a common problem which can be addressed by having the personal desire to develop oneself. The school counselor as a professional must continuously upgrade himself/herself with the computer skills. Schools, colleges and universities in the Philippines have

now embarked on developing the capabilities of the teachers in relation to IT or computer technology. The advent of online grading system and web-based or internet-driven programs in most colleges and universities necessitates the public school teachers to keep up with the fast trends in education. The works of Masagca et al. (2002; 2004) punctuate on the lack of the technological skills of teachers in e-learning programs.

The education department of the country has just recently drafted the five-year Information Communication and Technology (ICT4E) strategic plan that seeks to link learners to global resources. According to the Philippine education department's Secretary Jesli Lapus, it would be expected that all public elementary schools in the country would have computer laboratories by 2009. On Philippine legislation, Senate Bill 2402 would require every commercial mobile service to contribute portions of its net revenue earnings from local text messages to the education department of the country.

We find the problem on commercialism to be more advanced. It seems to us that the teacherparticipant has been involved on advocacy programs that look into the context of "*commercialism* and 21st century imperialism". It was expected that an academic/teacher placed premium on this problem, which we believe to be so pervasive in the circles of the academic world. The word "commercialism" according to the participant pertains to the usual output during 'surfing' sessions wherein the materials generated in the search engine give so much display of sites that require membership, asking one to type the credit card number, enroll or join in the group by paying a certain fee to be able to access the information needed.

Table 3: Issues, problems or gaps that relate to the use and application of ICT in school counseling

Digital Divide: A problem that not all guidance counselors of the Philippines will have the equitable access to the internet

Lack of IT Skills of Teachers/School Counselors: Undefined and unidentified trainings needed by guidance counselors for capacity building programs

Unsupportive School Administrators: Perhaps due to the notion of accountability, the guidance counselor's quest to use and apply ICT in school counseling

Commercialism of the Internet: Worries of the teachers whether the Internet will remain to be free to all and too much commercialization of the materials available on the net

Internet Atmosphere Congestion or Traffic: Increasing number of users of the Internet affects the life of the guidance counselor

High cost of Infrastructure or Support Facilities: The guidance counselors are confronted with the issue of the high cost of infrastructures/facilities needed to improve the ICT capabilities of the school towards efficient and effective use and application in school counseling

Doubtful Quality of Information: Reliability and quality of the information provided by the WWW available for the school counselors

Doubtful Security and Confidentiality of Personal Information: Records/Information of the guidance counselor when converted from hard data to soft data will be accessible by anyone.

Low quality and questionable reliability of the materials displayed on the web are valid problems. A number of academics have already expressed their views about quality of the information found on the web. According to Hung (2004), much of the information available on the Web has not received the rigorous editing and verification of facts through which traditional print must go.

Moreover, Connel & Tipple (1999) had a study on accuracy of information on the web using the Alta Vista search engine, while the results of the inquiry of Herring (2001) questioned the reliability and accuracy of web-based information. Similar with the aforecited studies, our study also took note of the doubtful quality and reliability of materials available on the web for the use of the teacher-participants.

Proposed innovative programs and projects in school counseling as to the use and application of ICT

We asked the teacher-participants on what innovative programs can be proposed so that elementary schools or secondary schools in the country may start working on how ICT can be used and applied in school counseling. The unique needs of children in the elementary grades indicate that guidance counselors should be able to design programs that would certainly meet these needs. These can be carried out by the use and application of ICT.

Helping pupils and their parents understand one another and work together by making difficult choices that occur during adolescent age

Most of the teacher-participants believe that it is not only the pupils who should understand that during the adolescent stage, there are choices to be made. The parents in this regard are supposedly involved.

In my counseling work... it is normal for me to call the parents of the pupils who were entrusted to me... the expenses of long distance calls somehow stopped me from contacting them... With the popularity of electronic mails, I started contacting them with this mode and the results were encouraging enough. Although texting is readily available, I find it worthwhile to send e-mails to their parents... This was the time when one of the pupils would not want to go to the province for a vacation, and instead would just stay in the city for some computer lessons... A choice has to be made...and the parents should know why the child resists...

Self-understanding of pupils

Some teachers expressed that practical strategies are needed to help their pupils move towards self-understanding. Innovative ways can be done with the use of videos.

As a guidance counselor of a private school for boys... the concept of self-understanding is quite difficult to deal with... using videos, film strips, story telling schemes in CD formats have powerful effects on self-understanding...

Developing confidence

Only two teachers came up with programs to help young children manage stress. This is quite new among counselors in the sense that in order to develop confidence and hope for the future,

...The pupils must see to it that life is not sad ("dark or bleak"), and that life is not full of worries. Again we tried to give emphasis on the presence of a play room or counseling room fitted to pupils whose understanding about life is not bright.

The teacher-respondent continued explaining.

We tried to convince our principal about the need to have technological support in the school especially when we are trying to develop confidence in them [children]...although this can be developed without computer technology, video cams and audiotapes... I believe... that these gadgets helped us in the school in trying to portray a positive image about the country... by showing to them how beautiful our country is... the Chocolate Hills of Bohol, the Rice terraces of Banawe and the Tubataha reefs somewhere in Mindanao can be shown to them...

Developing a strong work ethic

All the teachers we studied reveal that somehow pupils in the school are now lacking the desired work ethic so as to grow like responsible citizens of the country. The teachers reported several innovative ways in helping youngsters develop good work ethic. One of the teachers expressed about developing such to her pupils:

...I am beginning to understand now the significance of chatting when dealing with the pupils who are supposed to develop a good work ethic at home... or should I say taking the responsibility of home management or chores at home [when parents are away...] Through the miracles of chatting ... I can continue monitoring one of our pupils whether he has done his chores or part... this became more realistic with the use of video cams (which is not allowed among the youngsters...)

Chatting is common thing in our daily lives however, for elementary pupils their parents would not allow them to have such kind of activity. For college students and high school students, chatting is such a common thing and would certainly be a good intervention mode in counseling.

Career Guidance and Career exploration activities for children

Most of the teachers we studied mentioned something about the use and application of ICT in career guidance. Specifically, the teachers gave some innovative activities on career explorations.

The school can use and apply ICT in the production of career education materials. These materials are in the video format, web casts and in older versions, the CDs or DVDs... during career orientations, we found those sessions among children could be enhanced with the use of film clips or video footages to introduce new careers in the working place...

To sum up, the teacher participants presented innovative ways that center on the following: (a) career experience through the internet, (b) professional development of counselors through online or e-learning modes, (c) availability of linked courses from online programs other open or distance learning agencies available for the guidance counselor, (d) linking schools with the community though the websites created and establishment of school counseling portals, (e) linking schools with industry by maintaining useful links in the web or available links for every concern that the counselor will have during the week, and (f) linking schools with different agencies involved on child protection through list serve, net groups, chatting, forum boards, etc.

On the overall guidance services, we learned from the teacher-respondents that several innovative ways can be proposed particularly on: (a) counseling with the use of ICT such as the internet, e-mails, net groups, (b) Interviews can be done virtually (by mobile phones, videos, etc.), (c) Information service of schools will be enhanced as to retrieval if student data are uploaded on the local network, (d) educational placement of children can be carried out by links, (e) Referrals through the net, (f) Orientation service for children, the parents, community and the alumni through the portal of the school, (g) follow-up matters can be dealt with easily using ICT gadgets.

CONCLUSIONS AND RECOMMENDATIONS

Our study observed that the teacher-participants generated a limited number of themes (storing, encoding and preparing of materials/documents, retrieving, distributing and utilizing data/information related to school counseling, and other uses for entertainment, leisure and recreational activities) on the uses and application of ICT in school counseling. However, as to the potential uses, the teacher respondents have generated acceptable and commendable uses as what they have probably learned from their graduate courses on technology in education and knowledge management in education. Moreover, the issues and problems presented are mostly related to the economic aspects, costs, administrators' attitudes towards the use of ICT, quality of information and on the issue of commercialism. Finally, the teacher-participants innovative programs are mostly focused on the individual needs of the pupils and on the career services, but not on the ways to improve the professional capabilities of the guidance counselor.

Based on the conclusions provided, it can be recommended that there is a need for continuous re-training and establishment of a well-defined capacity building programs for guidance counselors that focus on individual skills of the counselors as to the other uses and application of ICT. This will erase the notion that ICT is only for encoding the information. Research activities related to accountability of administrators on ICT integration in school counseling can be carried out in the future. More empirical studies must be pursued so that different perspectives of administrators on ICT use and application can be known. Furthermore, inquiries related to assessment/evaluation on reliability of information can be pursued by looking into the research outputs of students and faculty with the online materials cited on the bibliography. Lastly, school counselors must be guided through school-based and the education department's sponsored programs on capacity building by putting emphases on the benefits of ICT use as well as case presentations of the various experiences of counselors in the Philippines about ICT integration in the implementation of the school guidance programs.

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