

Situational Analysis for the Development of an Instructional Media Program

Elenita N. Que

Many people agree that technological developments have added value to the processes of learning, and in the organization and management of learning institutions. These developments have changed the competencies required of teachers and students for them to function effectively in today's society. Information and communication technology (ICT) has become one of the core concepts that teachers and students alike have to master to equip them for the 21st century. This paper is part of an attempt to develop an instructional media program for an educational institution to address the need for a system that will ensure the effective integration of technology in the curriculum. This study is the situational analysis of the program development model, which aims to determine the gaps of what is desired and what is currently happening. The gaps will then be the basis for the development of the other components of the instructional media program. The entire program development process is based on the Program Development (PD) Logic Model.

Introduction

Technologies in education promise dramatic and meaningful improvements to classroom activities and outcomes. They can improve student motivation, enhance instructional methods, make student and teacher work more effectively and help students learn and sharpen their information age skills (Center for Applied Research in Educational Technology or CARET as cited by Roblyer, 2006).

Despite its potential power, however, technology needs to be effectively integrated for it to work best in addressing a given classroom situation or problem. Technology is most effectively integrated into instruction when educators and education decision makers develop detailed plans for infusing technology as a tool to increase learning opportunities. In a study conducted by Zhao et al. in 2001 (CARET, 2005) on conditions for classroom technology innovations, it was found out that successful integration of technology can be attained in the following conditions: 1) teachers know whether the technology application they wish to use requires additional equipment, software, and Internet and network connections, in order to work effectively; 2) they know how to use and have access to the additional resources as well as to the application they have selected; 3) they are aware and have access to timely technical guidance; 4) they use technology applications that are consistent with their own teaching practice and pedagogy; 5) they know the social dynamics of the school, the school culture (collaborative or individualistic), and the curricular goals of the school and district; and 6) their colleagues support and mentor them through the implementation of their innovative efforts. These conditions warrant a system of instructional media program that may seem lacking in some schools.

In the Philippines, the government has been promoting the use of different tech-

nologies in education since the 80s. Due to financial constraints, the public schools are slowly trying to integrate technologies in limited opportunities. However, several private schools are able to acquire necessary hardware and software and train teachers on the technical as well as instructional aspects of technology utilization. In spite of these efforts, it could not be claimed that the private schools are successful in technology integration since the conditions cited in the study conducted by Zhao, et.al. (CARET, 2005) are not completely met. Teachers may know how to use and access additional resources but the manner of use may not be consistent with their own teaching practice thus rendering instructional process to be less effective than the traditional mode of teaching. In this case, utilization of technology in the classroom is not useful in making instruction effective.

In some cases, school owners fill their library and media rooms with so called state-of-the-art hardware and software technology, but the teachers can not use the technology. It is not because they do not know how but the hardware and software available are not the ones they need for their instructional plan.

These situations indicate that there should be a system that will manage the acquisition, utilization and maintenance of the technology as well as the manpower development aspects, which include training of both technical personnel and teachers.

This study is the first part of an attempt to design an instructional media program. It deals with the situational analysis of a private educational institution located in Quezon City. The results will be the basis and main considerations for the development of the instructional media program.

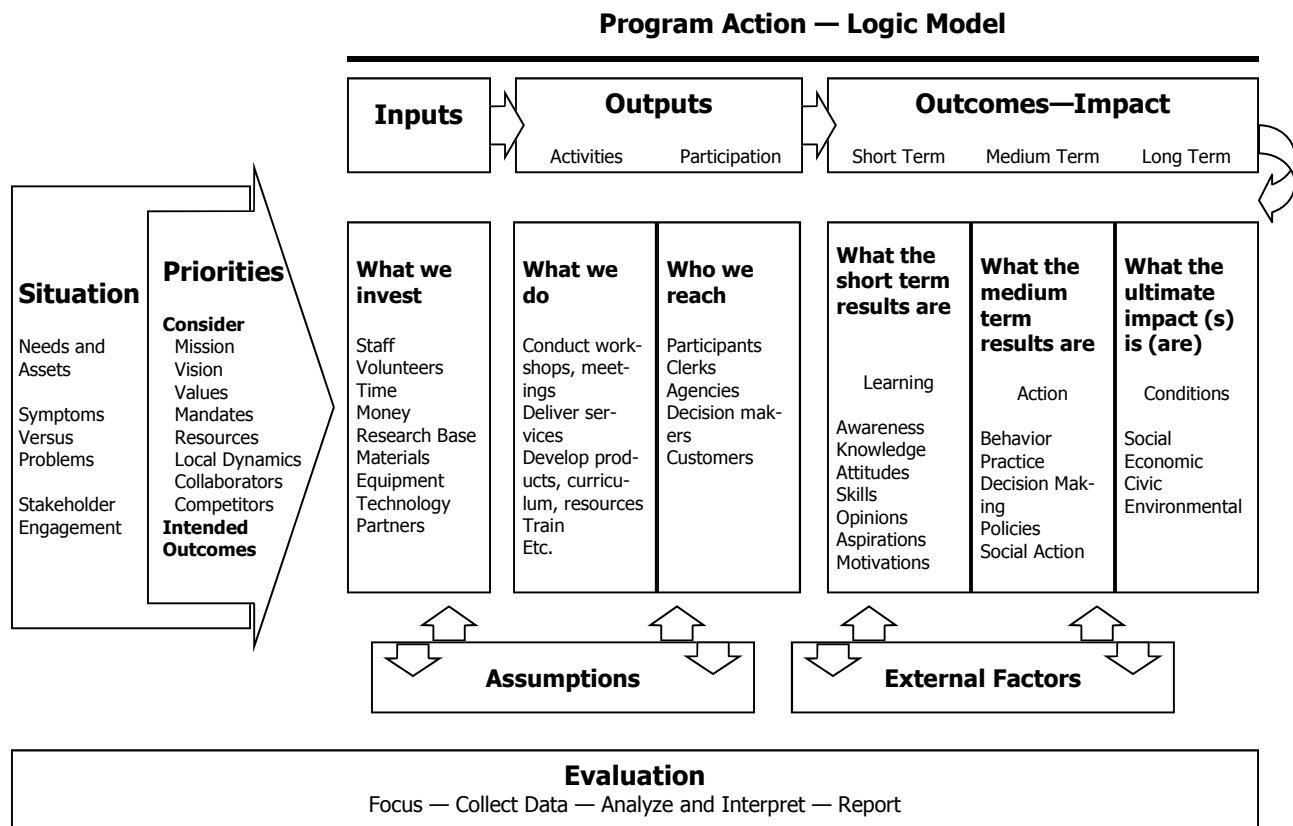
Specifically, this study aimed to answer the following questions:

1. Does the school support the use of instructional media in teaching?
2. What are the available media resources of the school that can be used in the instructional media program? (Which of these are used in teaching? Which are no longer used? Why?)
3. Do teachers have the competence to use the instructional media resources? Does the school conduct teacher training on media resources utilization in teaching?
4. Are there technical support personnel in-charge of the maintenance and operations of the instructional media resources available?
5. What do teachers perceive to be their needs on instructional media services?
6. What do the answers to questions 1 to 5 imply to the development of instructional media program?

Methodology

The framework for the development of the instructional media program is the Program Development Logic Model which is used by the University of Wisconsin Extension Program Development.

Fig. 1. Program Action — Logic Model



This covers only the first part which is the situational analysis, which looked into the needs and assets of the institution akin to instructional media program. To answer questions 1 to 5, the following data gathering techniques were used:

Inventory-checklist. This was used to identify the existing media resources (material and equipment) of the school. The library, school offices and classrooms were visited to identify the existing media resources and determine their location and condition. Two sets of checklists were prepared: one for the material resources; and the other for equipment resources. The Materials Checklist included information on: a) existing materials; b) topic/s; c) quantity; d) location; e) mode of acquisition (donated, purchased, locally-produced); f) date of acquisition; and g) state of materials. The Equipment Checklist determined: a) existing materials; b) topic/s; c) quantity; d) location; e) mode of acquisition (donated, purchased, locally-produced); f) date of acquisition; and g) state of equipment. Data gathered were tabulated and served as inputs in determining the media collection of the instructional media program.

Document Analysis. Information booklets, brochures, information logs and record files were examined to determine the actual utilization of available media resources in the school.

Questionnaires. These were given to both teachers and students to determine their instructional media needs and preferences.

Interview. For additional information on the history of media utilization, mode of acquisition of school equipment and supplies, and the policies regarding project financing, the researcher conducted unstructured interviews with selected school

personnel. A set of questions was prepared for the said interviews. Data gathered were recorded and were used to validate responses provided by other research participants.

This study involved 15 faculty members, 80 students, 6 non-teaching staff and school personnel who have knowledge on the media utilization in the school. The school was selected based on the following criteria:

1. It offers basic education.
2. It has a need for developing a system that will manage the acquisition, utilization and maintenance of the technology as well as the manpower development aspects, which include training of both technical personnel and teachers.

Results of the Study

Presented below are the data gathered:

On the existing policy on use of instructional media in teaching. Based on the interview with the school director, the school promotes the use of the different instructional media in teaching. This is made evident by the presence of different media resources; some of which were in the school's house-keeping way back in 1963.

On the availability and utilization of media resources. The media resources were divided into media materials and media equipment.

Media materials. An inventory of existing media resources revealed that media materials available include the following:

- 2,507 color slides
- 94 filmstrips
- 16 audio reel tapes
- 34 16-mm films
- 15 long playing records

- 14 VHS tapes
- 26 plates of microfiche
- 4 sets of still pictures where each set contains 75 flashcards
- 3 boxes with 1,000 vocabulary cards each for the Latin/English, Greek/Latin/Spanish and French languages
- 48 CD ROMs

These materials are on subject areas relating to religion, science, nature, language and the arts. However, these materials and equipment are under-utilized. It can be presumed that this is due to the lack of a system that will manage the acquisition, utilization and maintenance of the technology, to include training of both technical personnel and teachers.

Media materials in the school were kept in the library. Poor ventilation and dust already caused some materials, particularly the filmstrips and the 16mm films to degenerate.

Media equipment. The school has a computer laboratory equipped with 16 desktop computers, a laptop, 3 LCD projectors, 4 television sets and 4 overhead projectors.

The school also has a speech laboratory and photography room and science laboratory. The two former rooms have not been used since the time the person in-charge left the school. The science room ceased to be functional when the curriculum was changed in 1991.

Other media equipment are found in various offices – the library, office of school director, classrooms and library's stock-room. Some equipment which are still functional are at the office of the school director. These include the slide projector, VHS machine, Video 8 Handy Cam and VHS rewinder.

Utilization of media resources. The interview and document analysis showed that teachers most often use textbooks and hand-outs. Real objects and representational media were least used or not at all. Of the traditional media, visuals, projected media, audio aids, audio-video aids and performance media were used often. Of the newer media, computer software and multi-media, which included the CD-ROMs were occasionally used.

The teachers also mentioned that they are not aware of the existing media resources of the school that they can use in the classroom. The under-utilization of media resources can be attributed to the non-existence of a system that can help teachers identify appropriate media resources that are available in the school.

On teacher competence in using media resources. Based on the interview, it was learned that the teachers do not have the appropriate training for the proper utilization of the different media resources. Teachers cited that they need training in the following: 1) selection of appropriate media materials and equipment; 2) preparation of media materials and equipment; and 3) design and production of media materials. This was probably the reason why most of them use textbooks and handouts.

The school has not conducted any training at all to develop teachers' competence in using the appropriate media resources in their classrooms. However, some of the teachers had had training by attending short-term courses using their personal funds.

On personnel in charge of the media resources. There is no personnel in-charge of the media resources. It is the school director who takes care of the operations of the computer laboratory. He is very much enthusiastic with the use of media resources in teach-

ing and recognizes the enormous need to have an instructional media program.

On teachers' perception on utilization of media resources. The questionnaire and interview results showed that teachers perceived the following as needs related to utilization or media resources:

Adequate supply of more updated media resources and equipment. Although there are materials and equipment available, these are limited in terms of scope and variety. Classical film strips are useful as well as latest film strips to be in tune with the social conditions of the times.

Training for the development of competence related to selection and development of media resources. Teachers need to be skillful in selecting media resources appropriate for their instructional plans. If appropriate media resources are not available, teachers are competent to develop their own materials which can be shared by other teachers.

Trained personnel in-charge of the media resources. There is a need to recruit and hire a trained media personnel who will oversee the operations, management and maintenance of all the media resources of the school.

An academic personnel coordinating services of media resources. This person who will be assigned from among the teachers will take care of coordinating the different media resources needed or warranted by institutional programs. These materials are on subject areas relating to religion, science, nature, language and the arts. However, these materials and equipment are under-utilized. An academic personnel who understands the instructional demands of the programs is needed.

Information dissemination. Updates through catalogs, bulletins and handbooks should be regularly acquired and properly disseminated among the teachers for proper implementation. This task can be the responsibility of the academic personnel.

On the implications to development of instructional media program. Considering the conditions required by the CARET (2005) for successful integration of media resources in teaching, the following implications could be drawn from the above results:

For Media Resources

The school needs to consolidate their existing media resources to save them from further degradation.

The damaged equipment should be repaired or those that are beyond repair should be condemned.

Upgrading should be done based on the identified instructional needs of the teachers

For Teachers

Teachers need to be trained on the different dimensions of the proper utilization (integration) of media resources in teaching. This is to address the first two requirements of CARET (2005) pertaining to knowledge on whether the technology application they wish to use requires additional materials and equipment; and on how to use and have access to the additional resources as well as to the application they have selected.

Teachers need to list down all the media resources necessary based on their instructional plans. The list should be prioritized so the school would know which should be purchased as soon as possible.

For other resources, the school can draw a plan for their acquisition in the future.

For the School Administrators

The school should form a committee that will take care of drawing a plan for the group that will be in-charge of the instructional media program. The plan will include the organizational set-up, personnel needed, services to be offered and operational manual. The committee members should be those who know the school culture and curricular goals.

The school needs to incorporate explicitly in its policy the use of different media resources for improved instruction.

Conclusions

Results of the study showed that the school needs to do a lot of work in terms of developing instructional media program before maximum benefits can be derived from the use of the different media resources. It would be a waste if the media resources, both materials and equipment, owned by the school are not used properly to achieve the intent of improving the quality of instruction. Definitely, the school needs to develop an instructional media program that will consolidate all the isolated efforts of using media resources. Other than the equipment, the school needs to focus on the teachers who make the decisions on how to utilize the different available resources in delivering effective instruction. Training is definitely necessary for the teachers to be equipped with skills in designing effective instruction using different media.

An instructional media program can provide teachers with extensive instruction and resources to promote effective technology use in the classroom. It can provide a context in which teachers can further develop their own technology skills and their under-

standing of the impact and implications of using technology within the classroom.

Designing an instructional media program for an institution can be tedious. Though all components of the program may be included in the design, each school or institution differs in philosophy, nature, curriculum, media needs and preferences. As such, it is important that in the design process, said factors must be thoroughly studied to make the media program a significant component of school operations.

References

- Zhao, Y., Pugh, K., Sheldon, S., & Byers, J. 2002. Conditions for classroom technology innovations: Executive summary. *Teachers College Record*, 104 (3) 482-515. Retrieved: January 31, 2008, from <http://caret.iste.org/index.cfm?useaction=evidence&answer>
- Gustafson, K.L. and Branch, R. B. 2002. *Survey of instructional development models (4th ed.)*. ERIC Clearinghouse on Information and Technology. Syracuse, New York.
- Roblyer, M.D. 2004. *Integrating technology into teaching (3rd ed.)*. Upper Saddle River, NJ: Pearson Education, Inc.
- Roblyer, M.D. 2006. *Integrating technology into teaching (4th ed.)* Upper Saddle River, NJ: Pearson Education, Inc.
- Wools, B. 2004. *The School Library Media Manager*. CT: Libraries Unlimited, Inc.