Needs assessment essay

Business, Accounting



BackgroundThe management of human capital is as necessary a part of any strategic effort as the management of any other resource. This involves the acquisition and development of the talents represented by the people employed in a particular institution (Stalcup, 2004, p. 1). Training is the main and most direct method of employee development, and it has been defined as the " making available to employees planned and co-ordinated educational programs of instruction in professional, technical, or other fields that are or will be related to the employee's job responsibilities" (2004, p.

1). The Government Performance and Results Act of 1993 represented an effort by the Federal government to increase productivity and people's confidence in its policies through strategic planning and proper human resource development. These reasons are directly applicable the education world, as the confidence of parents and students in the job being done by the staff and administration is affected by the cohesion, professionalism, and capabilities expressed by the organization and its members. Throughout the education industry, there is a need for the assessment of the staff with regard to their current knowledge and use of computers and technologybased systems to enhance their teaching experience. In today's technological world, it seems antithetical that teachers should be committed to establishing a literate community while many of them are becoming increasingly illiterate with the development and proliferation of technology. What is more, technology is a useful tool in the enhancement of their jobs, and it is a medium that most of their students understand. The seamless integration of technology into the classroom environment as well as in other areas of school administration is a necessity in the twenty-first century.

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The International Society for Technology in Education (ISTE) has given a " desired-performance profile for teachers" in the education world (Schmitt, 2002, p. 77), and this includes certain operational and integration standards. This study will, therefore, include the teachers and administrators of the 000 school in an assessment of all their daily experiences with technology in the enhancement of students' learning experience.

000's mission is to provide the students with a wide base of knowledge and experiences, a foundation on which to lay quality higher educational experiences and/or a springboard to meaningful lives as adult contributors to the general health of their immediate societies, nation, and world. The employees of this organization are skilled in the area of education and are generally committed to remaining in its employ. Each teacher is dedicated to providing the best education to the children with which he or she comes in contact. Over the years, the 000 school has been working at improving and increasing its technological resources, yet it is questionable as to how much of the staff actually utilize this beyond the most superficial extent. It has proven challenging to provide the adequate technology training needed by those in charge of classrooms around the country (Schmitt, 2002, p. 64).

The challenge exists here as well. It has become necessary to carry out a comprehensive assessment of the need to implement a training program in order that the best advantage be taken of the equipment provided. The areas in which the majority of the staff is ignorant of how to use the technology must be assessed, as well as the areas of strength and in which staff members can be a source of help and guidance to others. Needs Assessment Design and Implementation The goal of this assessment is to locate a gap between the optimal levels of technological development and understanding desirable in the teachers and other staff of this institution and the actual abilities of the same group in the given area. Once this has been assessed, attempts can be made to address the gap in the technological competency level of the staff. This school has no official training committee per se, but does have specific teachers with seniority who are in charge of orienting newcomers to the staff and the supervision of those in their subject areas.

The assessment involved an observation phase, in which the routine of the school's staff and administrators is scrutinized in light of technology use. Problem areas were then noted and questionnaires formulated for the purpose of accessing more information regarding those areas. From the questionnaires, further information was gathered about the technological needs and desires of the staff as well as the organization as a whole.

Then focus groups were formed to get a more in-depth look at these problems and to offer ideas on the formulation of strategies to combat this. Needs Assessment AnalysisOrganizational AnalysisIn the world of changing technologies and dynamic employees, it is not possible to effect a complete integration of technology into the daily routine of the workplace, but this optimal integration can be approximated. The first step to doing this was through an organizational analysis, where the training provided in the organization as a whole was assessed through observation so that improvements could be made upon it. The goal was to research the

application of technology in the three important components of education: curriculum, instruction, and evaluation. Therefore, it was first necessary to assess the technology available to the school by visiting the classrooms, computer labs, and any equipment storerooms the school possessed. Then it was also necessary to take a look at the curriculum for each grade and sample lesson plans written by the teachers in order to gauge the level of technological integration attained in the school. The administrators and teachers were also observed while doing their jobs. Finally, the total number of hours of development in the area of technology to which the staff has had access was assessed through the use of questionnaires and focus groups.

Person AnalysisTwo sets of questionnaires were made up, and the items for both were grouped into categories that included the following headings: demographics, vision and mission, technological orientation, and personal technological achievements and goals. One was to be given to the staff, while the other was given to randomly selected students from every grade level. The items for the questionnaire were developed over a period of two weeks while observing the teachers and administrators at their jobs. The questions numbered twenty-five, and each of the twenty-eight teachers in the school was given one, plus the six administrators, the principal and vice principal.

The twenty-five questions in the questionnaire included eight closed-ended and seventeen open-ended questions. The questionnaire for the students contained similar questions, but worded differently so that they pertained to the students' view of the technological situation at their school. The persons

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filling out the questionnaire (all the members of staff) were allowed to take them home and return them within three days, and of those thirty-six questionnaires, thirty-one were returned.

The students were allowed twenty minutes of a class period in which to complete the questionnaire, so all (40) were returned. The data from the questionnaires were then used to formulate discussion topics for the focus groups. According to the number of departments, there were a total of four focus groups. Within extended department meetings, the group met for 75 minutes and the leader of each group was the head of each department. He or she was equipped with a topic, plus back-up questions to prompt discussion should the conversation flag. The discussion began with in less structured atmosphere which allowed people to voice concerns. As this was done, the moderator was taped in order that nothing be missed and all the information gathered could be put to best use. After the sessions, the notes of each group was summarized and then compared in order to note the salient and common areas of concern.

Although most of the teachers were present and the group gave a very good idea of their needs, it was not assumed that it necessarily represented all the needs of all the teachers (Gamon, 1992). Task AnalysisAnother area of assessment was the availability of the resources necessary for technological training of the staff in the areas they needed most. The institution's two information technology teachers provided a wealth of knowledge about the subject and were considered an asset.

The school was relatively well equipped with computers, projectors, televisions and DVD players either in classrooms, conference rooms, or readily available from storerooms. However, the biggest challenge proved to be the cost of removing teachers from their daily jobs long enough to effect the necessary training. It was decided that such training could be done in smaller groups, so that teachers might still be able to take their classes and attend the workshops when they have free periods. Some teachers might take over the classes of others whose schedules do not permit them any convenient times to attend.

Analysis of Data Collected Research has shown that adults are more process- than content-oriented learners, and that in order to have successful training sessions, it is necessary to acquaint them with the necessity of learning, and then have them directly and completely involved with the task of learning (Larson, 2001). The older teachers (> 15 years in the classroom) of the organization were less likely to be familiar with a wider variety of technology types. According to observation and the questionnaires, the use of videotapes and DVD's occurred in only a small number of classes per week, and those were taught by the younger teachers (< 15 years in the classroom). Analysis of the questionnaire responses demonstrated that older teachers were unfamiliar with DVD players, and though many were generally able to work VCR's, still felt more comfortable using text books or photocopied material for illustration rather than audio-visual technology.

The use of computers for enhancing learning rarely occurred inside the classroom. The students were generally expected to do research using the

Internet or other electronic database and return with that information synthesized. However, very little (if any) hands-on computer-based research guidance was given by teachers. Even information technology classes focused little on this as it was more concerned with learning about the technical aspects of the computer itself. There was evidence of some teachers (again the younger ones) bringing to classes information retrieved from computers on their own time. They usually voiced concerns about the lack of time in the curriculum for excursions to the computer labs, or the availability of that lab, as classes were often simultaneously taking place in the labs. When it comes to the older teachers, most of them find computers enigmatic.

Many of these admit to having been through several training sessions before, but say that they were overwhelmed by the details of learning the software and that the sessions were went too quickly and were too short for them to assimilate much of what they learned. Most expressed apprehension about technology as a whole, but also willingness to participate in any training program that could overcome the impediments they mentioned before. The administrative staff demonstrated a much higher level of technology integration in their everyday routines.

The staff was familiar with the basic copiers, fax machines, computers and printers available at the school. They also demonstrated proficiency in using software to sort and store the masses of information that is necessary in the running of an educational institution. Logs of attendance, grades, activities and other data that pertain to students and teachers alike were kept easily

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using computer software. It was therefore hypothesized that the staff (especially teachers) needed a low, medium, or high level of training in the areas of technology use as well as in the integration of technology into their lessons.

Appropriate methods of training were agreed to include grouping, coaching and mentoring, rather than classroom instruction. Training/Intervention Strategy (Teachers as Trainers)The study group approach will prove effective in this setting as it conforms to the need to leave a number of teachers available for teaching classes. Therefore, in forming the group cells, teachers whose free periods coincided were chosen to work together. In order to combat the possibility of having groups containing members without technological experience, only three group sessions will take place in any given day, and only at times when one of five designated teacher/administrators are also free. These five individuals will be chosen because of their technological proficiency, and each study group will have at least one of them as a member. The study sessions will take place in the conference room, which is equipped with all the major forms of technology: computer, video-projector, television, VCR, and DVD player.

The tasks will be systematically laid out in print using exploration topics previously defined by the same group, and the tasks will be completed by the less proficient members of the group under the guidance of the most proficient. Each training session will last for an hours, and the program will take place over a period of two months to facilitate the participation of all the staff members. Subjects will be expected to report on their learning. Coaching involves the collaboration of one expert with each of the technologically challenged teachers on a one-on-one basis, where they work together to design a project that uses an aspect of technology not yet explored by the novice teacher.

The coaches will, again, be chosen from the group of technologically proficient staff members, and the collaboration will be implemented after the study-group sessions have ended. This will confer a higher level of responsibility upon the teachers, for though they will be supervised and assisted by the coach, they will be expected to complete that project largely on their own. The project will be in the form of a highly technological lesson in their content area, which they hope to present to their students.

Each coaching session will take two weeks, and each expert will be assigned two novices to work with, according each two sessions per day. With ten coaching pairs per two-week session, the entire coaching section of the training program should take about four weeks. Mentoring involves a loose pairing of expert with non-expert, giving the non-expert leave to approach the expert teacher with problems at any time. This type of pairing allows the teachers without skills to know where they can go to get the help they need, and the data from the skills survey gives mentors the knowledge of who on staff has technological information that they may not themselves have.

Mentoring will therefore serve also as the beginnings of a networking strategy through which teachers or administrators will be able to find the technological help they need. Training/Intervention CostsThe program was designed in order to minimize the costs of lost labor. The teachers will

continue to teach their regular classes as much as possible, as the sessions are calculated to take place only during their free periods. Productivity of the office administrators will, however, be lost, as their colleagues who take over their jobs in their absence will need to be paid overtime to get everything done. Other costs will come in the form of increased utility bills from increased and extended technology use. Wear and tear to the equipment will also take place.

EvaluationIt was essential that all persons involved be given a voice in the evaluation of this program, as evaluation is to be "viewed as a collaborative activity" (Eseryel, 2002). Evaluation of the program will consist in a reissuing of questionnaires with items that evaluate similar aspects of the institution's technological culture. It will also include questions about the program itself. The responses to the questionnaires will be compared with that given to the initial ones prior to the training program. A debriefing session will also take place in which all the teachers will come together and talk about the effects of the program on their teaching.

They will be encouraged to voice their opinions regarding the strengths and weaknesses of the program. The program will also be evaluated through the use of the written reports for that the staff members will provide at the end of the study groups. In addition to this, the projects created by the coaching team will be implemented in classrooms and reports given on this. There will also be someone there to observe the teacher while she shares that project with his or her class. Thirdly, random observation of classes and reviews of lesson plans, etc. will give an idea of whether technological advances were made in the teaching of lessons as well as the carrying out of daily routines. Finally, the students will again be surveyed to find out if any changes had been made in the technological aspects of their lessons, and whether such changes (if any) enhanced their learning experiences.

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