Program Development on the Student Supporting System in Prajaksilpakom School, Prajaksilpakom District, Udon Thani Province

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Abstract: The purposes of the research were: (1) to study of the requirement in the program of Student Supporting System in Prajaksilpakom school; (2) to create the program of Student Supporting System; (3) to study the outcome of the implementation of the program of Student Supporting System in Prajaksilpakom school; (4) to develop the program of Student Supporting System; and (5) to study the outcome of the implementation of the program of Student Supporting System in 31 schools, UdonThani Educational Service Area Office 2. The study consisted of 5 phases. The findings were:

Phase 1: The study of the requirement in the program Student Supporting System in 4 respects matched the needs of 18 advisor teachers in Prajaksilpakom school at a high level.

Phase 2: The creation of the program of Student Supporting System consisted of 4 main systems and 12 sub-systems.

Phase 3: The target groups consisting of 18 advisor teachers had a high satisfaction toward the Program of Student Supporting System, and 5 the program development experts highly approved the efficiency of program in all respects.

Phase 4: The further development of the program consisted of 4 main systems and 12 sub-systems as well as phase 2 except 6 sub-systems required improvement.

Phase 5: The target groups consisted of 31 administrators, 31 network supervisors and 198 advisor teachers had a high satisfaction toward the program of Student Supporting System.

Key words: program development, student supporting system

1. Introduction

The student supporting system is the process which encourages all students to achieve quality as well as to protect them to be away of the social problem. Advisor teachers became consultants as key personnel to coordinate the cooperation of the parents and are involved with the community. Tools and procedures were used and there were 5 elements: Knowing individual students, students scanning, student Supporting. Protecting student and resolve their problem, then student referring (Ministry of Education, 2003).

Prajaksilpakom School, UdonThani Educational Service Area Office 2. The school, providing the range of grade levels 3–4, has taken care seriously to help students since the researcher moved to this school as the director

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in 2003. The director helped students to develop and meet the standards of Student Supporting System which included: 1) recognize oneself and self-reliance, 2) physical health, mental health and health habits, 3) have the skills to avoid security hazards and adverse behavioral, 4) understand love and self-regard with others and be able to deal with emotional problems, 5) be a good member of the family, school, community and society, and 6) have good attitudes and basic skills in occupations faith. The problems found were: 1) the preparation of individual student data files had errors and no data was updated, and 2) the information to be used in promotional activities and defensive students were also not consistent with the actual situation and it was delayed. Many students didn't have any opportunity to get help. However, the students with academic talent, sports, music, art and careers haven't been encouraged by the school as they should be (Prajaksilpakom school, 2006).

The solutions to such a problem, from the researcher and associates, such as outstanding performance teachers and professional computer teachers, were to adopt a computer program producing a student database program. Student database can support complex data, and process the correctly and accurately data base program. The results can be in various forms as needed, and it also saves time by performing fast and preventing errors that may occur (Ratchasin Paetrakul, 1994; Theerapat Tinsandee, 2004).

2. Review of the Literature

2.1 Design and Development of Database Systems

Project manager, systems analysts and database designers must study together for understanding in each step as follows (Somjit Ardin & Ngamnit Ardin, 2000):

(1) Problem Analysis is the process of analyzing of the existing System's problem due to insufficient performance of necessity meeting now a day.

(2) Feasibility Study is a study of information science systems or editing the existing information systems to detect if there is a possibility or not.

(3) Users Requirement Analysis

(4) Database Design for analysis or entity including define relationships between entities or relations.

2.2 Applications Microsoft Access

Microsoft Access program is a database application with high performance and applicable functions as follows:

(1) creating an application in Access properly, and use it easily.

(2) many kinds of tools to apply various inquiries and take the results of using the database.

(3) creating a tool to connect with users appropriately.

(4) able to generate reports from the database.

(5) Publishing corporate data easily in the database via the Internet and an Intranet (Tarin Sittithamcharee, 2000).

2.3 Student Supporting System

Student Supporting System is an operational process and it assists students.

The system is clearly set up with the methods and tools of quality, and evidence of that is checked by an advisor teacher, a key personnel in the operation of both inside and outside school (Ministry of Education, 2000).

2.3.1 Objectives

(1) assisting the students properly and work effectively.

(2) providing and collaborate with school, school board, parents, community organizations through a clear process that traces proof of performance and monitors and evaluates.

2.3.2 Benefits

(1) Students received through help and problems were solved.

(2) The relationship between teachers and students was good and warm.

(3) Students recognized their own and had self-control.

(4) Students learned happily and were encouraged to develop their full potential.

(5) Stakeholders were seriously and strongly involved in quality development with empathy and sacrifice.

2.3.3 Process and Steps of the Student Supporting System Consisted of 5 Elements as Follows:

(1) Recognizing individual student was important helping advisor teachers to understand them better. Many students data can be analyzed to scan students to promote the prevention and remedy of the students issues properly.

(2) Student scanning to determine information about the student in order to divide students into 4 groups:

• Normal group is students who have already been scanned. Students were placed on the threshold of normal group which must receive immunization and promote and develop.

• The risk group is for students who have been scan and classified on the basis of risk. The school must prevent or resolve problems case by case.

• The problem group is for students who have already been scanned. Students were placed in terms of problems. Schools must help and resolve their problems quickly.

• Leaders group are students with special abilities. Expression is a genius which has one outstanding side or several sides. Schools have the potential to encourage students to develop their talents to the point of maximum.

(3) Student protecting and finding out how to help and resolve student's problems, and not abandon them to become social problems. There are many ways following by the advisor teachers. The advisor teachers need to take at least two reasons:

• The initial consultation.

• Provide beneficial activities to protect and solve problems.

(4) Student supporting to their full potential. There are several ways to do it, but the following activity keys at the school have been performed:

• Home room activity.

• Home visits.

• Classroom Meeting.

• The livelihood skills development and learning.

(5) Transferring to help students by submitting them to the specialists. There are two different types as follows:

• Inside Transferring, advisor teachers forwarded to the teacher who can assist students such as counselors, nurses, forwarding teacher or administrative department.

• Outside Transferring, advisor teachers, or administrative action is forwarded to the external experts if the problem is hardly and requiring much effort than the school's capacity to handle the assistance.

3. Methodology

Development Program on the Student Supporting System in Prajaksinlapakhom School operated in 5 following phases:

Phase 1: Studying the requirement in the program of Student Supporting System in 4 respects: 1) Recognizing individual students system, 2) Scanning system, 3) Supporting, Protecting and Referring system, and 4) Reporting system. The data was collected from18 advisor teachers of Prajaksilpakom school. The research instrument was a questionnaire about the requirement of the advisor teachers in the program, was a five rating scale. The statistics used to data analysis were mean and standard deviation.

Phase 2: The creation of the program of student supporting system by experts such as 2 school deputy directors, 1 head of division, 5 supervisors, 2 head of classes and 1 computer teacher. Continue designing the program into 8 steps: 1) planning; 2) designing the system; 3) designing programs; 4) checking the operation of the system; 5) trial of the program; 6) improvement program bugs; 7) piloting the program with 18 advisor teachers in Prajaksilpakhom school; and 8) lead the experts in use of program to assess performance.

Phase 3: Studying the implementation in the program of Student Supporting System in Prajaksilpakom school from18 advisor teachers and 5 the Program development experts. The research instruments were: 1) a questionnaire for the satisfaction of the teachers toward the program was rating scale; and 2) evaluation form of the effectiveness of program by experts' opinions was a five rating scale. The statistics used to data analysis were mean and standard deviation.

Phase 4: Development Program of the Student Supporting System by 6 responsible person and the performance was outstanding, and 3 professional computer teachers, and development for the 4 steps: 1) Bringing the result and feedback of teachers and experts were the weaknesses or deficiencies in developing the program; 2) Development of a program as an improvement from the original program created in Phase 2 was done as follows: (a) Using the program of Student Supporting System both on the Website for members and for students and the general public on Internet Explorer, and (b) Improving the six sub-systems such as recording students data, searching student data, printing report of the individual students, printing report of the students scanning, printing report of the students' attention and printing report of the students' behavior both daily and monthly; 3) Checking the operation of all systems applications; 4) Implement the program to the school network supervisors and advisor teachers in 31 schools of UdonThani Educational Service Area Office 2.

Phase 5: Studying the implementation in the program of Student Supporting System in schools under Udon Thani Educational Service Area Office 2 from 1administrators, 31 network supervisors, and 198 advisor teachers. The research instruments were: 1) a questionnaire for the satisfaction of the school administrators toward the Student Supporting System program was a five rating scale, and 2) a questionnaire for the satisfaction of the network supervisors and the advisor teachers toward the Student Supporting System program was a five rating scale. The statistics used to data analysis were mean and standard deviation.

4. Results

Development Program on the Student Supporting System. The findings were :

(1) Result of the requirement in the program of student supporting system in 4 respects found that the needs of 18 advisor teachers in Prajaksilpakom school at a high level. The respects with the highest requirement in the

system was scanning system, followed by reporting system, supporting and protecting and referring systems, and recognizing individual students system, respectively.

(2) The 1st results of the creation in the program of student supporting system were consisted of 4 main and 12 sub-systems as follows:

- The recognizing individual students system
  - ✶ Recording students data
  - ✶ Editing students data
  - ✶ Searching students data
- The scanning system
  - ✶ Recording assessment of SDQ
  - ✶ Recording authentic assessment
  - ✶ Recording classification group of usual, risk and problem students
  - ✶ Editing data of students scanning
  - ✶ Searching the students scanning
- The supporting, protecting and Referring system
  - ✶ Recording students' behavior and supporting
  - ✶ Editing data of students' behavior
  - ✶ Searching data of students' behavior and supporting
- The reporting system
  - ✶ Printing report of the individual students
  - ✶ Printing report of the students scanning
  - ✶ Printing report of the students' attention
  - ✶ Printing the daily and monthly report of the students' behavior

(3) Results of the implementation in the program of Student Supporting System in Prajaksilpakom school found that :

- 18 advisor teachers had a high satisfaction toward the program of Student Supporting System in all respects. The respects with the highest satisfaction on the system was supporting and protecting and referring system, followed by recognizing individual students, reporting and scanning systems, respectively. There were also suggestions in the development program: 1) to transfer students data from Student 44 or SMIS; 2) able to install and use the program easily; and 3) the documentation should include documents involved in more care and helping students.
- 5 of the program development experts highly approved the efficiency of program in all respects. The respects with the highest efficiency on the system was the design of the program, followed by the management of the database, the value and use benefits, and reporting data, respectively. There were also suggestions in the development program: 1) to transfer students data from Student 44 or SMIS, 2) able to install and use the program easily and 3) should update the installation guide and use the program to read, and be easy to follow instructions.

(4) The 2nd results of the development in the program of the Student Supporting system were consisted of 4 main and 12 sub-systems as well as phase 2, by increasing the capacity of the program: 1) to transfer students data from Student 44 or SMIS; 2) to record, edit and search data easily; 3) for users to easily install and use the system; 4) the protection of student data; 5) add relevant documents to assist students with activities to prevent and resolve them, etc; and 6) to improve an instruction guide to install and using the program of student supporting system

appropriately.

(5) Results of the implementation in the program of Student Supporting System in school under the Office of UdonThani Educational Service Area 2 found that:

• Most school administrators were satisfied with the reporting data as a whole and every item had respectively the scanning reports, the students' attention reports, the recognizing individual reports and the daily and monthly report of the students' behavior at a high level. As for the report in practice, the school administrators were satisfied with as a whole and every item had respectively the recognizing individual reports, the daily and monthly report of the students' behavior, the students' attention reports, and the scanning reports at high level.

• Most network supervisors had a high satisfaction toward the Student Supporting System program in all respects. The respects with the highest satisfaction was respectively the database management and users of the program, followed by reporting students data, data search, installation, and recall the program.

• Most advisor teachers had a high satisfaction toward the Student Supporting System program in all respects. The respects with highest satisfaction was the supporting, protecting and referring system followed respectively by the reporting system, the scanning system, and the recognizing individual students systems.

5. Discussion and Conclusion

The researcher discussed the research findings as follows:

(1) Most advisor teachers of Prajaksilpakom school were requirement in the Program Student Supporting System in 4 respects such as recognizing individual students, scanning, supporting, Protecting and referring, and reporting systems at a high level. Because They have an experience in the student Supporting System and meet operating problem throughout were: 1) individual file of students data; and 2) Students scanning making a fuss required more time making a documentation system, that would make it not easier to keep and use the data. These are an effectively the student supporting, Protection and referring. The students were not take care for everyone. If the program is to assist then, it would make the operating student supporting system more efficiency than before.

(2) Development of the Student Supporting System program Phase 2 and Phase 4 The system consists of 4 main and 12 sub-systems and application requirements. The program capacity was increasing, and able to: 1) transfer students data from Student 44 or SMIS; 2) record, edit and search data easily; 3) allow users to easily install and use; 4) easier protection of the data from damage; and 5) add relevant documents to assist students in the documentation and updating the instructions to install and use the program to suit the user. This is because the application development process and the researcher and related users have led to suggestions from teachers, school counselors from Prajaksilpakom school, and from experts to use and develop programs from prior weaknesses or defects in the development of the program. As a result, the program is developed in line with the needs of users and the ability to add improvements.

(3) Results of the implementation in the program of Student Supporting System in school under. The Office of UdonThani Educational Service Area 2 found that :

• Most school administrators were satisfied with the reporting data and the report in practice at high level, Because they had been reporting data delays and deficient. It also made activities Supporting and Protecting students' delayed and did not match the reality. When programs assist students to make a report, quick and informative organizing activities help students match the reality much faster.

• Most network supervisors had a high satisfaction toward the program of student supporting system in all

respects. Because: 1) the installation is simple and easy to run the programs; 2) the performance of database management of students and use of Enter and edit data was easy; 3) operating the entire call reported using Reporting on the screen and print reports and can be used within a wide range; and 4) the ease of retrieval of individual students, scanning, students' attention, students behavior both daily and monthly datas.

• Most advisor teachers had a high satisfaction toward the program of student supporting system in all respects. Because: 1) the recording, editing, and retrieval was easier and faster; 2) recording the estimated SDQ to assess the actual condition, identification of the normal group, and the risks and problems to update information for scanning and search results scanning was simple, and fast data was more accurate than the original data; 3) recording the improvement of the search students' behaviors helped students easier and faster than ever before; and 4) printing reports of individual students including the scanning, the study, and control students' behavior, both daily and monthly, were all easier and faster as well.

(4) Should on a study guide the program of student supporting system. To understand the manner data must be corrected, more better and properly, than before, the procedure to prevent error in data processing.

(5) If you would like to use this program, you must to change a database with corrects information to ensure the integrity of your report, and make it ready for using.

(6) The program of student supporting system must be applied to other schools.

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