The Using of SMS Gateway to Optimize Parents's Function for Watching The Level of Presence and Students's Score in Junior High School 4 and 6 Palopo South Sulawesi

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Abstract

The role of technology in education is to convey information to students or parents. The current method to giving information still used the old ways, for example is using students reports cards. Other than that, for students who have problems in school, the teacher uses a way to send a letter to parents or in other way, teachers visited directly to the parents houses, so that information about the students in the school are not monitored properly. The utilization of SMS Gateway at school is the the way for the dissemination of information by using SMS. SMS Gateway connected directly to the database so it can spread the message quickly and automatically to hundreds of numbers. The solution proposed to partner is to build a system that can create a database of personal school especially database learners to a presence that can calculate (recap) Presence student attendance and grades are integrated with the device monitoring attendance and grades of students in school-based SMS, where the monitoring is the parents themselves through information delivered from the school by using SMS gateway. Overall this system helps the running of the educational system, by utilizing information technology and communication as a media liaison between parents and the school, which will greatly help keep the students to remain always guided toward positive activities and away from things that are destructive and direct them to become potential Human Resources for nation building.

Keywords: *Educational Monitoring System, SMS Gateway, Information and Communication Technology (ICT).*

Background

Starting from our anxiety as the intellectual who every day see students who wander during hours of lessons. This reality informs us that there is a gap of communication between teachers and parents. The students set out from home to go to school to learn but there are many who do not get to school for various reasons, and events like this are sometimes without the knowledge of her parents. Teachers and parents should be involved in controlling the students so that good communication between teachers and parents and the most important is the involvement of teachers and parents in giving example on students.

SMS Gateway is expected to provide solutions to spread the message to hundreds of numbers automatically and quickly. SMS-based service gateway is as a medium of communication between schools and parents, who can assist parents in monitoring the progress of their children at school. Information delivered via SMS gateway will ensure information to parents quickly, precisely, accurately, without having to wait for the results of the evaluation study final on report cards.

The problem of students who play truant or often do not get to school is a phenomenon experienced by almost all schools especially those on partner Junior High School 6 cities Palopo is causing the lagging certain subjects, and students also experience feelings later disadvantaged students lose discipline. One of the causes of students not going to school or miss school because they did not want to follow a particular lesson because he did not like or do not like in one of the teachers or as invited by his friends.

In this case, SMS gateway very important for both partners, Junior High School 4 Palopo and Junior High School 6 Palopo. Parents will received information quickly via SMS gateway information and the contents of the information submitted will not experience changes when it gets into the hands of the parents and they do not have to come to the school to determine the level of their presence, apart from the above reasons not the least of parents of students who are outside the Palopo City and there are even students from Tana Toraja and Enrekang, and there is also derived from the Southeast. With sms gateway is very helpful parents who are outside Palopo to determine the level of attendance and the value of their children.

After an initial survey by interviewing and discussing with Headmaster Junior High School 4 Palopo and Junior High School 6 Palopo, which both have almost the same problems. The partner's problem is technology of information did not maximal in controlling or monitoring learners. So far, this presence information and the value of working with students in the manual and the information provided to the parents of students is done every six months.

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Method

There are several methods used in this research are the process. Data collection is done in schools, the data are taken for the manufacturing proses of the system is data related to the system to be built. In this case is data about student attendance format, subjects, student assessment format, and also needed for implementation is data of phone number from parents of students. (2) Data selection can be done using the data required and check the completeness of the data provided to avoid errors or a lack of data because it will affect the system to be built later. (3) Analyzing the data that has been obtained in the school as an ingredient for the manufacture of the system. (4) Check the completeness of the data is adequate or not, if it has not sufficient means to come back to a partner but if the data is sufficient then the manufacturing phase of the system can be resumed. (5) The design can be done if the data is sufficient, the design begins with a system design that builds on the models and tools used, and then create a database to store data created by SMS Gateway, then proceed coding stage or making the program. (6) Do the testing phase at this stage whether the application of the system made perfect, if the system has not been successful made of 100%, the current design is fixed in particular on the manufacture program, after checking all the errors then do the test again until the system regardless of fault. (7) Conclusion can be decided to be implemented in schools of partner locations if the system is free of error. (8) The test results, after successfully testing the system is ready for implementation of the conditions that have been tested and have been regardless of fault.

Results and Discussion

Based on the problems, the suggested solution is to build a system based on SMS which can create personal database for schools. Parents can do their own monitoring through information delivered from the school. Some problems can be resolved including the following:

a. Build a fast and precise communication to parents of students using the SMS gateway
b. Informing teaching and learning activities quickly and accurately to students and parents via SMS gateway
c. Delivering information via SMS gateway on the school to the parents so they will not need to come to school to obtain the desired information
d. Spread the administrative information dissemination and the learning process by using the SMS gateway, so in the future, school doesn't need to do all the things manually (using paper) that requires a lot of cost.
e. Schools provide SMS gateway that can control the students administrative information, teaching and learning process. With this systems, the team can find a solution when students leave home but did not attend to school. If that things happened, parents will receive a direct report from the school on the same day, which will be sent automatically by the system in the form of SMS.
f. In terms of the system, SMS Gateway can broadcast messages such as messages about students attendance rate, and other important announcements about students.

Conclusion

Realization of fast and precise communication to the parents by using the SMS gateway. Realization of information via SMS gateway on the school to the parents so they will not need to come to school to get the desired information. The creation of administrative information dissemination and the learning process by using the SMS gateway, so in the future, school doesn't need to do all the things manually (using paper) that requires a lot of cost. The realization of regularity (discipline) is caused due to the good communication between teachers and parents. For example: when students leave home but didn't present in the school, the parents will receive a report from the school directly on the same day, which is sent automatically by the system in the form of SMS.

Overall this system helps the educational system by utilizing information technology and communication as a media liaison between parents and the school. Which is it will help to keep the students to remain always guided toward positive activities and keep away from things that are destructive and direct them to become Human Resources potential for nation building.

References

Agustine Asnat, *SMS Application Gateway at the Neighborhood-Based Website using the Framework Code Igniter*, Informatics Engineering, Faculty of Industrial Technology Gunadarma University: Journal Publication.

Diartono, D.A, *Presence System Integration Gateway to the Finger Printdan SistemSms Student Attendance Monitoring, Journal of Information*

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Fadlurrahman, (2012), *Making SMS Gateway For Media Information On Assembly Ta 'lim, Recitation & sholawat Ahbaabul Musthofa Yogyakarta, Department of Information Systems Yogyakarta Amikom STMIK: Journal Publication*

Prasetyo Teguh, (2013), *SMS Gateway System Design as Media Information Value and abscesses Students SMA Negeri 1 Garawangi, Department of Information Systems InforTeknik STMIK Amikom Yogyakarta: Journal publication.*

This paper has been presented at Sahid Jaya Hotel Makassar- International Conference on Natural and Social Sciences 2017. Palopo Cokroaminoto University, Makassar, March 12-13, 2017.

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