

A SYSTEMATIC APPROACH TO ENHANCE THE MANAGEMENT OF GRIEVANCES IN THE SRI LANKAN PUBLIC EDUCATION SYSTEM THROUGH AN INTEGRATED COMMUNICATIONS PORTAL "EduGM"

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Abstract

To have a good education, students in schools must have to have the required resources at all times. If the required resources such as teachers, lab material, sports equipment, etc. are not available at the time when they are needed, it can affect badly on the students' education. The main issue identified from the research is the communication gap between the schools and the authorities when communicating the resource issues. The paper based communication which is happened via mails is proving to be ineffective throughout the process. During the research, the author has found that there is a business need in a proper communication mechanism to manage these resource issue communication procedure instead of the current mechanism. The objective of this research is to eliminate the mentioned issue through an IT based system. This research provides a computer based solution called "EduGM" for the above mentioned business requirement by automating the current communication mechanism between schools and the education authorities. By implementing this automated solution, the communication mechanism will work more efficiently, hence the resource issue resolving time will be reduced. By this the students will get what they want at the correct time. Also this system will be a portal to the higher education authorities to monitor their subordinates. In conclusion, it is proved that fruitful results can be generated if the proposed system is implemented in the education system in a proper manner.

Keywords: Education Authorities; Government Schools; Grievance Management; Public Education,

1. Introduction

The Sri Lankan education system can be divided into two main categories as the government sector and the private sector. Even though Sri Lanka is moving ahead in development there still remains a lag in development related to the education industry. While schools in urbanised areas are equipped with abundant facilities, schools in rural areas are struggling with adversity. The worst part is that the communication mechanism used in solving these problems is proving to be ineffective. This study intends to carry out a research on the education system in Sri Lanka, supported by statistics related to the education industry.

Even though the government expends approximately Rs 40,000 million per year, which accounts for about 3% of the GNP (Gross National Product), still there is lack of resource availability in Sri Lankan public

education system. At present, there appears to be no proper mechanism in contacting the relevant authority to get a specific job done. For example, in the absence of academic staff to teach a particular subject or in an instance of inadequate lab material, students have to wait for a long time to get their work done. The current communication process for this is an out-dated method with a lot of drawbacks. An identification of that process will be carried out, supported by detailed research in this domain. For an example, if there is an issue like lack of lab materials, the principal has to write a letter to the education ministry/zonal education office/provincial department of education describing the issue. The education ministry/zonal education office/provincial department of education will then investigate this issue and inform the authorised personnel of same. The availability of funds to cater to the solution will then be analysed and if inadequate, the common practice is to ignore the issue and refrain from initiating any correspondence related to the said subject. Even in an instance where adequate funds exist, it will still take a long time to provide the required equipment to the school. So clearly, there is a communication issue as well as an issue in terms of productivity.

This inadequate process harms the overall education industry in many ways. Firstly when the students do not get what they need for the accurate continuation of the studies, it can affect them in lack of understanding the subject scope. Even if these students hold the potential to rise to the top, the lack of sufficient resources and organised communication mechanisms may impede them from doing so. The proposed system will be developed to make this communication in the grievance management process more effective and to improve the productivity of the relevant personnel.

2. Literature Review

2.1 Grievance Management In Public Education In Sri Lanka

In Sri Lanka, the public education system has various kinds of issues and lack of required resources. As it can be seen in the below figure, availability of some resources are even less than 50% in several areas in Sri Lanka. Even though these issues exist, still it suffers from a need of a proper grievance management system to escalate these issues to relevant parties.

Figure 1 - Availability of resources in government schools, by province and sector

Table 2: Availability of resources in government schools, by province and sector												
	Selected Provinces								Sector			
	Sri Lanka		Western	Northern/Eastern	North Central		es.	Sabaragamuwa	Urban		Rural	Estate
Good roof ¹		92%		98%	96%	85%	94%	82%	ó	95%	93%	73%
Good floor ² Divided classes		99%		99%	99%	100%	95%	100%	Ď.	98%	99%	100%
in class rooms Separate furniture for all		44%		72%	27%	15%	37%	47%	b	71%	39%	60%
students Usable blackboards and ad e quate		60%		62%	28%	66%	58%	74%	6	53%	61%	71%
supply of chalk Current teachers as a ratio of teacher		72%		75%	70%	75%	69%	65%	ò	7 5%	71%	82%
entitlement Student teacher		92%		97%	82%	89%	84%	93%	.	96%	93%	77%
ratio		22		20	31	18	21	22	2	24	21	29
Sample size		429		77	99	30	30	42	2	85	329	

Source: Arunatilake, 2005

In the grievance management for public education system, there can be mainly three parties as Issue raiser, School representative (Mostly the principal of the school or a delegate person by the Principal) and the authorised personal to solve the issue. These three parties have different responsibilities in a grievance management framework.

- 1. Issue Raiser
- Work with school representative and discuss about the issue and try to solve the issue internally.
- If the issue cannot be solved internally, ask the representative to lodge the complaint.
- Participate in discussions in the attempts to solve the grievances, where it is appropriate.
- 2. School Representative
- Resolve issues internally as much as possible.
- Formally communicate the issues which cannot be solved internally, to relevant authorities.
- Participate in discussion regarding the issue with the relevant authority.
- 3. Authorised Personal
- Check whether the communicate issue has been tried to resolve internally or not.
- If not, ask school representative to try to resolve the issue internally.
- Accept the issues which cannot be resolved inside the school.
- Direct the issue to relevant personal.
- Check the status of the issue.
- Communicate with school representative about the status of the issue.
- Successfully close the issue if the issue is resolved.

2.2. Public Education Sector In Sri Lanka

Even though Sri Lanka is still a third world country, its population has 92% of literacy rate, which is way higher that the expected literacy rate for a third world country. Also this is the highest rate in South Asia and one of the highest in Asia. Modern education system has established by the British Empire around 19th century. Public education falls under three bodies as Ministry of Education, Provincial Department of Education and Zonal Office of Education.

3. Industry Survey

Several data gathering techniques have been used such as face-to-face interviews, telephone interviews, questionnaires and document sampling. Below are the main findings of the industry survey. Stakeholder analysis has been carried in order to assess their needs on the proposed system. Also this helped to identify the required data from each and every stakeholder. The stakeholders who have been utilized in the survey are;

- a) School principals 4 principals of Galle district have been interviewed and 25 questionnaires have been distributed among other principals.
- b) Education authorities/Offices 2 interviews and 5 questionnaires
- c) Students 150 questionnaires
- d) School Staff (Academic and Non-academic) 50 questionnaires

All the interviews have been carried out by two methods; face-to-face interviews and telephone interviews. All the questionnaires were distributed through hard copies as well as softcopies (Using social media such as Facebook and through emailing the questionnaires).

Figure 2 - Flow of data collection and information usage in public education system

Information

International - Comparison between countries, Monitor international initiative

Ministry of Education

National - Formulation of national level policies, providing information to other ministers & Informational Institutions,

Provincial Department of Education

Provincial Department of Education

Processing

Zonal Office of Education

Zonal Office of Education

Zonal - Zonal level planning, Monitoring, Teacher deployment, Resource distribution

School's School level planning, Achievement, Student Performance, Monitoring

School Monitoring

School Monitoring

Nonitoring

Monitoring

Source: MOE, 2011

4. Findings of the Survey

3.1.1 Several Findings of the Questionnaire

A) Rate of issue occurrence

The rate of occurrence has been asked from the students for the selected issues. It has been given a rating of 1 to 5, where 5 is the highest rate of occurrence and 1 is the lowest rate of occurrence.

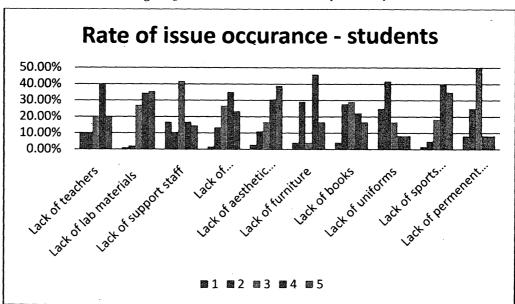
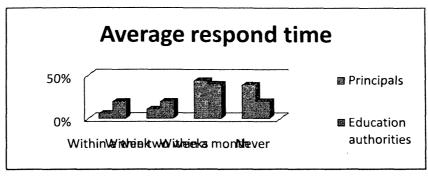


Figure 3 - Rate of issue occurrence (Students)

B) Average respond time from the authorities

This question was asked to get an idea about the average respond time for the issues communicated by schools to authorities. Since 61% said they haven't got a quick respond from them, the author wanted to know the average time period for a response.

Figure 4 - Average respond time from authorities

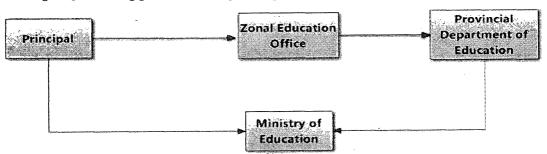


3.1.2 Existing Procedure in Resource Issue Communication

✓ National schools

The principal of the school have access to both ZEO and the MOE. According to the severity of the issue, the resources have been reported. As an example, if the issue is to get a teacher for a particular subject, then the principal directly contact MOE to get it done. If the resource issue is a low severity issue like getting lab equipment, the principal will ask ZEO about it. But in any case if the ZEO cannot resolve the issue, they transfer it to MOE through the PDE. Even though the principal have direct access to the ministry, in some cases after reporting the issue to the ministry, they ask principal to get ZEO's approval. As an example, if there is a repair of a building to be done, it has to be inspected beforehand passing money to the school. That inspection is being done by the officers in ZEO. So after they approve the issue, ZEO itself send the issue letter with the approval to MOE through PDE. All the issues are being reported through letters.

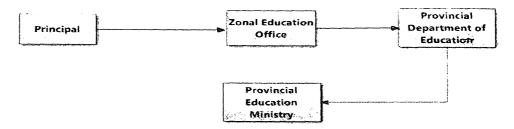
Figure 5 - Existing grievance management procedure in national schools



✓ Provincial schools

Provincial schools only have the access to ZEO. So whenever a resource issue comes up, the principal has to communicate it to zonal education office. After relevant inspection, ZEO send the same issue letter which has been sent by the principal, to the PDE. Some issues like building development, computer and other equipments supply, etc are handled by PEM. So PDE transfer the same issue letter to PEM. According to the issues, PDE transfer the issues to the relevant division. Same issue letter is transferred to these divisions as well.

Figure 6 - Existing grievance management procedure in provincial schools



The divisions are:

- ✓ Teacher establishment division
- ✓ Planning division
- ✓ Education development division
- ✓ Accounts division
- ✓ Internal Audit
- ✓ Administration
- ✓ Disciplinary division
- ✓ School activities division
- Special education and early childhood care and development division
- ✓ Piriven division

3.2 Identified Issues in the Current Procedure

- ✓ The issues are reported and all the communication within the authorities happens through letters. So the delays in postal system in Sri Lanka make the issue resolving process to be delayed as well.
- ✓ A proper reply has not been given by the authority to schools for the communicated resource issues.
- ✓ The resource issue resolving gets more than three months and sometimes the issue never get resolved.
- ✓ Sending a letter to diminutive issues is proving to be ineffective since the authorities have to keep these letters so the document collection getting expanded.
- ✓ When the principals or authorities want to find a particular issue letter sent or received, it is very time consuming since they have to go through the whole lot of document bundles again and again.
- ✓ Authorities do not have a proper way to communicate with the schools to get required information such as exam results, teachers' details, student details, etc.
- ✓ The communication process is not happening in a proper procedure. As an example, even though the provincial schools have been asked to send the resource issues with the approval of ZOE by PDE, sometimes they directly send the letter to the PDE.
- ✓ Less human resources in authorities to work with the huge amount of issues.

3.3 Respondent Opinions On The Overall Project

Most of the respondents have mentioned that the proposed system is a timely project. They have said that since the whole world is moving ahead with IT to make their work easier, the government sector in Sri Lanka also has to enhance with the use of IT. Also since the government also has started the projects like e-Sri Lanka, the respondents have suggested proposing this system to government if possible so the system can be implemented in reality.

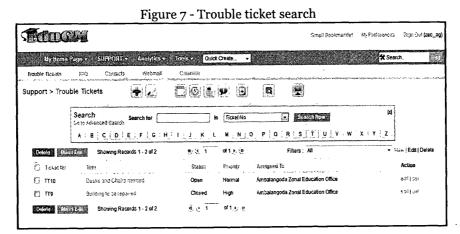
One respondent have suggested implementing this system only in selected schools first. These selected schools can be the schools which are rich with resources such as computers, internet and knowledgeable human resources. So it will be easier to monitor the practicality of the system. Also a proper training has to be given to all the stakeholders who are using the system. Also there should be a team appointed by a higher authority to critically evaluate the system once a month, since some principals might not agree for the ideas along with technology involved. Moreover it will be helpful to measure the efficiency of the system and compare it with the current procedure.

4. Design of an Integrated Communication Portal: "EduGM"

To develop the prototype, an open source CRM template named "SugarCRM" is used and it has been customised in order to achieve required output. Php is used to do the required customisation and MySQL is used as the database. The system is hosted in a hosting environment in the URL of "http://edugm.axis.lk/".

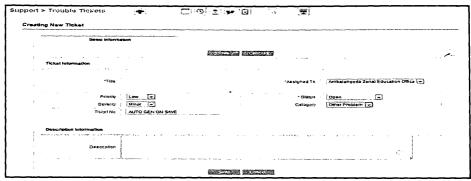
4.1 Resource Issue Management

When a trouble ticket (resource issue) is needed to be raised, user has to follow the link "Support" from the menu and then click "Trouble Tickets". It will direct the user to the following screen. All the raised trouble tickets (issues) will be displayed here. A search option also included here to find an issue more easily. Particular issue can be searched according to the ticket number (The unique number created when raising an issue), title, status, priority and assigned to. Here it is not necessary to provide whole word, even a part of the word or sentence is given, and it will show all the results including that particular part of the word or sentence. Advanced search option is also available where user can search with the options as "not like", "equals to", "not equal to", etc. Several conditions can be added to the same search as well. As an example, in the same search query user can search a particular resource issue by title as well as the priority. The issues can be queried by the first letter of the title as well. It can be done by pressing the required character in the given alphabet in the same search option.



New issue can be raised by clicking the plus (+) sign above the search form. The screen for creating a new issue is as follows.

Figure 8 - Trouble ticket creation



As per the school type, the issue type assigned office will be changed. According to the user requirement, the provincial schools only have access to the zonal education office. National schools have the access to both zonal education offices and to the education ministry to lodge a complaint. Only the relevant authorities will be shown in the field "Assigned To", and the complaint will be lodged to that particular authority. As an example if a principal from a provincial school tries to lodge a complaint, only the zonal education office which is affiliated with his school will be shown in the "Assigned To" field.

User can assign a severity and priority for the issue and keep the status as open. Whenever the issue is resolved, the status can be changed to "closed". After giving a brief description about the issue, user can save the complaint and a number for the complaint will be generated automatically as the trouble ticket number. User can edit a lodged complaint at any time but whenever it is edited, a mail will be generated saying it has been edited to the affiliated parties.

Whenever a resource issue has lodged through the system, an e-mail notification will be sent to the relevant officer. As an example, if a complaint has been lodged to education ministry by a national school, an e-mail will be sent to the authorised personal of the ministry saying that there is an issue to be resolved. Then the officer can log in to the system and check the issue and give a reply.

Here, in the first phase a description about the selected issue will be shown. Then the replies can be seen in a sequential manner as in a forum. User can reply at the bottom and after submitting the reply, that reply will be added to the issue forum as it can be seen in the screen. User can change the status of the issue as well before submitting a reply. As an example if a particular issue has finished resolving, the authority can update the status as "Closed" and submit the reply. The usefulness of this kind of forum method is, anyone who is affiliated with a particular issue can have the overall picture about the issue and can have a thorough understanding on the status of the issue.

5. Recommendations

The future suggestions which can be incorporated to EduGM are described below. By implementing the following options, it will be an added advantage to EduGM and potentially it can be useful to the respective stakeholders.

- ✓ A report which shows the time taken to resolve a particular issue can be incorporated. This time can be measured by taking the time difference from the issue communicated date and issue closed date.
- ✓ An option to see all the resources which have allocated to a particular school will be useful to the authorities. So they can prioritise the resource issues according to that as well. As an example if a

particular school have been given 10 resources per month and another got just 2 resources, then the next time the resource issues from the latter school can be given more priority than the previous.

- ✓ The system can make available in some other languages like Sinhala and Tamil as well. By implementing this, it will be easier for the users to select whatever the language they prefer. But since this is communication process, an option can be given to see what language the other party is capable of using and use a common language which is understandable by both the parties to communicate.
- ✓ Apart from the email alerts, an SMS alert system can be implemented since mobile phones are widely used in Sri Lankan when comparing with the emails to communicate. Then the relevant party can attend to the issue more quickly since the emails are not frequently by non IT related people.

6. Conclusion

The aim of this study is to manage the grievances by providing an effective communication mechanism to schools to communicate the resource issues to relevant authorities. As it is analysed above, this aim is successfully achieved through implementing EduGM in the Sri Lankan public education system. There were obstacles which have occurred during the project, but all the obstacles were overcame successfully with appropriate problem solving methods and the project was completed successfully. Lots of difficulties of the students have been seen by the author, by not having required resources to complete their education. Also when the author was a student in a government school, the author personally experienced problems when the required resources were not available. So if this system is implemented successfully, firstly there will be a better communication mechanism to both principals and education authorities to make their work easier, and secondly the students will receive the required resources quickly comparatively to the current status.

On the whole the author is proud to have conducted such research which is a rare research area in current days and also the author is really satisfied since this system will help students in their education and to become better people in the society.

Acknowledgement: Even though my name appears on the cover of this paper, a great many people have contributed to its production. I owe my gratitude to all those people who have made this thesis possible and because of whom my graduate experience has been one that I will cherish forever.

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