

PROFICIENT CONSTITUTION FOR ONLINE EDUCATIONAL ENVIRONMENT USING FEEDBACK ANALYSIS

MSc D. Rajagopal, Department of Computer Science, Vivekanandha College of Arts and Sciences for women,
Namakkal Dt, TamilNadu, India

E-mail: sakthiraj2782007@gmail.com

MSc K. Thilakavalli, Department of Computer Science, K. S. R College of Arts and Science for women,
NamakkalDt, TamilNadu, India

E-mail: thilaksathya2782007@gmail.com

Received: May, 20.2014.

Accepted: June, 07.2014.

Original Article

UDK 37.018.43:004.4

Abstract. Modern world learners want to get more knowledge about their respective field which they like. The Learner just has to implement the knowledge using which they are learnt. This implementation has been used in the modern world. Learners are like to study in within the term they like to learn supplementary bunch. This requirement has been fulfilled by the online education system. The online Educational System provides the Notes, Books, Audio and Video Lectures, Manuals, Presentations etc., learners are expecting more apart from the contents or the learners are not willing to study which were provided by the online Educational System. The online Educational system provider has to know about the Learners satisfaction level, which has been evaluated by the Learners feedback. The feedback analysis has been evaluated by the selected criteria. Each criterion has some scoring options. Using this option, the learners will give the feedback to the particular subject trainer through the scoring options. Finally, feedback scores are evaluated and give the advice to the trainer to implement the new techniques for giving the training. This operation is instructing the trainer to implement and update their teaching skills.

Keywords: *E-learning, Learner, Trainer.*

1. INTRODUCTION

Anything can be able to learn from anywhere through the Internet. The use of electronic media, information and communication technologies in education, teaching and training is called E-learning (Awad, M., Venkatesan, S., Roberts, H., Keating, N., and

Myles, P. 2013). E-learning provides on the Management decreasing the cost of learning delivery, and inexpensive travel, survival cost and time away from the job. The proposed system detects the differences among trainers by using the Evaluation Criteria. An important goal of E-learning system is to deliver instructions that can produce equal or better outcomes than face-to-face learning systems. To achieve the goal, an increasing number of empirical studies have been conducted over the past decades to address the issue of what antecedent variables affect the students's satisfaction and learning outcomes and to examine potential predictors of e-learning outcomes (Bassil, Y. 2012). A positive change in knowledge outcomes was shown as an increase in the proportion of students with correct responses after completion of the e-learning package as compared to baseline knowledge scores (Srivastava, E., and Agarwal, D. N. 2013).

2. METHODOLOGY TO COLLECT THE FEEDBACK

The numbers of Criterion have given to the learners to give the performance of the trainer. The Trainer Performance can be given like Very good, Good, Average, Need Improvement and Poor. Each performance has been allocating some marks. Finally, conclude the performance of the faculty through the marks which have been given by the learners. The Criteria has listed below.

- Knowledge base of the faculty for course taught.
- Communication skills of the faculty

Corresponding Author

D. Rajagopal, Department of Computer Science, Vivekanandha College of Arts and Sciences for women,
Namakkal Dt, TamilNadu, India

E-mail: sakthiraj2782007@gmail.com

(in terms of course delivery and making learner understand the course).

- Sincerity/Commitment/Punctuality
- Lesson Planning and Execution.
- Ability to integrate Content with other courses/Other issues, to provide a broader perspective.
- Accessibility of the trainer in and out of the class (includes availability of the trainer for discussion outside class).
- Answering Questions/Clarifying Doubts.
- Amicability with Students
- Motivating/Counseling the student for their betterment.
- Providing Course materials and other technical details.

3. STEPS TO FIND THE TRAINER PERFORMANCE

Criterion types (CT) need to be defined to analyze the trainer. Each criterion has been awarded and evaluated by the Score Type (SCT). They have to find the Number of counts for the score type (NCT) and assign the scores for particular criterion (SPC). These are the basic requirements to find the Total Score for Particular Criterion (TSPC), Total Score for All Criteria (TSAC), Average Score for Particular Criterion (ASPC) and Average Score for all Criteria (ASAC). The Number of Criterion has defined as NC.

$$TSPC = \sum [SCT * SPC] / \sum [NCT]$$

$$ASPC = [TSPC / 100] / NC$$

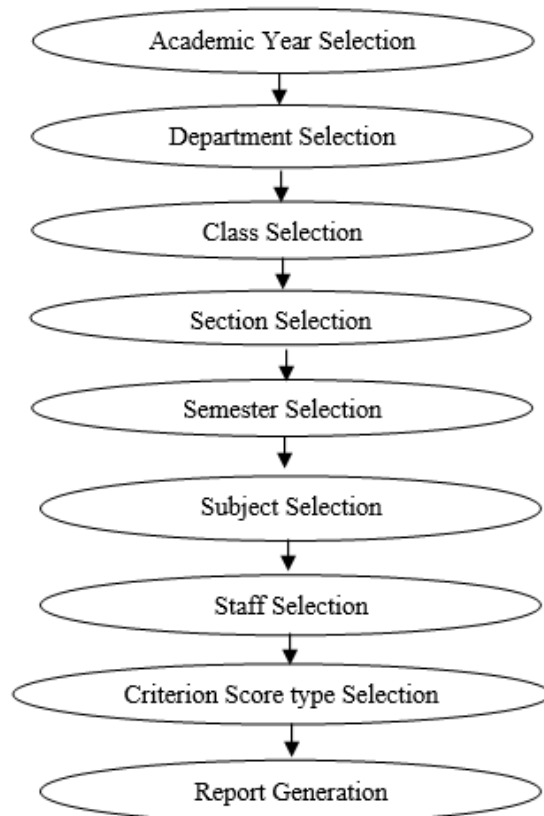
$$TSAC = ASPC / NC$$

$$ASAC = TSAC / NC$$

The Average Score for Particular Criterion (ASPC) which has been secured by the learners. The Average Score for all Criteria is the Cumulative and the score which have been secured by the learners using the Proposed System.

4. DESIGN OF THE FEEDBACK ANALYSIS

The Proposed System has been designed for learners to give the feedback about the trainers' performance and the Environments. The Design starts with Academic Year Selection and Ends with Cumulative Feedback Report.



5. DATABASE TOOL

DBMS short for database management system plays an important role in most real-world projects that require storing, retrieving and querying digital data (Saba, T.).

5.1. Advantages of Microsoft SQL Server

1. Microsoft SQL Server has built-in data integrity/recovery facilities. Instead of all users accessing the same file at the same time, each user talks to the server software, and the server software manages the creation, reading and writing of information to each table. Data backup and restore options are built into the server software.

2. Microsoft SQL Server has user and group level security. Instead of giving each user access to the folder that contains all of your data files (as is necessary with the native database), you simply give them rights to speak to the server software. Rights can be granted based on your Windows Domain users and groups. The actual file that the server uses in order to store data can be invisible to the user.

3. As the number of users grows, it will provide better performance than the native Database.

4. Performance is not affected by anti-virus programs.

5. It is an industry standard database, meaning almost any database aware application will need to be able to access your data, including various report writers and Excel.

5.2 .Disadvantages of Microsoft SQL Server

1. Require a level of knowledge of the Microsoft SQL Server environment.

2. Backups must be done in a different way.

5.3. The Way to Use MS SQL Server

- Database Creation

In case of MS SQL Server, by clicking on the corresponding icon, a new database can be created.

- Database Login

Once a database is created, a user can login to his/her database and, after which he/she can work with the objects in the database. In case of Oracle, we are always automatically logged into the default database of Oracle and we can login into the same as different users.

- Database Rename

A database in MSSQL server can be renamed by selecting the corresponding option.

- Database Drop

There is an option provided for dropping

an already existing database when the GUI is connected to the MSSQL Server.

- Database Profile

The user can monitor and view the database properties, like name, owner, and size, date of creation, status and contents.

- Objects

The user can access the opened database through a Graphical User Interface. Through this interface, the user can see and work with the database objects like tables, queries and reports.

- Create Table

The user can create tables in the selected database. A design view is provided, through which the user can simply enter the field name, select the data type from a select list. There are separate options for setting a field as primary, unique, or not null. There is another option for adding checking constraint on a field or a default value in a field.

- View Table

This option allows the user to view the contents (rows) in a table.

- Execute Queries

The user can execute any query on the database using the user-friendly graphical interface. All the tables in the database are listed, from which the user can choose the one(s) in which he/she has to execute the query. The user can choose the type of query to be executed (like select, update, make-table and delete). The field(s) in the table(s) in which the query needs to be executed can be selected from a list and the conditions can be input, all using the graphical interface. The conditions can include sorting (ascending, descending or none), fields to display, criteria and any other specification, if any. The result of the query action is exhibited.

- Select

User can first select a table, and then execute select queries on it. Select query can be executed in different ways:

- Specific fields or all fields in a table can be displayed.

- Only distinct fields can be displayed if required.
- Aggregate function can be applied to a field selected.
- Field or fields satisfying a specific condition can be selected.
- Selection can also be made using Order by or Group by clause.
- Alter

Any alteration on the table can be made on a selected table using this option. Alterations that can be made includes the Following:

- Alter the data type of a existing field in the selected table.
- Altering the selected table by adding a new field to the table.
- Altering the selected table by dropping an existing field in the table.
- Altering the selected table by adding a constraint to afield in the table.
- Altering the selected table by dropping a constraint specified on the field in the table.

- Update

This option is used for making any updating on a selected table. Any condition for updating can also be specified if required.

- Delete

This option is used for deleting rows from a selected table. Deletion can also be performed by specifying conditions so that only rows satisfying that condition are deleted.

- Drop

This option allows a user to drop an already existing table from a database

- Insert

Using this option, the user can insert rows into an existing table.

- SQL query analyzer

If required, the user can execute queries in SQL mode, not using the graphical interface. A separate workspace is provided, where the query can be typed and executed.

The Feedback collection is checked

with two different database tools. Both are developed by the Micorsoft Corporation. One is MS-Access. Another one is SQL SERVER. While using the MS-Access tool the application not stored all the data to the database because the tool has not the backup media retention “Wait indefinitely” and Recovery interval. These two choices are used to store the feedback to the database without missing. These choices are fulfilled by the SQL SERVER Database tool. The Existing System has used the MS-Access database tool and the proposed System has used to the SQL SERVER Database tool.

6. RESULT AND CONCLUSION

The Feedback is collecting from the Learners through Online using the Proposed System. While using the Existing System, the Number of receiving feedback is 82.38%. But the proposed system receives 98.74%.

TOTAL STRENGTH	FEEDBACK USING EXISTING SYSTEM	FEEDBACK USING PROPOSED SYSTEM
53	45	53
54	48	54
48	42	48
52	43	51
55	42	53
56	42	55

Table 6.1. The Number of Feedbacks collecting from the Learners through Online

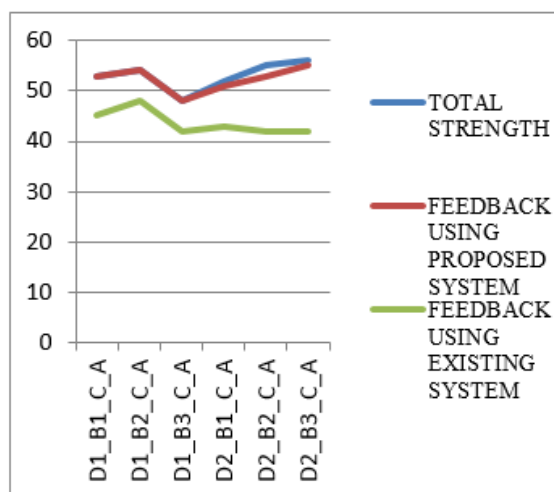


Figure 6.1. The Number of Feedbacks Collecting from the Learners through Online (Department, Branch, Class, and Section wise Analysis)

7. FUTURE DEVELOPMENT

For making the system adaptive to the changing environment, it will be necessary that the system will be produced above the percentage which is provided by the proposed system.

Srivastava, E., & Agarwal, D. N. (2013). E-learning: New trend in Education and Training”, *International Journal of Advanced Research*, 1(8).

8. ABOUT THE AUTHORS

D. RAJAGOPAL has completed his Bachelor of Computer Science degree and completed his Master of Computer Applications degree in Periyar University in the year 2003 and 2006 respectively. He completed his Master of Philosophy in PRIST University in the year of 2012. He has 3 Years and 10 Months experience in the field of Software Developing and 4 Years experience in the field of Teaching. He delivered more than 10 seminars & training programs for different Academic Institutions. His research area of Interest is Computer Networks (Wireless & Wired), Mobile Computing, Data Mining, Software Programming (OOPS).

K.Thilakavalli has completed her Bachelor of Physics degree in Bharathiar University in the year of 2006. She completed her Master of Computer Applications degree in Anna University in the year 2009. She completed her Master of Philosophy in PRIST University in the year of 2010. She has 5 Years experience in the field of Teaching. She published 3 International Conference papers and a National Conference paper. Her research area of Interest is Computer Networks (Wireless & Wired), Mobile Computing, Data Mining.

Conflict of interests

Authors declare no conflict of interest.

REFERENCES

- Awad, M., Venkatesan, S., Roberts, H., Keating, N., & Myles, P. (2013). Developing and evaluating an e-learning package for medical students on genocide and public health. *International Journal of Medical Education*, 4, 180-185.
- Bassil, Y. (2012). A Comparative Study on the Performance of the Top DBMS Systems, *Journal of Computer Science & Research (JCSCR)* 1, 1-20.
- Saba, T. Implications of E-learning systems and self-efficiency on student's outcomes: a model approach. *Saba Human-centric Computing and Information Sciences*, 2,

