# A Summary of Recent Studies Published by DIU Researchers





The researchers of Daffodil International University (Faculty, Students, Alumni) have conducted a number of research projects related to SDG 4 (Quality Education) and results of the projects have also been published as research papers in various international reputed peer reviewed and Scopus indexed journals. The summary of the research publications related to SDG 4 are given below:

# 1. In quest for sustainable quality assurance in higher education: An empirical investigation

### **Hasnan Ahmed**

United International University, School of Business and Economics, Madani Avenue, Gulshan Dhaka, Bangladesh

#### **Mohammad Ali Ashraf**

United International University, Department of Economics, Madani Avenue, Gulshan, Dhaka, Bangladesh

### Kabirul Islam

Daffodil International University, Department of Multimedia and Creative Technology Dhaka, Bangladesh

# Raquiba Hasinat

United International University, School of Business and Economics, Madani Avenue, Gulshan Dhaka, Bangladesh

**DOI:** <a href="https://doi.org/10.18844/cjes.v17i5.7215">https://doi.org/10.18844/cjes.v17i5.7215</a>

### **Abstract**

The main intent of the present research is to explore the particular practices of human resource management (HRM) to impact on sustainable assurance in quality higher education. Specifically, how promotion opportunity, performance appraisal, work condition and payment package influence teachers' job satisfaction which, in consequence, impacts on education quality in the private universities. To attain this objective, this research applies the two-factor theory of Herzberg as its theory background. Data (n = 517) were

collected from 21 private universities' faculty following the technique of random sampling. The study analyzed the data utilizing structural equation modeling through the analysis of moment structure. Results demonstrate that all four HRM variables are statistically positively significant to influence faculty job satisfaction. It also indicates that faculty job satisfaction also influence positively quality education. The study also indicates that if proper HRM practices are nurtured in private higher education institutes (HEIs) that will enhance faculty satisfaction which will sustain the development of quality education.

Keywords: HRM practices; Faculty satisfaction; Sustainable quality

# 2. Evolution of quality assurance practices in enhancing the quality of open and distance education in a developing nation: a case study

<u>Farhana Ferdousi</u> (Department of Business Administration, East West University, Dhaka, Bangladesh)

<u>Amir Ahmed</u> (Department of Real Estate, Daffodil International University, Dhaka, Bangladesh)

Md Abdul Momen (Department of Business Administration, East West University, Dhaka, Bangladesh)

Asian Association of Open Universities Journal

#### Abstract

### **Purpose**

The purpose of this study is to look at the challenges and successes that the case institution has had in implementing and maintaining quality assurance (QA) processes. The study also looks into the role of QA techniques in improving an institution's performance in a developing country.

# Design/methodology/approach

The research is qualitative. Nine significant persons were interviewed, including the institution's top administration, faculty members and related staff. Data were gathered to learn more about the background, incremental

changes and numerous internal and external elements that influenced how QA was approached over time.

### **Findings**

The findings revealed the challenges and experiences of the evolution of QA practices in the case institution. The results show the changes in QA practices regarding three aspects, including people, place and program of case institutions under three phases. During phases I and II, the adoption and upgradation of QA practices were very slow; phase III showed significant improvement in all three aspects. In addition, the positive impact of QA practices is evident in improving the performance of students and teaching and nonteaching staff of the case institution.

### **Practical implications**

The findings of this research could aid open and distance learning (ODL) providers in other developing nations in understanding the challenges of such a system. It may also make it easier for other ODL providers to comprehend the QA-led success in stakeholder confidence, employability and reputation.

### Originality/value

The research will give insights into how QA procedures are used and valued in ODL in developing nations.

# 3. Promoting student-centred blended learning in higher education: A model

Md. Kabirul Islam, Daffodil International University

Md. Fouad Hossain Sarker, Daffodil International University

M. Saiful Islam, University of Dhaka

E-Learning and Digital Media, Volume 19, Issue 1

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#### **Abstract**

This empirical study is conducted in a blended learning setting of a technologyfocused private university in Bangladesh to offer a model that could help attain a comprehensive goal of blended learning. The main objectives of this study are to examine course design in a blended learning setting, strategies adopted by the course teachers to maximize students' online interactions in a collaborative manner and how well these strategies had an impact on quality of blended teaching and learning in tertiary education. Drawing upon a quasiexperimental approach, qualitative data were collected by observing the teaching and learning activities of a course named 'Bangladesh Studies' over a four-month semester. Findings of this study suggest a model that would allow better student-teacher interaction in both synchronous and asynchronous modes of teaching and learning based on three sequential stages such as referring to and discussing online peer-group comments in the regular face-toface classes in asynchronous mode (stage 1), off-campus synchronous mode of interactions to utilize students' personal study hours (stage 2) and off-campus asynchronous mode of interactions to offer flexibility for collaborative learning (stage 3). It is argued that the model that has been offered could be useful in promoting innovative and contextual pedagogy which will essentially involve students in sharing, interacting and collaborating discussions for knowledge construction and hereby enable overall cognitive development of students in a blended learning environment.

# 4. Sentiment Analysis using Machine Learning and NLP for Digital Education

### Md. Shahed Hossen

Daffodil International University, Dhaka, Bangladesh

# Md. Nwoshad Alam Chowdhury

Daffodil International University, Dhaka, Bangladesh

# **Arpita Mony Sristy**

Daffodil International University, Dhaka, Bangladesh

# Nusrat Jahan

### Daffodil International University, Dhaka, Bangladesh

#### Abstract:

In this present day, a higher level of education about various subjects can be acquired through various applications and websites which are known as online educational platforms. That is why digital education has its platform to spread knowledge among people. Each of these applications contains individual content along with the user point of view which is usually expressed in the comment section, and those reviews or comments can be processed through the natural language processing. On the other hand, there are numerous machine learning algorithms for evaluating these reviews to find out the best and most user-friendly online educational platform. This paper has considered 6000 reviews which have been collected manually from education-related six applications and classified them by analyzing the feelings of the reviewers. The use of 4-gram with Logistical Regression produced higher accuracy (88%) among five algorithms to classify the reviewer's comment.

### **Keywords**

- <u>Sentimental Analysis</u>,
- <u>Digital Education</u>,
- Natural Language Processing,
- Logistic Regression,
- <u>4-Grams</u>

# 5. Acceptance of E-Learning Among University Students During Covid-19 Crisis: Bangladesh Perspective

- Maruf Ahmed Tamal Daffodil International University
- Md Fouad Hossain Sarker Daffodil International University
- Md Kabirul Islam Daffodil International University
- Mohamed Emran Hossain Daffodil International University

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### Abstract

COVID-19 pandemic has dramatically transformed the global education system to a great extent. In a short period, e-learning has been adopted globally as an al-ternative teaching-learning medium. However, this sudden transition raises many concerns about e-learning acceptability. To make a clear inference, this study investigated the acceptance of e-learning (perceived usefulness, and perceived ease of use) among university-level students using the Technology Acceptance Model (TAM). The empirical analysis was performed on a sample of 694 university students in Bangladesh during the COVID-19 crisis. Findings revealed that students' overall e-learning acceptability was not adequate (32.8%), a significant number of students (46.8%) were not satisfied with elearning experience and that majority (70.2%) of students preferred face-toface education systems for their future study. The study also highlighted the underlying factors that negatively affect students' e-learning acceptance such as lack of technological skills, less familiarity with e-learning, lack of simplicity, low productivity, inefficiency, and so on. The overall findings of this study are intended to assist stakeholders to understand the gaps that need to be addressed immediately to increase students 'e-learning acceptability in the future.

# **Keywords:**

E-learning, Acceptance, Satisfaction, COVID-19, Technology Acceptance Model (TAM), Developing country