Teaching Dossier

Krishno Dey, Lecturer

Department of Computer Science and Engineering, Faculty of Science and Information Technology

Daffodil International University

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Date: 10-06-2022

The purpose of this teaching dossier is to describe the complete spectrum of my efforts as a teacher over the period of January 2022 to June 2022, and the full range of my contributions as a teacher. This dossier chronicles my development as a teacher, highlights the very my teaching skills, and records the learning responses achieved by my student. It serves as my self-evaluation tool for my career planning and personal development of my teaching abilities as well as to raise the value of education in the computer science and engineering department and the Faculty of Science and Information Technology of Daffodil International University.

Contents

A. Curriculum Vitae

Krishno Dey

Lecturer,

Department of Computer Science and Engineering,

Daffodil International University

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Contact No: +8801786-147796

Website: https://sites.google.com/view/krishnodey

Research Interests

Deep Learning, Machine Learning, Data Science, Computer Vison, Natural Language Processing, Artificial Intelligence and Cryptography

Educational Qualifications

Bachelor of Science in Computer Science and Engineering   Graduation: March 2021

Faculty of Science and Information Technology

Daffodil International University (DIU), Dhaka

CGPA: 3.92 out of 4

Undergraduate Projects

i.   Light Football Manager Simulation Game with MySQL and PHP
ii. Student Information System with SQL Server and Java

Publication

Dey, Krishno, Md Mustahid Hassan, Md Masud Rana, and Mst Hasna Hena. "Bangladeshi Indigenous Fish Classification using Convolutional Neural Networks." In 2021 International Conference on Information Technology (ICIT), pp. 899-904. IEEE, 2021.

Eteka Sultana Tumpa, Krishno Dey, "A Review on Applications of Machine Learning in Healthcare", 28-30, April 2022 Cheranmahadevi, Tirunelveli, India.

Research Experience

Undergraduate Thesis   **September 2019 - Januray2021**

Bangladeshi Indigenous Fish Classifications using Convolutional Neural Networks under the supervision of Asst. Prof. Ms. Most. Hasna Hena

[Presenting fast and automatic indigenous fish classification with great accuracy and other performance measures]

Professional Experience

- Lecturer   January 2022 – Present
  Department of Computer Science and Engineering,

  Faculty of Science, Information and Technology,

  Daffodil International University

- TAF Fellow and Teaching Assistant   February 2021 –
  December 2021
  Department of Computer Science and Engineering,

  Faculty of Science, Information and Technology,

  Daffodil International University

Technical Skills

- **Programming Language:** Python, PHP, Java, C, C++, Assembly Language
- **Web Development:** HTML, XML, CSS, Bootstraps, JavaScript, jQuery
- **Databases Experience:** SQL Server, MySQL, SQLite, Firebase
- **Environments:** Android Studio, Jupyter Notebooks, Google Colab, Kaggle Notebooks, Codeblocks, Netbeans, Emulator (80X86), Eclipse, SQL Server, xampp, PyCharm, Sublime Text, Microsoft Visual Studio
- **Operating Systems:** Windows, Android, Ubuntu, Debian
- **Circuit Simulation:** Tinkercad, OrCAD

- **Presentation Tools:** Prezi, Microsoft PowerPoint, WPS Presentation, Google Slides
- **Type Setting:** Microsoft Word, Google Docs, Latex, WPS Writer
- **Spreadsheets:** Microsoft Excel, Google Sheets, WPS Spreadsheets
- **Interfacing Device:** Raspberry Pi, Arduino

Language Skills

- English (Professional working proficiency)
- Bangali (Native or bilingual proficiency)

Awards and Scholarships

Tuition fee waiver based on academic result in 10 semesters out of 12 semesters from Faculty of Science and Information Technology, Daffodil International University (DIU).

- Tuition Fee Waiver for Excellent result in B.Sc.

B. Teaching Philosophy

I believe that a teacher is morally obligated to enter the classroom with only the highest of expectations for each and every one of his students. Thus, the teacher maximizes the positive benefits that naturally come along with any self-fulfilling prophecy. With dedication, perseverance, and hard work, his students will rise to the occasion.

I aim to bring an open mind, a positive attitude, and high expectations to the classroom each day. I believe that I owe it to my students, as well as the community, to bring consistency, diligence, and warmth to my job in the hope that I can ultimately inspire and encourage such traits in the children as well.

I believe that all children are unique and have something special that they can bring to their own education. I will assist my students to express themselves and accept themselves for who they are, as well as embrace the differences of others.

Every classroom has its own unique community; my role as the teacher will be to assist each students in developing their own potential and learning styles. I will present a curriculum that will incorporate each different learning style, as well as make the content relevant to the students' lives. I will incorporate hands-on learning, cooperative learning, projects, themes, and individual work that engage and activate students learning.

C. Teaching Artifacts

   i.   Course Taught
- CSE412 Big Data and IoT (1 Cr): Spring 221
- CSE43 Big Data and IoT (2 Cr): Spring 221
- CSE414: Simulation and Modeling (3 Cr): Spring 221
- CSE415: Simulation and Modeling (1 Cr): Spring 221
- CSE421 Computer Graphics (1 Cr): Summer 222
- CSE422 Computer Graphics (2 Cr): Summer 222

   ii.   Developed Courses in the DIU BLC
- CSE412, CSE413, CSE414, CSE414, CSE421 and CSE422 courses are developed in the BLC (a LMS) for facilitating online classes, on campus classes and blended learning.

   iii.   **A Sample Syllabus**

	Daffodil International University **Department of Computer Science and Engineering (CSE)** **Course Outline**		
Course Code:	CSE 421		
Course Title:	Computer Graphics		
Program:	B.Sc. in CSE		
Faculty:	Faculty of Science and Information Technology (FSIT)		
Semester:	Summer	**Year:**	2022
Credit:	3.00	**Contact Hour:**	3.00
Course Level:	L4T2	**Prerequisite:**	MAT211, CSE213, CSE222, STA 223
Course Category:	Core Engineering		
Instructor Name:	Krishno Dey		
Designation:	Lecturer		
Email:	krishno.cse@diu.edu.bd		
Office Address:	Room-518, CSE Building, DIU		
Class Hours:	**Section**	**Class Day**	**Class Hours**	**Classroom**
		Monday	1.5	705 DT5
		Tuesday	1.5	304 DT
DIU BLC Link and Key:	https://elearn.daffodilvarsity.edu.bd/course/view.php?id=16162 Enrollment Key: CSE421-kd		

1. **Course Rationale**

Computer Graphics is a 3-credit senior-level course that introduces the concepts and implementation of computer graphics. As one of the important subject areas of the study of computer science and information systems, this course will focus on the theoretical aspects and implementation of computer graphics using Open GL.

1.1. Course Objective

Computer Graphics and Design - Foundation provides potential for the engagement of integrated learning opportunities and the capacity to develop design thinking skills to effectively transfer knowledge and understanding across disciplines. The applied design thinking and problem solving focus of this course helps equip learners to develop skills essential for the digital age.

1.2. Course Outcomes (CO's)

CO1	Able to explain the core concepts of computer graphics, including output primitives, anti-aliasing, fundamentals of colour models, lighting and shading models, animation, dithering, hidden surface elimination and rendering, anti-aliasing, 3D display-perspective and parallel projection.
CO2	Able to apply the concepts of different algorithms of output primitives and transformation in 2D and 3D
CO3	Able to analyse objects viewing and Clipping Algorithm.

1.3. Program Outcomes (PO's)

Program Outcomes are reported in Appendix-I.

1.4. CO-PO Mapping

PO's / CO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2		3										
CO3			3									
CO4												
CO5												

1.5. Mapping of CO-PO with Corresponding Learning Taxonomy

CO No.	CO Statement	Corresponding PO No.	Domain/level of learning taxonomy	Delivery methods and activities	Assessment tools
CO1	Able to explain the core concepts of computer graphics, including output primitives, anti-aliasing, fundamentals of colour models, lighting and shading models, animation, dithering, hidden surface elimination and rendering, anti-aliasing, 3D display-perspective and parallel projection.	PO1	L2	TLA1, TLA2, TLA3	Midterm/Final (Direct Method)
CO2	Able to apply the concepts of different algorithms of output primitives and transformation in 2D and 3D.	PO2	L3	TLA1, TLA2, TLA4	Midterm/Final (Direct Method)
CO3	Able to analyse objects viewing and Clipping Algorithm.	PO3	L4	TLA1, TLA2, TLA4	Midterm/Final (Direct Method)

1.6. CO Assessment Scheme

Assessment Task	CO's					Mark (Total=100)
	CO1	**CO2**	**CO3**	**CO4**	**CO5**	
Attendance	--	--	--	--	--	7
Class Test (CT1, CT2, CT3)	--	--	--	--	--	15
Assignment	--	--	--	--	--	5
Presentation	--	--	--	--	--	8
Midterm Examination	10	15				25
Semester Final Examination	10	10	20			40
Total Mark						100

2. Strategies and Approaches to learning

2.1. Teaching and Learning Activities

TLA1	Lectures twice a week using multimedia of different topics.
TLA2	Interactive discussion using Online/multimedia or whiteboard of different topics.
TLA3	Group discussion and presentation regarding diverse problems and corresponding lectures.
TLA4	Evaluation of class performances to reach each student in a class for every topic.

3. Course Schedule and Structure

3.1. Textbook

Computer Graphics, by Donald Hearn, M. Pauline Baker

3.2. Reference Books

1.   Schaum's Outline of Computer Graphics by Ray Plastock, Gordon Kalley, Zhiang Xiang, Zhingang Xiang

2.   C Programming Using Turbo C++ by Robert Lafore

3.   Fundamentals of Computer Graphics, by Peter Shirley et al., ISBN 978-1568812694

4.   Interactive Computer Graphics: A Top-Down Approach with Shader-Based OpenGL by Shreiner and Angel, Pearson Education ISBN 9780273752264

5.   Computer Graphics: Principles and Practice by Foley, Van Dam, Feiner, & Hughes, Addison-Wesley ISBN 0201848406

3.3. Course Plan/Lesson Plan

Week	Lesson.	Topic	Teaching and Learning Activities (TLAi)	Textbook & Video Reference	Related CO's
1	Les. 1	Introduction: A Survey of Computer Graphics, Application of Computer Graphics	TLA1	Chapter-1 [page 4-page 34]	CO1

Week	Les son.	Topic	Teaching and Learning Activities (TLAi)	Textbook & Video Reference	Related CO's
	Les. 2	Video Display Devices: Refresh Cathode Ray Tubes, Raster and Random Scan Displays, Color CRT Monitors, DVST, Flat-Panel Displays.	TLA1	Chapter-2 [page 36-page 52]	CO1
2	Les. 3	Points and Lines, Line Drawing Algorithm, DDA Algorithm	TLA1, TLA3	Chapter-3 [page 84-page 88]	CO1, CO2
	Les. 4	DDA Algorithm-example with plot in a graph.	TLA1, TLA3, TLA4	Do	CO1, CO2
		(Class Test – 1, Assignment – 1)			
3	Les. 5	Bresenham's Line Algorithm with Parameter description.	TLA1, TLA3	Chapter-3 [page 88-page 92]	CO1, CO2
	Les. 6	Bresenham's Line Algorithm with example	TLA3, TLA4	Do	CO1, CO2
4	Les. 7	Circle Generating Algorithm, Properties of Circle, Midpoint Circle Algorithm	TLA1, TLA3	Chapter-3 [page 97-page 101]	CO1, CO2
	Les. 8	Midpoint Circle Algorithm with example	TLA3, TLA4	Do	CO1, CO2
5		(Class Test – 2)			
	Les. 9	Two-Dimensional Geometric Transformation	TLA1, TLA2	Chapter-5 [page 184-page 190]	CO2
	Les. 10	2D Geometric Transformation Example	TLA1, TLA2, TLA4	Chapter-5 [page 184-page 190]	CO2
6	Les. 11	Antialiasing-Different techniques	TLA1, TLA2	Chapter-4 [page 171-page 178]	CO1
	Les. 12	Review Class for Mid-term exam			
		(MID–TERM EXAM)			

Week	Les son.	Topic	Teaching and Learning Activities (TLAi)	Textbook & Video Reference	Related CO's
7	Les. 13	Two-Dimensional Viewing, Window-to-Viewport Coordinate Transformation	TLA1, TLA2	Chapter-6 [page 217-page 221]	CO1
	Les. 14	Two-Dimensional Clipping, Cohen-Sutherland Line Clipping Algorithm	TLA1, TLA2, TLA4	Chapter-6 [page 224-page 230]	CO3
8	Les. 15	Polygon Clipping: Sutherland- Hodgeman Polygon Clipping Algorithm	TLA1, TLA3	Chapter-6 [page 237-page 242]	CO3
	Les. 16	Sutherland- Hodgeman Polygon Clipping Algorithm-Example	TLA1, TLA3, TLA4	Do	CO3
9	Les. 17	Polygon Clipping: Weiler-Atherton Polygon Clipping Algorithm	TLA2, TLA3	Chapter-6 [page 242-page 243]	CO3
	Les. 18	Weiler-Atherton Polygon Clipping Algorithm-Example	TLA4	Do	CO3
10	Les. 19	Three-Dimensional Display Methods, Parallel Projection, Perspective projection	TLA1, TLA3	Chapter-9 [page 297-page 299]	CO1
	Les. 20	Depth Cueing, Visible Line and Surface Identification, Surface Rendering	TLA1, TLA3	Chapter-9 [page 299-page 301]	CO1
11		(Class Test-3, Assignment – 2)			
	Les. 21	Three-Dimensional Geometric Transformation	TLA1, TLA3	Chapter-10 [page 327-page 346]	CO2
	Les. 22	Example of 3D Geometric Transformation	TLA2, TLA3, TLA4	Chapter-11 [page 408-page 423]	CO2
12	Les. 23	Halftone Pattern and Dithering Techniques, Color Models and Color Applications	TLA1, TLA3, TLA4	Chapter-14 [page 516-page 522]	CO1
	Les. 24	Review Class			
		(FINAL EXAM)			

4. Assessment Methods

Assessment Strategy:
- Creative/ scenario-based questions
- Questions mapping with the learning outcomes
- Written/ oral examinations

Grading System

Numerical Grade	Letter Grade	Grade Point
80-100	A+	4.00
75-79	A	3.75
70-74	A-	3.50
65-69	B+	3.25
60-64	B	3.00
55-59	B-	2.75
50-54	C+	2.50
45-49	C	2.25
40-44	D	2.00
Less than 40	F	0.00

CIE – Breakup (Theory) [60 marks]

Bloom's Criteria	Attendance (07)	Class Test (15)	Assignment (05)	Presentation (08)	Mid Exam (25)
Remember		05			
Understand		05	02	02	05
Apply		05		03	10
Analyze			03		10
Evaluate					
Create				03	

SEE – Semester End Examination [40 marks] {Theory}

Bloom Criteria	Score for the Test
Remember	05
Understand	05
Apply	15
Analyze	05
Evaluate	05
Create	05

Appendix-1: Program outcomes

Program Outcomes (POs) are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitudes that students acquire while progressing through the program. The program must demonstrate that by the time of graduation, students have attained a certain set of knowledge, skills and behavioral traits to some acceptable minimum level. The BAETE specifically requires that students acquire the following graduate attributes.

POs	Category	Program Outcomes
PO1	Engineering Knowledge	Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis	Identify, formulate, research the literature and analyze complex engineering problems and reach substantiated conclusions using first principles of mathematics, the natural sciences and the engineering sciences.
PO3	Design/Development of Solutions	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety as well as cultural, societal and environmental concerns.
PO4	Investigations	Conduct investigations of complex problems, considering design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.

PO5	Modern tool usage	Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society	Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.
PO7	Environment and sustainability	Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics	Apply ethical principles and commit to professional ethics, responsibilities and the norms of the engineering practice.
PO9	Individual work and teamwork	Function effectively as an individual and as a member or leader of diverse teams as well as in multidisciplinary settings.
PO10	Communication	Communicate effectively about complex engineering activities with the engineering community and with society at large. Be able to comprehend and write effective reports, design documentation, make effective presentations and give and receive clear instructions.
PO11	Project management and finance	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work as a member or a leader of a team to manage projects in multidisciplinary environments.
PO12	Life Long Learning	Recognize the need for and have the preparation and ability to engage in independent, life-long learning in the broadest context of technological change.

Course Resources:

All the materials (lecture slides, lecture videos, class recordings, book chapters) can be found in the DIU Blended Learning Center (BLC)

iv. **Prefects**

Prefects are typically selected from senior students who can assist the course teachers to mentor the students, especially in lab classes. The details of two prefects are given here who have worked with me in the Simulation and Modeling Lab and Computer Graphics Lab (CSE422) course to assist me in mentoring the students.

Name: Raunak Ahmed Email: rounak15-12023@diu.edu.bd Student ID: 183-15-12023 Course: Simulation and Modeling Lab	Name: Md. Touhidur Rahman Email: touhidur15-10361@diu.edu.bd Student ID: 173-15-10361 Course: Simulation and Modeling Lab

v. Pre Recorded Video Lecture for this course (non-interactive) ([click here to view](#))

vi. A Snapshot of Sample Weekly Interactive Learning Content
Provided in the appendix

vii. A Snapshot of Sample Discussion Forum
Provided in the appendix

D. Reflections of Teaching Artifacts

i. **Student Evaluation Questions (Anonymous)**
The feedback was taken for Computer Graphics (CSE421) and Simulations and Modeling (CSE414) courses

Instructor Name *

Your answer

Semester *

◯ Fall 2020

Course Code *

◯ CSE214 (Algorithm)

◯ CSE450 (Data mining)

ii.   Student Evaluation Report

Please evaluate your course instructor using the following questions. Options (5=Superior, 4=Good, 3= Average, 2 = Fair, 1 = Poor)"

Fig. 1: The Summary of the Feedback (Total participants: 63, Superior: 52; Good: 9; Average: 1; Fair: 0; Poor: 1)

Comments from Students:

- "The courses design are ok. And sir you give us good lecture. That's why we don't have to read again and again to remember our lessons."
- "Yes. The course has been designed in proper way. We are Learning new things about computer graphics and the learning environment is also very good and helpful."
- "Yes, the course has been designed in the proper way. It's enough for us."
- "No, I don't think contents are designed properly."

iii. **Rubric for Peer Teaching Evaluation**

Criteria	Very Poor (0.0-2.0)	Poor (2.1 – 4.0)	Average (4.1-6.0)	Good (6.1-8.0)	Excellent (8.1-10)
C1: Content Knowledge					
C2: Use of Instructional Materials					
C3: Class Organization					
C4: Presentation Form & Substance					
C5: Teacher-Student interactions					
C6: Student Participation					
C7: Assessment practices					

Additional Comments by the Evaluator (if any):

Description of the Criteria:

C1: Content Knowledge	- Selection of class content worth knowing and appropriate to the course. - Provided appropriate context & background - Mastery of class content - Citation of relevant scholarship - Presented divergent viewpoints
C2: Use of Instructional Materials	- Use of slides, audio, video, examples to simplify the learning
C3: Class Organization	- Clear statement of learning goals - Relationship of lesson to course goals, and past and future lessons - Logical sequence - Appropriate pace for student understanding - Summary
C4: Presentation Form & Substance	- Project voice - Varied intonation - Clarity of explanation - Eye contact - Listened effectively - Defined difficult terms, concepts, principles - Use of examples - Varied explanations for difficult material - Used humor appropriately
C5: Teacher-Student interactions	- Effective questioning - Warm and welcoming rapport - Use of student names - Encouraging of questions - Encouraging of discussions - Engaged student attention - Answered students effectively - Responsive to student communications - Pacing appropriately for student level, activity - Restating, questions, comments - Suggestion of further questions, resources - Concern for individual student needs - Emotional awareness of student interest, needs
C6: Student Participation	- Student interest - Enthusiasm - Participation - Student-to-student interaction

C7: Assessment practices	- Background knowledge probes, muddiest point exercises, defining features matrix and other classroom assessment techniques - Ungraded in-class writing exercises such as minute papers - Discussions - Questioning

iv.   Sample Analysis of Peer Evaluation

Course Code: CSE421

Course Title: Computer Graphics

Date & Time of the Class: 11:30 AM to 1.00AM, Tuesday, June 7

Topics: 2D Viewing and Clipping

Total Participants: 30

Peer Name & Designation: Mr. Md. Sanzidul Islam, Lecturer (Senior Scale) (Appendix for detail communication record)

Evaluation for: Krishno Dey, Lecturer

Criteria	Very Poor (0.0-2.0)	Poor (2.1 – 4.0)	Average (4.1-6.0)	Good (6.1-8.0)	Excellent (8.1-10)
C1: Content Knowledge				✓	
C2: Use of Instructional Materials			✓		
C3: Class Organization				✓	
C4: Presentation Form & Substance					✓
C5: Teacher-Student interactions					✓
C6: Student Participation			✓		
C7: Assessment practices				✓	

Additional Comments by the Evaluator (if any):

Date: 7th June 2022

"Mr. Krishno Dey, Lecturer, Department of Computer Science and Engineering, Daffodil International University, invited me to evaluate one of his classes in person in June 2022.

Mr. Krishno Dey creates an open learning environment where he encouraged all of his students to participate. In such an environment, students feel free to share their opinions or raise questions on a particular topic. Rather than using the traditional teaching method, he follows the question and follow-up question-based method in the classroom. He does not provide traditional lectures, instead, helps students to do critical thinking by asking questions. I found the outcome of this kind of teaching-learning method very effective after applying this method in my own classroom.

His main vision in the classroom is to involve each and every student in the learning process. He keeps track of every small detail in the classroom and the performance of each of the students. He believes with a proper teaching-learning environment and guidance each and every student can shine.

His friendliness, smiley face, and emphasis on making the class interactive are the things that make students like his teaching method.

v.   Pre-test & post-Test Analysis

The same questions were used for both pre-test and post-test

Test Taken on: Saturday, 11 June 2022

Course Code: CSE421, Section: N

Total Questions: 10

Total Time Given: 10 minutes (for both pre-test & post-test)

Total Participants in Pre-test: 0
Total Participants in Post-test: 0

Platform Used: Google Form (quiz, shuffle)

1.   Translation of an object means moving an object either across the x or y axis.

a. True
b. False

Ans: True

2. Scaling an object means_____
    a. Increasing or decreasing the size of object
    b. Rotating an object
    c. Translating an object along with x axis
    d. Rotating an object with an angle of 180 degrees.

Ans: a

3. What will be the scaling factor if you magnify an object twice of it's original size?
    a. $S_x = 1, S_y = 2$
    b. $S_x = 0.5, S_y = 0.5$
    c. $S_x = 2, S_y = 2$
    d. $S_x = 1, S_y = 1$

Ans: c

4. Usually we rotate objects along z axis in 2D rotation.
    a. True
    b. False

Ans: True

5. What does shear means?
    a. Changing the shape of an object
    b. Translating an object
    c. Reflecting an object
    d. None of the others

Ans: a

6. The shear can be in one direction.
    a. True
    b. False

Ans: False

7. Transformation changes an object's position, orientation, or size.
    a. True
    b. False

Ans: True

8. Why do we need to apply transformations?
    a. To manipulate the initially created object without having to redraw it.
    b. To manipulate the initially created object by redrawing it.

c. To redraw the object.

d. To redraw multiple objects at a time.

Ans: a

9. Reflection is a transformation that produces a mirror image of an object.

a. True

b. False

Ans: a

10. Which of the following transformations rotates an object by 180 degrees either about the x-axis or y-axis.

a. Translation

b. Reflection

c. Rotation

d. Scaling

Ans: b

Insights on Student Learning

Table1. Scores obtained by the students during pre-test & post-test. Question by question

Question	Pre-test (% provided correct answer)	Post-test (% provided correct answer)
1	86.11	93.34
2	52.71	76.66
3	38.88	66.66
4	60	74.19
5	37.14	74.19
6	39.33	70.96
7	82.35	77.41
8	51.42	64.51
9	80	90.32
10	44.44	67.74

Average	Median	Range
5.58 / 10 points	5 / 10 points	0 - 10 points

Total points distribution

Fig. 1: Distribution of points obtained by the students during pre-test

Average	Median	Range
7.52 / 10 points	8 / 10 points	4 - 10 points
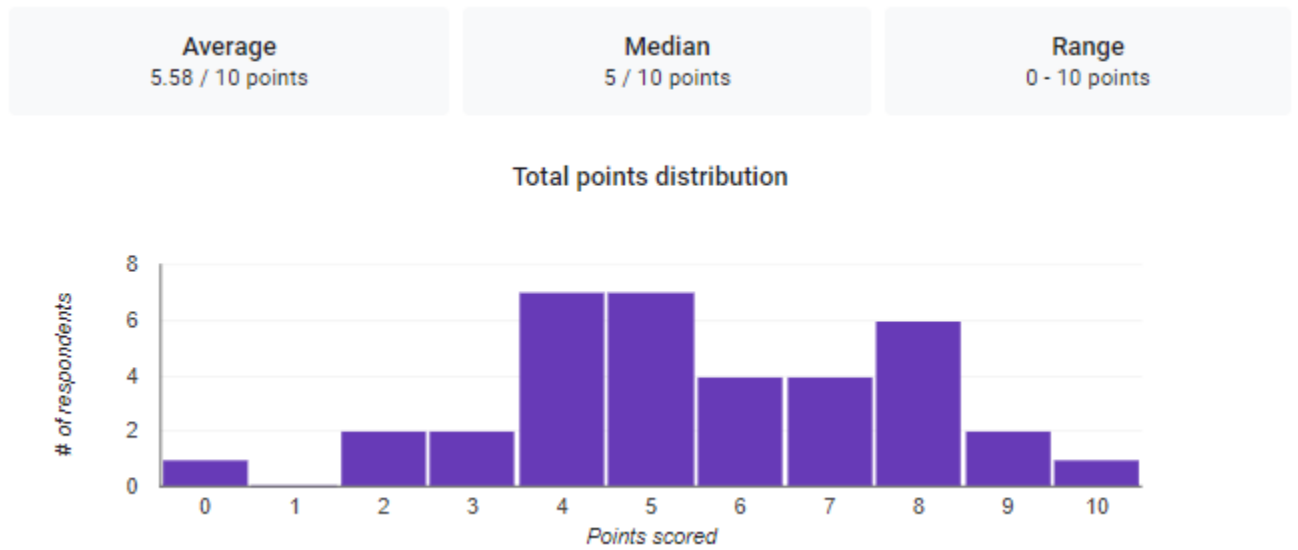
Total points distribution
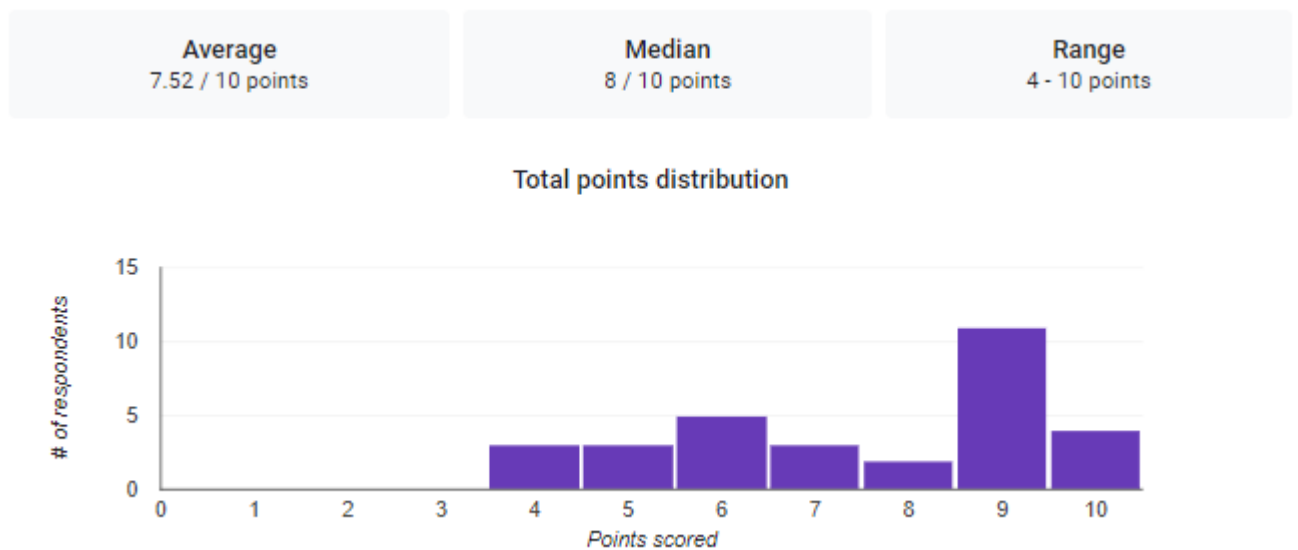
Fig. 2: Distribution of points obtained by the students during post-test

Average marks Obtained by students during pre-test and post test
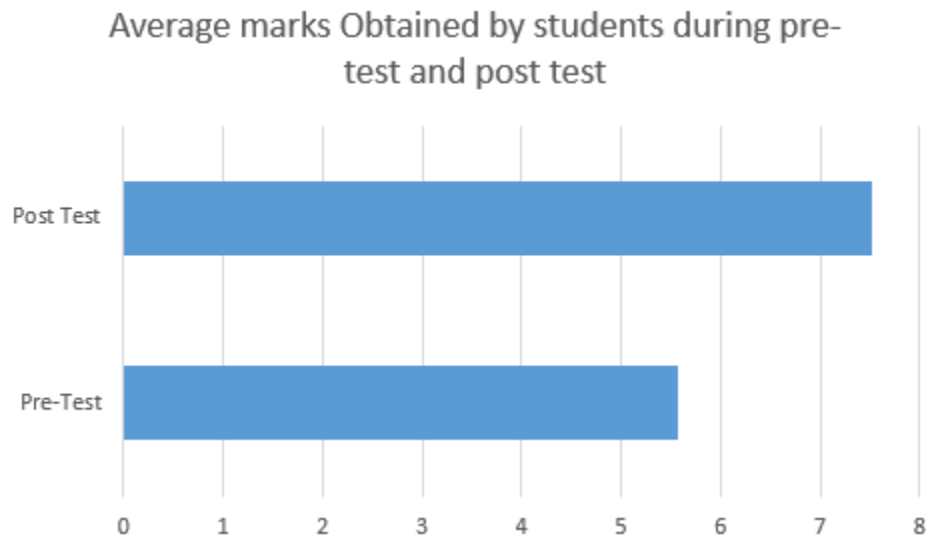
Fig. 3: Comparison of Avg. Marks Obtained by the Students during Pre-test and Post-test

Summary: There were total 36 students participated during the pre-test and 31 students (from the same section) participated during the post-test. A class on the relevant topic was taken in between the tests. As can be seen from the above statistics, the overall learning of the students has been improved after the class was taken. During pre-test, the average marks obtained by the students was 5.58 while during post-test, after taking the class, the marks improved to 7.52.

Summary and Goals

Teaching should interactive and interesting. Learning should be achieved from both ends (teacher -students and students - teacher). I firmly believe helping students use their critical thinking to solve problems is way better than an uninteracting class. The world of science is really uncertain nothing is absolute, then how we as a teacher can ask our students to believe whatever we teach them in class. Personally, I do that support that kind of learning where the student assumes the teacher is always right, student does not question or evaluate whether teacher's understanding. I would rather be part of an environment where the teacher asks questions to boost the critical thinking of students. That's the kind of philosophy I want to adopt in near future.

Appendix (Teaching Artifacts)

Re: Display Device
by Tanjima Akhanda - Sunday, 5 June 2022, 2:32 PM

LED

Permalink   Show parent   Edit   Split   Delete   Reply   Export to portfolio

Re: Display Device
by Shabrina Sharmin - Sunday, 5 June 2022, 2:34 PM

Because of its great color reproduction, faster response times, wider viewing angles, higher brightness, and exceptionally light weight designs, LED technology outperforms LCD display technology.

Permalink   Show parent   Edit   Split   Delete   Reply   Export to portfolio

Re: Display Device
by Shake md Rakib - Sunday, 5 June 2022, 3:52 PM

I think Plasma Panel display

Permalink   Show parent   Edit   Split   Delete   Reply   Export to portfolio

Re: Display Device
by Minjun Nahar Mim - Sunday, 5 June 2022, 4:26 PM

plasma panel display

Permalink   Show parent   Edit   Split   Delete   Reply   Export to portfolio

Re: Display Device
by Kazi Abu Sayem Md. Nayem - Sunday, 5 June 2022, 4:30 PM

OLED (Organic Light Emitting Diode) display technology is much better than LCD display technology because of its excellent color reproduction, faster response times, wider viewing angles, higher brightness, and extremely lightweight designs.

Permalink   Show parent   Edit   Split   Delete   Reply   Export to portfolio

Re: Display Device
by Rubaiya Tasnim Sholi - Sunday, 5 June 2022, 5:11 PM

As Flat planel displays produce much wider range along with deeper color, also less in volume and required less power, these displays are better compared to CRT

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Re: Display Device
by Mahtab Jamshed - Sunday, 5 June 2022, 5:52 PM

Organic Light Emitting Diode (OLED) display technology is much better as compared to the LCD display technology because of its excellent colour reproduction, faster response times, wider viewing angles, higher brightness and extremely light weight designs.

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Re: Display Device
by Md.Abdullah Masum - Sunday, 5 June 2022, 7:14 PM

The picture quality of an LED display is far better than an LCD. Due to modular light-emitting diodes, an LED screen produces better control over the contrast, rendering a clear picture. Also, LED provides RGB contrast, which can show truer blacks and truer whites.

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A snapshot of sample discussion forum from the BLC

Appendix (Reflections Artifacts)