New teaching method

- Method: Flipped class
- Students: II yr, Sec A
- Staff: K.Kalyani, AP, ECE Dept, TCE.
- Subject: D42- Designing with PLDs and FPGA
- Topic: Sequential programmable devices
- Tool: CAMU (Octoze Technologies)

Why Flipped class?

- Students can read the material at any time, from anywhere and any number of time.

- Repeatable reading will improve their level of understanding

- After reading that material, discussion on that topic will become easier in the class room.

- More interaction takes place between staff and students

- Discussing more than book about that topic will happen.

- Teachers will become learners

- This consume less time than direct teaching method

- During leisure time, students can go through that material.

- Easy to train the students for the particular topic by posting material earlier and conducting discussion about that in class room.

Requirement of flipped class

- System
- Internet
- Common group id among the students

Flipped class method

- Prepare common group id for students
- Staff can post the material to all the students through that group id.
- Students are asked to go through the material before coming to the class
- After that, staff and students have an discussion about that topic in the class room
- Conduct test on that topic
- By means of test result, verify the performance of students in flipped class.
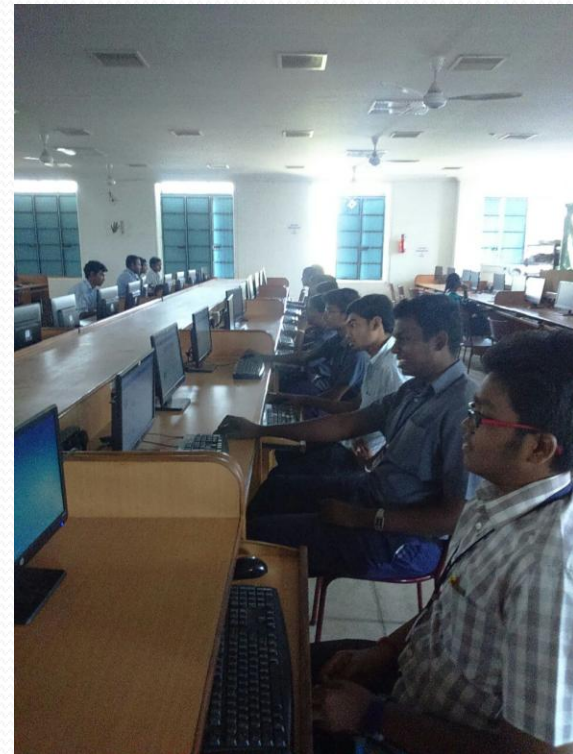
ACTIVITY PLAN:

➢ Preparation of flipped class material.

➢ Forming group mail id among students.

➢ Post material to group mail id.

➢ Students are asked to go through the material before coming to the class.

➢ Discussion on the topic is done in the class room.

➢ Questions posted in mail id.

➢ Students are asked to attend the online test within the given period.

➢ Evaluation done on that test and results are taken.

Flipped class room & Online test

Discussion on Flipped class

Online test in CAMU

Online test Result

	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6	Score 7	Best Score 8
Thiagarajar College of Engineering								
Assessment Summary								
Sequential Programmable Devices								
BE-ECE , Sem 4								
From	08-Jan-2015 (09:00) hr		To	15-Jan-2015 (10:00) hr				
	Score 1	Score 2	Score 3	Score 4	Score 5	Score 6	Score 7	Best Score 8
ALAGURAJA V	35	-	-	-	-	-	-	35
NAVARAJESHWARI B	35	50	-	-	-	-	-	50
MANICKAM R.M	50	50	-	-	-	-	-	50
MEENAKSHI N	50	50	-	-	-	-	-	50
ISHWARYA A	50	10	50	-	-	-	-	50
ARUN M	50	50	50	50	50	50	45	50
JOTHI R	35	-	-	-	-	-	-	35
KARTHIKEYAN S	50	45	-	-	-	-	-	50
ANGALAPARAMEASHWARI K	40	-	-	-	-	-	-	40
ABINAYA R	50	-	-	-	-	-	-	50

- Inference:

Maximum score: 50;   Minimum score: 35

Flipped class Online Test Question – D42- Designing with PLDs and FPGA – Dr.K.Kalyani.

1) SPLD is ………. Programmable Logic Device - **C**

        a) Serial   b) shift   c) sequential   d) semicustom

2) SPLD includes - **d**

a) PAL   b) PLA   c) flipfliop   d) all the above

3) The type of flipflop used in SPLD - **d**

a) D type   b) T type   c) JK   d) D or JK

4) A circuit in SPLD consists of sum-of products combinational logic function and an optional flip-flop is called- **b**

a) microcell   b) macrocell   c) minicell d) simply cell

5) The gate used to program a true or complement function in SPLD is -**d**

a) OR   b) XNOR   c) NAND   d) XOR

6) Collection of individual PLDs on a single integrated circuit is-**c**

a) SPLD   b) FPGA   c) CPLD   d) FPLA

7) In CPLD, multiple PLDs interconnected through - **a**

a) programmable switch matrix b) programmable state matrix c)programmable I/O matrix d) Programmable AND-OR array

8) The type of flipflop used in CPLD - **d**

a) D type   b) T type   c) JK   d) Any one of the above

9) Lookup table in FPGA is stored in -**C**

a) DRAM   b) PROM   c) SRAM   d) EPROM

10) Which one of the following is not considered as FPGA logic block -**C**

a) LUT   b) MUX   c) Decoder d) flipflops