

# SREYAS Institute of Engineering & Technology

(Approved by AICTE, New Delhi | Affiliated to JNTUH, Hyderabad | Accredited by NAAC)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## Innovations by the Faculty in Teaching and Learning

Sreyas Institute of Engineering & Technology is uniquely qualified to take advantage of our expertise in teaching and learning processes. Over the 2 years, we have spread headed a revolution in learning experience of students at Sreyas and beyond. Hundreds of hours of training for hundreds of faculties from Sreyas and many other institutions have seen the incredible benefits of scientific and modern educational practices of active and experiential learning, formative assessments, project-based learning, Sreyas Institute of Engineering & Technology has always focused on student-centric teaching and learning.

In this process, the ICT enabled infrastructure plays a vital role. Availability of quality audiovideo systems and multimedia projectors in classrooms facilitates the faculty member use of PowerPoint, excel spreadsheets, videos, and online databases in classrooms help the students to master a basic and advanced understanding of subjects with greater clarity in the application of the concepts.

Students also play a critical role here. For example, in many courses, students are allotted exercises/assignments in terms of presentation of case studies, topics etc. Such activities not only enhance the learning outcomes but also develop self-confidence among students. Similarly, in many courses, the quizzes are conducted online. All such activities put students at the centre of the teaching and learning process.

Each course has their course-pack available on Course-Google drive/ course-website which contains all information related to courses, like assignment list, practical list, syllabus, lesson plan and question bank etc, which is approved by the Academic Group Leader (AGL) in their respective domain.

## Innovative practices used by faculty in Teaching and Learning Process: 2019-20 to till date

Sl.No	Innovation Method	Academic Year/sem	Year	Description
1	ICT method	2019-20 I sem	II, III and IV	Student can able to understand the concepts easily and record the session for future reference.
2	Google classrooms/Microsoft teams/Canvas/Zoom meetings/Cisco- webex	2019-20 II sem	II, III and IV	Online classes conduced to the students in Covid-19 pandemic situation using the online web channels for understand the concepts effectively and record the session.
3	Quiz Assessment:	2020-21 I sem	III	For assessing the students knowledge, conducted the online quiz by using the Google forms
4	Self Learning Encouragement in on-line learning mode(Edureka)	2020-21 I sem	II, III and IV	Acquire the online certificate programme for faculty members for up skilling their knowledge in teaching and learning process.
5	Edmodo	2020-21 I sem	III and IV	It is web based free tool - In which Students and teachers can reach out to one another and connect by sharing ideas, problems, and helpful tips.

# Following are the innovative practices used by our faculty in Teaching and Learning Process: 2016-17to 2018-19

S.No	Innovation Method	Introduced on	Year	Description	Photo	
1	Flipped Class Room	2016-17 II- sem	III	Student can learn new technology by giving seminars		
2	Background Knowledge Probe	2016-17 II-sem	III	Before commencement of classwork, faculty has given some prerequisite knowledge to the students.		
3	Problem Based Learning	2016-17 II-sem	II	Learning the new concept by derive/solve the given problem		
4	Think Pair Share Activity	2017-18 II-sem	III	A group of student can make as group and think-pair-share the given problem in the classwork.		
5	Clarification Pauses	2017-18 II-sem	III	Students can clarify their doubts		

6	Jigsaw Group	2018-19 II-sem	III	A jigsaw group of student can able to discuss and develop a project/product.	
---	-----------------	-------------------	-----	--	--

#### 1. ICT method

#### **Introduction:**

The role of the teacher is undergoing radical change - his expertise requires continuous training and coordination with students in the use and practical applications of Information and communication technology (ICT) in education. ICT in the educational process should serve as a learning method and not only as a tool. At the same time, it is important to realize that ICT does not replace traditional teaching methods, but complements them by encouraging curiosity, research and experimentation.

#### **Prerequisite:**

- Various devices/technology in ICT includes:
- · Access of course materials through remote devices,
- Online digital repositories for lectures, course materials, and digital library,
- Online/ Cloud based academic management systems,
- Employing the flipped classroom concept,
- Making use of handheld computers, tablet computers, audio players, projector devices etc.

#### **Objectives:**

- Support functions: administrative, technical and supportive functions
- Learning assistance: assistance and support for learning and teaching
- New learning: new teaching and learning methods, techniques and tools

#### **Outcomes:**

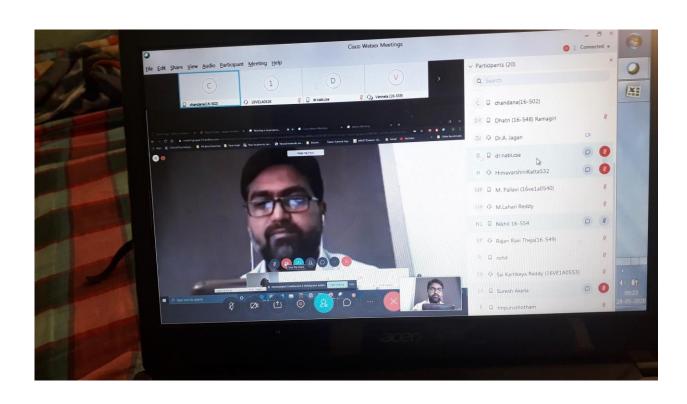
- Enhancing learning experiences and providing new sets of skills,
- Reaching more students with Massive Open Online Courses(MOOCs),
- Facilitating the training of faculties,
- Minimizing costs and saving time associated with information delivery and automating regular day-to-day tasks,
- Improving the administration of institutions to enhance the quality and efficiency of service delivery.

## **Implementation:** ICT Tools

Sl.No	Name of the	A.Y	Year	Subject	Outcome
	faculty				
1	Dr.M.Purushotham	2019-20 I sem	II	COA	Lean about computer system architecture and organization
2	Mrs.K.Navatha	2019-20 I sem	III	DAA	Learn about various algorithms and its complexity analysis
3	Mr.Santhosh ramachander	2019-20 II sem	IV	DM	Students able to learn classification/clustering techniques
4	Mrs.Padam Joshi	2019-20 II sem	II	Java Prog	Learn about navigation of java programming with ICT tools
5	Mr.Sravan kumar	2019-20 II sem	III	CD	Able to distinguish the phases of compilers
6	Salar Md.	2019/20 II sem	IV	MSE	Usage of ICT tools to encourage the learning of modern software engineering tools/applications

## Participants: -





#### 2. Google classrooms/Microsoft teams/Canvas/Zoom meetings/Cisco-webex: -

In the Covid-19 Work-From-Home scenario, most of the educational institutes have adopted the online education mode. This mode is heavily dependent on E-Learning Tools and there are a lot of tools available in the market. What is the best combination of e-learning tools for example for the following activities:

- Learning Management (e.g. Moodle)
- Lecture Delivery (Microsoft Teams, Google Meets, Zoom, etc.)
- Video Editing and Compression
- Video Hosting, Streaming, and Downloading
- Assessments, Exams, etc.

As part of academics, Department of CSE has adopted online teaching tools like Microsoft teams, Zoom meetings, and Canvas Infrastructure. During the Covid-19 pandemic situations most of the faculties are adopted the canvas infrastructure tool for online classroom teaching for 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year students via online mode from their home.

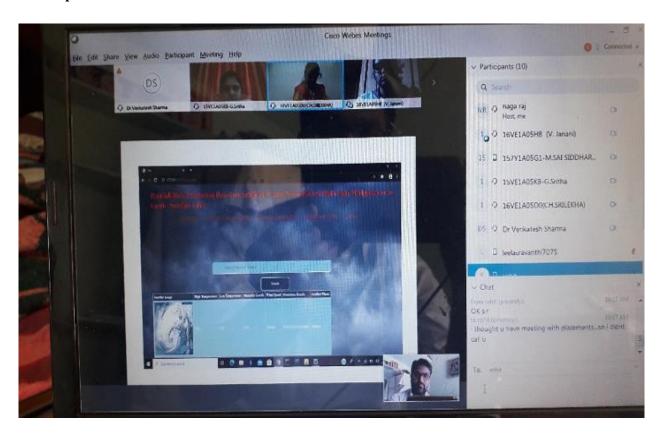
#### **Outcomes:**

- Students able to learn the new concepts via online classrooms
- Able to record the sessions and listen it whenever required.
- Share the contents in the you-tube channel
- Improved the clarification of doubts in conversion manner by the students and faculty

#### **Implementation:**

Department of CSE has implemented these online tools for conducting online classes effectively in Covind-19 pandemic period.

## Participants: -





Implementation: Google classrooms/Microsoft teams/Canvas/Zoom meetings/Cisco-webex:-

Sl.No	Name of the	A.Y	Year	Subject	Outcome
	faculty				
1	Mrs.K.Ramya	2020-21	IV	Python	Students able learn the emerging
	Lakshmi	I sem		Program	programming languages like
				ming	python programming
2	Mrs.P.Archana	2020-21	IV	OOP	Learn about object oriented
		I sem		through	programming using C++
				C++	
3	Mrs.Meenakshi	2020-21	IV	Data	Using weka tools analyze the data
		Isem		Mining	sets of various kinds using data
					mining techniques
4	Mrs.V.Swathi	2020-21	III	SE	Learn about unified modeling
		Isem			language for design the software
					blueprints.
5	Mrs.K.Ramya	2019-20	II	DBMS	Learn about navigation of java
	Lakshim	II sem			programming with ICT tools
6	Mr.Santhosh	2019-20	III	WT	Students able to learn
	ramachander	II sem			classification/clustering
					techniques
7	Mrs.Padma Joshi	2019-20	II	Java Prog	Lean about computer system
		II sem			architecture and organization
8	Mrs.P.Srilatha	2019-20	III	CRNS	Learn about various algorithms
		II sem			and its complexity analysis

#### 3. Quiz Assessment:

Quizzes can be given without an instructor, Quizzes let students know where they're wrong as they provide instant results. This gives students a direction to the areas in which they ought to improve and form a strategy for the same. Students can begin to use their strategy as they encounter a problem using the same concept that they just missed, improve and then apply it during summative assessments

#### Methodology:

**Set timer:** The creator is able to set a timer for the whole quiz or to set a timer per question. This is possible to do with written quizzes, but is very time consuming for the instructor. Plus, it's almost impossible to do with a huge amount of participants.

**Better overview:** It's possible to show one question at the time with online quizzes. People are not able to skip a question, because you will get a reminder that you can't leave the answer blank.

**Improve your brand:** There are several ways to gain more brand awareness: Generate new interactive sales opportunities, build your traffic to your online channels, improve time spent on site and improve the sharing on social media about your campaign and brand.

**Instant Response:** Students do not have to wonder if their answer is correct or not as they answer a question. Nor do they have to wait until the next class, which may be 24 hours or more away. Online quiz programs provide immediate feedback to their answers.

**Formative Assessment:** Using online quiz tools to deliver formative assessment can be a useful and crucial resource. Carrying formative assessments through online quizzes is a smart way to look into the areas that need to be paid heed to during training/learning.

**Assists in Memorizing:** Quizzes that include images and pictures help in memorizing the right answers. With quizzes, students associate an answer or any useful piece of information with any image or video incorporated in that answer. It works because students are visually pegging (or

"placing") representations of what they want to remember in images or videos they can easily memorize and identify.

Ample Attempts to Improvise: Students can retake a practice quiz as often as they want to improve their score. The program can be set to keep the highest score. If the practice quizzes are truly formative, then no grade will be given. Students will demonstrate their learning in class and on summative tests.

#### **Outcomes: -**

- Students able to assess the knowledge install and trying to gain more knowledge on the subject.
- To acquire the more marks in objective type in internal examinations.
- Able to gain the depth knowledge of subject.

#### **Advantages: Google forms**

It is a free online tool that allows you to collect information easily and efficiently. The interface is very easy to use. Any user with an average Internet knowledge can create forms using this tool. The assistant is simple to use. The What-You-See-Is-What-You-Get interface makes it easy to drag and drop form elements and organize them based on actions or events.

At the design level it is possible to choose between a palette of colors, as well as own images as a background. Google forms stores the feedback received so we can analyze it in detail.

The forms are integrated with Google spreadsheets therefore we can access to a spreadsheet view of the collected data. The general configuration of forms or surveys allows you to collect the recipient's email address and limit the answers.

For advanced users, the type of data that can be inserted into a field can be customized using regular expressions. This helps customize the form even more.

A Google form allows us to see how the survey will look before sending it over to the recipients. We can send the form by email, integrate it into our website or send the link via social networks or any other means. With this tool, you can get unlimited questions and answers at no cost, while other survey tools require a payment depending on the number of questions and recipients.

## Implementation:

Sl.	Name of the	A.Y	Year	Subject	Outcome
No	faculty				
1	Dr.G.Suryanarayana	2020-21	III	Artificial	Gain the importance of AI
		I sem		Intelligence	and its applications
2	Mr.Santhosh	2019-20	III	Web	Students able to gain the
	ramachander	II sem		Technologies	knowledge of data mining
					techniques

#### 4. Self Learning Encouragement in on-line learning mode(Edureka)

#### • Edureka: -

Edureka is one of the online education marketplaces on the Internet. To create an alternate platform for students who wish to continue and complete courses by attending live online courses, using a team of ridiculously committed educators who will stop at nothing to impart education, helped by a 24 x 7 support system. By deploying world class team of industry experts and aim to educate learners with the skills they need to advance their professional life to the next level.

Apart from innovative teaching and learning, our faculties are registered in Edureka online courses and completed successfully with certifications. Based on their learning skills, we proposed a same kind of innovative method to share the knowledge of new courses to our students.

#### **Objectives**

- To provides a online learning platform with certification program
- Interactive innovative online discussion forum with expert from the industry
- To gained the knowledge of emerging technologies from computer science and engineering
- To encourage the faculty and students to learn the new technologies with practical experiments.

**Implementation:** The implementation of this innovative method to teach the students by the faculty who acquired the certification from the edureka online academy.

#### **Outcome**

- To improve the skills by the students for their placements
- More practical knowledge gained by the students in latest technologies
- Useful for academic progress of the students.

The following list of faculty's who acquired the certification and given the lecture delivery of emerging courses/ technologies in computer science and engineering.

Sl.	Name of the faculty	Name of the course	Year
No			
1	Mr.K.Rohit Kumar	Fundamentals of Block	2019
		chain Technologies	

#### 5. Edmodo:

#### Introduction

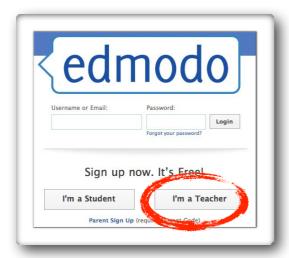
A teacher can assign and grade work on Edmodo; students can get help from the entire class on Edmodo. It is a safe environment. There is no bullying or inappropriate content, because the teacher can see everything that is posted on Edmodo. Also parents can join the class to bring a level of transparency that is difficult to achieve without technology.

#### Signing up

This is very easy. At the homepage, simply click *I'm a Teacher* and a new dialogue box will open up. Simply fill out that information and click *Sign up*. That is it! No junk mail, no verification email; it is just simple and painless.

#### **Group Code**

Now that we're into Edmodo, it is time to start setting up your groups. **Groups are basically classes for students to join**. It is very easy to create a group and just as easy for students to join that group. To do this click on *Create* in the *Groups* area of Edmodo (on the left hand side below your profile picture).





## Student Signup

Now that you have created your *Group*, we need to get your students into it, which is even easier than creating the class. First have the students go to <a href="www.edmodo.com">www.edmodo.com</a> and click on *I'm a Student*. They will need the *Group Code* you received when you signed up.

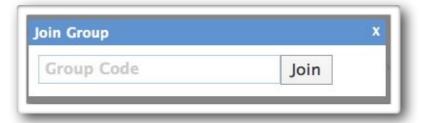


The students will be greeted with the following screen. Please note that e-mail is optional and that students will not receive any junk mail or e-mail from Edmodo (unless they set up e-mail notifications). However, the *Group Code* you is required.



If students are already signed up and using Edmodo. They do *NOT* need a new account. All they need is to *Join* the group. To do this they sign into Edmodo and on the left hand side they will see their class(es) they have joined. They merely need to click *Join* and type in the code. This way they can easily switch from one class to another.



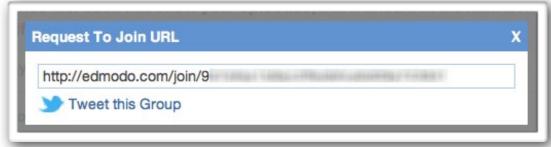


#### Request To Join URL

There is another way for students to sign up. You can give your students (or whoever) a link. If they follow the link it will ask them to either login or create a new account and then it will send a request to the teacher. The teacher then has the ability to approve or deny the request. Even if the group has been *locked*, students can join with the *Join URL*.

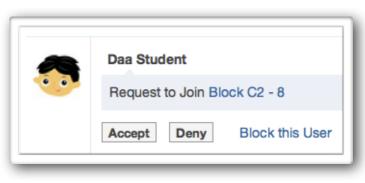
You can find the URL on the far right side under the *Group Code*. Heck you can even Tweet the *Join URL* if you use Twitter in your class.





When a student requests to join the class you will receive a notification. Click that and a new window will open where you can *Accept*, *Deny* or *Block*. If you have multiple you can select *Approve All*.



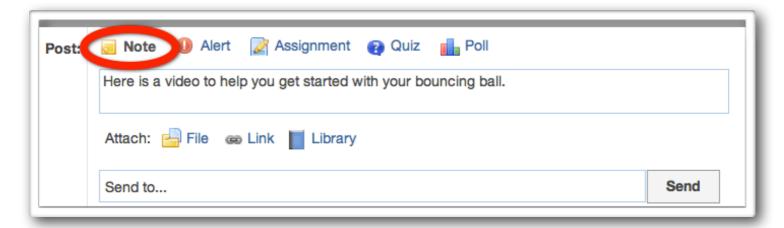


## The Basics of Posting

Now that your groups are created, let's take a look at some of the basic features that Edmodo has to offer. Most are obvious and straightforward, and nearly all of them are meant to help increase communication and make the class a better place.

#### **Posting Notes**

This is the main feature of what makes Edmodo great. The ability for you and your students to post and respond to other posts easily and in real time. It is very easy to do and very helpful. Let's take a look at the *Comment Box* found at the top of your homepage.

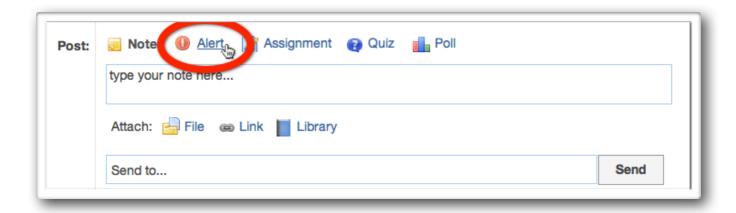


It is pretty easy to see what you need to do. Type your message in the larger blank box. Then where it says *Send to...* type in which group or person (people) you want to send the message to. Click *Send* and you're done!

#### **Posting Alerts**

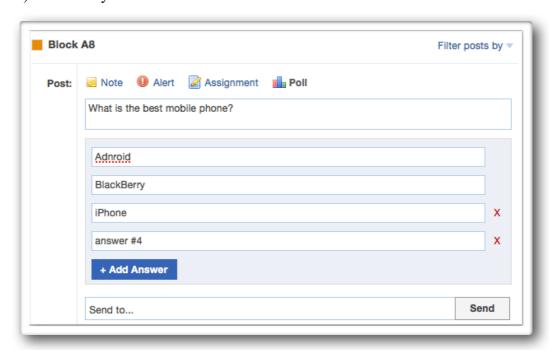
*Alerts* are used to send important messages to people or groups. It is done the same way but will appear in larger font and in bold. It will also show up in the *Notifications*. To create an *Alert*, just click on *Alert* at the top of the *Comment Box* and the rest is the same as creating a note.

You only have 140 characters to help you distill your thoughts.

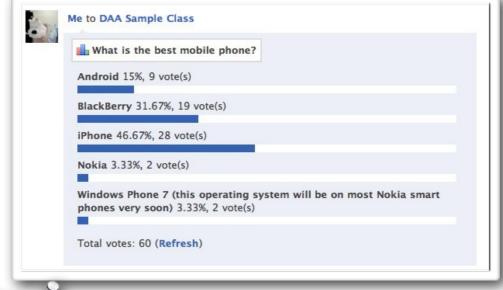


#### **Posting Polls**

Polls are pretty neat. You can create questions with multiple choices and the people in the group vote on it. Click on *Poll* at the top of the *Comment Bubble* to get started. Then write the question and the different choices. At first you only have two choices, but you can add plenty more (I've added up to nine before). Pick who you want to send it to and click *Send*.



Here is an example of what it will look like when it is done and after some students have voted. Each person only gets one vote and there is no way to know who voted for what. It's a lot of





#### Working with Assignments

#### Creating an assignment

Like writing a *Note*, *Alert*, or *Poll Question*, creating an Assignment is very easy. On the *Comment Bubble*, click on *Assignment* and you will see this.

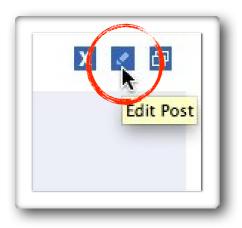


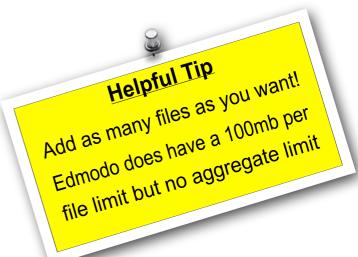
Filling in the necessary fields is self explanatory. What is great about creating an assignment in Edmodo is you can attach just about any type of file you want to the assignment. You can add as many files as you want to an assignment but you must add them individually. In other words you cannot select ten files and upload them simultaneously. I have added up to five before and it was no problem. Send it to the appropriate Group(s) and you're done.

#### Edit an assignment

If you find a mistake in your assignment I have good and bad news for you. The good news is, you can edit the written part of the assignment. The bad news, is you cannot remove or attach any new files to the assignment.

To edit an assignment simply find the assignment on your homepage and click in the top right hand corner.

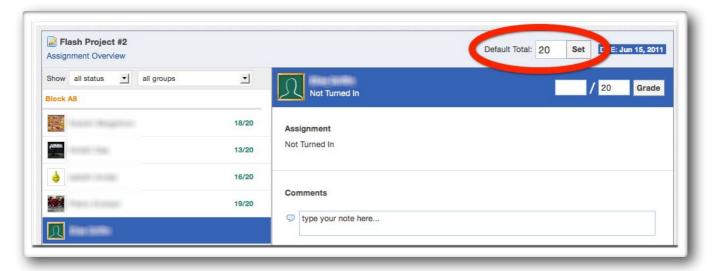




#### **Grading assignments**

Grading an assignment is easy as well. In the *Default Total:* at the top right corner, type in the total possible points and click *Set*. Then click on a student's name in the list on the left. There assignment will show up on the right. View their work, give them a grade, you can even post a comment about their assignment, attach a file (like a rubric) or even record your voice and add an audio file.

When you click *Grade*, it will immediately show up on that student's Edmodo as well. If you make a mistake you can always click *Clear* and input a new grade. You can also edit, delete, or reattach anything you like. The student will be alerted immediately about the comment and the grade.

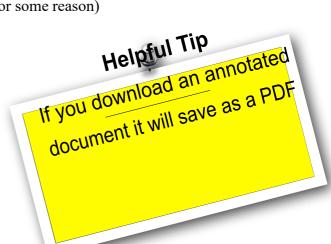


For the *Grade* section, you are not limited to a number. For example, if you would like to excuse a student from an assignment, you can actually type in "*Excused*" in the box and that is what will be recorded. Pretty awesome huh?

#### **Annotating assignments**

A new feature added to Edmodo gives teachers the power to annotate on turned in assignments. Teaches are able to highlight certain areas and give more meaningful feedback. This will only work with certain file types though. Check out the list below

- Microsoft Word documents (some .doc files do not work for some reason)
- Microsoft PowerPoint
- PDF (Adobe's Portable Document Format)



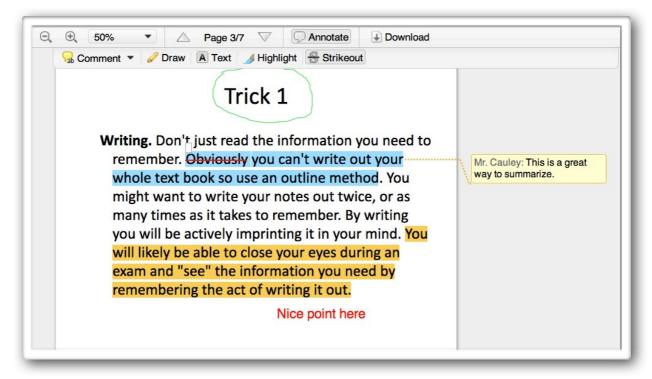
To annotate a document, it must be "Turned in" from an assignment.

So find an assignment that has been turned in and you should see the *Annotate* option below the file name and next to the file thumbnail. Go ahead and click that.



A new window will open up and showing you the document and the annotation tools at the top. As you can see you can add comments, draw, text, highlight, strikeout a document.

All of these annotations are saved in real time so there is no save button. This also means that students will be able to see these annotations as soon as you are done creating them.

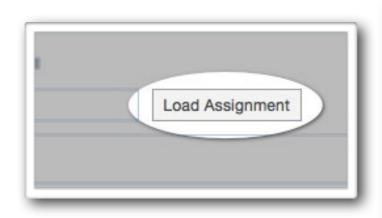


To delete an annotation, simply click on it and remove or change it.

You can download the document with the annotations but it will save the file as a PDF only.

#### **Load assignment**

If you have already written an assignment and want to use it again for another class, simply click on *Load Assignment* and it will load the assignment list. Find the particular assignment you want to load and click it. The description and all files that were attached with the original assignment will be attached to this one as well.. All you need to do is select the due date and which Group(s) to send it to. Check out the picture below to get a better idea.



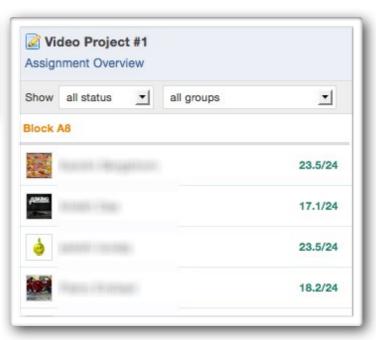


#### **Turned in assignments**

Another great feature of Edmodo is the ability to see who has and who has not turned in an assignment.

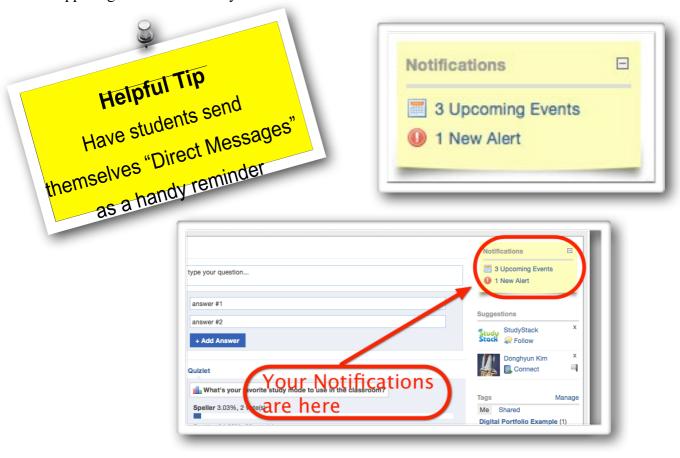
When you look at the top of the assignment it will tell you how many students have submitted it through Edmodo. To see the detailed list, click on *Turned in* and it will take you there. As you can see everyone has turned in this assignment.





#### **Notifications**

This is a handy feature to get a quick idea of what is awaiting you every time you log into Edmodo. It will tell you if you have any new *Direct messages*, *Replies*, *Turned in assignments*, or *Alerts*. To view the information, simply click on what you want see. It's that simple. You can find the *Notifications* in the upper right hand corner of your screen.



#### **Filters**

When you class is up and running on Edmodo, you may notice that important information can get buried under comments and replies from you and students. Filters will show you just the type of information you want to see. If you want to see just *Assignments*, click on the *Assignments* filter and everything will disappear except for the assignments. There are two areas where you can filter. One is right under your profile picture (click *more*). The other place is near the *Comment Box*, just click on *Filter posts by* and select what you want to see.

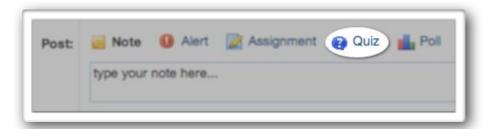




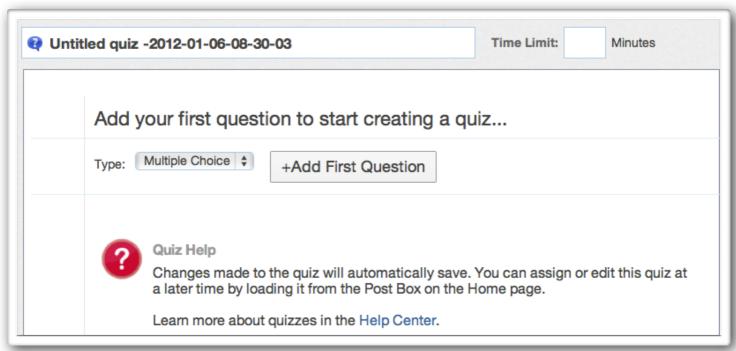
## Creating a Quiz

Edmodo offers a way to create and give online quizzes. Just like an assignment, once you create a quiz, it is saved and you can give it again at a later date. So let's get started on making a quiz.

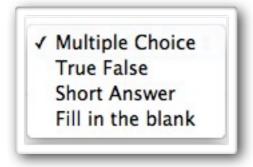
First you click on Quiz. It will ask you if you want to Create a Quiz or Load a previously created quiz



If you chose Create a Quiz, it will take you to this page. Here is what you will see.

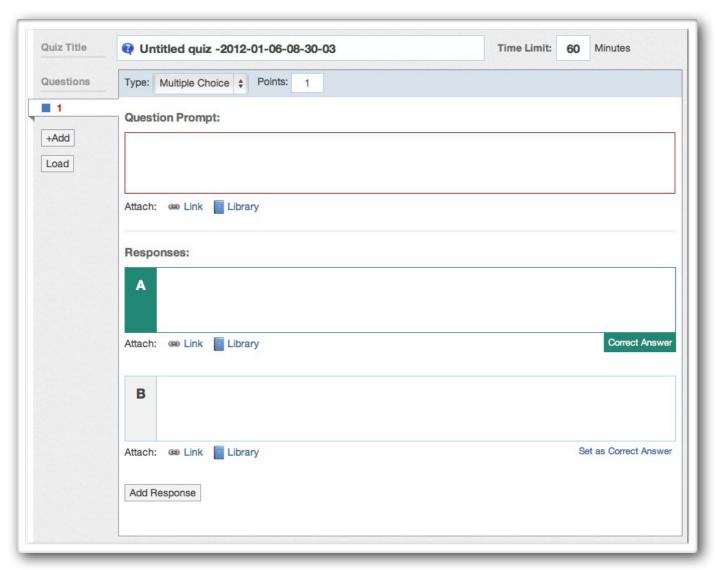


Here you can give the quiz a title, add a time limit and start to add questions. Take a look at the pictures below to see what type of questions you can add.

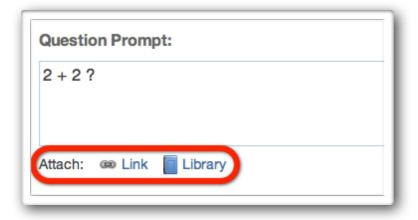


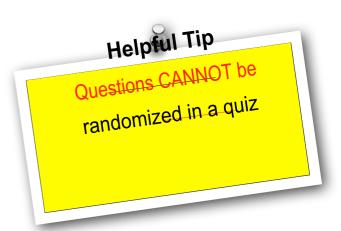
When you select a type of question and create it a new page will open that will look like this. Here you have a lot of options like how many points each question is worth and will there be a time limit.

Obviously you must type the question and the choices. You can add as many responses as you want to the question, but you can only have one correct answer.



A really nice feature is that you can load a file (image, file, etc.) to the question. You can upload them to your library and then insert them into the quiz. You can also add a link to a webpage as well.

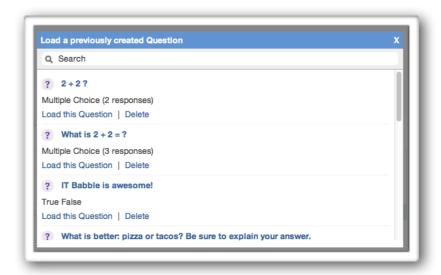




#### **Loading Questions**

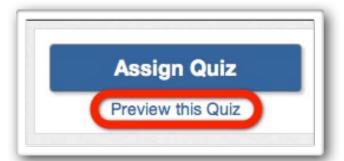
Another nice feature is the ability to load a question from another quiz. To do this simply click on *Load* in the left hand column (under your question list). From here a window will open up with all the questions you've ever made. Simply scroll through or search for it, then select the one you want.



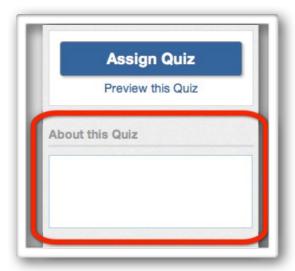


## Previewing, About this Quiz & Options

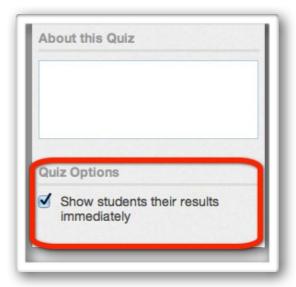
If you would like to experience the quiz or make sure that you have everything in the right place you can preview it! All you have to do is select Preview this Quiz located on the far right column. This will let you take the quiz (students will see the exactly same thing you do).



You have the option of giving information about the quiz. It could be instructions, a synopsis about the quiz or your favorite knock-knock joke. Really it is up to you.



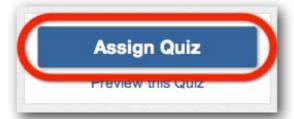
Another option you have is to give the students their results back right after the quiz. To do this simply put a check in this box.



#### **Assigning a Quiz**

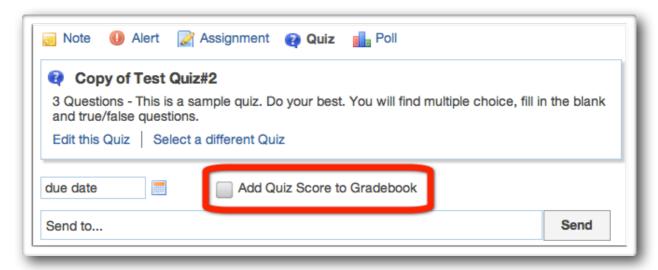
This is pretty simple but you do have an important decision to make.

To assign the quiz just select Assign Quiz in the right hand column.



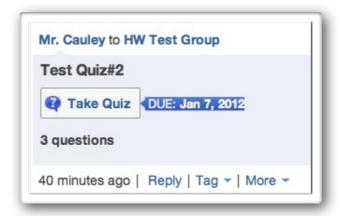
Once you do this it will take you back to your Edmodo home page. At the top the Quiz will be loaded in and waiting for you to assign to the appropriate Group(s), give it a date that it will be taken by and you have the option to *Add the Quiz Score to Gradebook* (highlighted in the image below).

For example if it is a pretest, you may not want that score to be counted, so you would leave the box *unchecked*.



#### **Taking the Quiz**

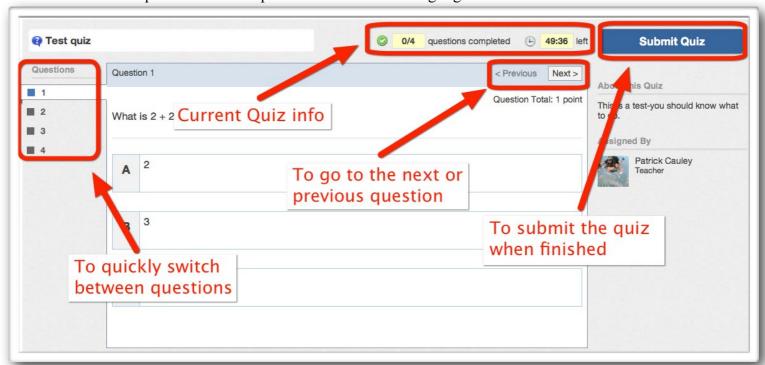
When a student takes the test, here is what it will look like. on their Edmodo homepage. All they need to do is click *Take Quiz*.



When the click on that, Edmodo will take them to a new page that gives them information about the quiz. When the student is ready they simply click *Start Quiz* and they're off!



Here is what the quiz looks like. Important areas have been highlighted.



#### Important information about quizzes

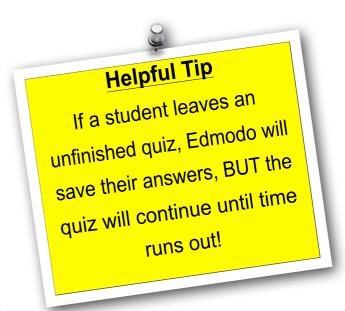
You cannot randomize the questions or answers on a quiz. For example, question #12 will be the same for all students, so someone can easily look at another computer screen to see their answers.

Also, if a student leaves the webpage for whatever reason, the quiz still continues. All their answers will be saved by Edmodo. If there is time remaining, they can log back into Edmodo and resume the quiz.

If a student does not finish the quiz in the appropriate amount of time, Edmodo will automatically submit the quiz for the student. All unanswered questions will be marked incorrect.

Another thing to note, is that there is no option to print the quiz off of Edmodo. It must be taken electronically.

When students finish a quiz and if they are shown the results they see exactly what questions they got incorrect and what the correct answers are. This is a nice touch for reflective purposes.

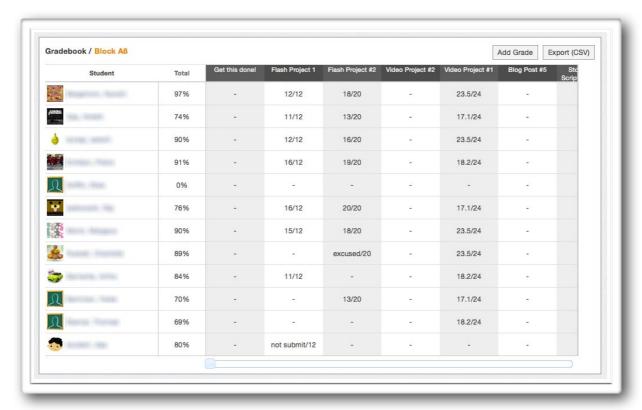


#### Grades

The Grade feature is something Edmodo has been working hard on. It is quick, easy to look at, and easy to get there. All you have to do is click on *Grades* at the top of the page.



A drop down menu will appear and you pick the class you wish to view. Once that is done you can quickly see who has turned in what, what the results were, their total percentages (you can weight grades in Edmodo), or if it still needs to be graded.



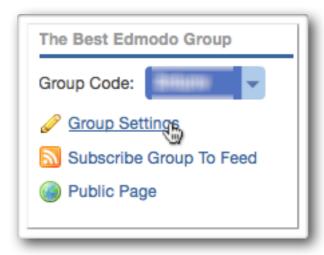
From this view, you can do many things. If you click the assignment name at the top you can view the Average or View the assignment or quickly input grades for assignments.



You can also click on *Add Grade* to (you guessed it) add a grade. You can find this in the upper right hand corner and this is different than an assignment because you CANNOT attach anything or a due date. You can add a detailed description and add a default total (which is optional). This is good for a grade that you track throughout a grading period for example participation. You can also delete and edit this grade in this view (but not assignments).

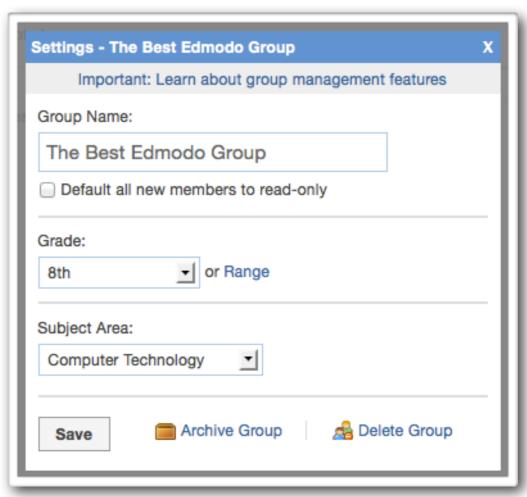
## **Group Options**

Once a group is created Edmodo gives you a multitude of options that gives you the teacher, a ton of power (to be used for good - not evil). To get to these options look at the right hand side (it is below your *Notifications* window). When you click on the Group Code you may notice that you can *Reset* or *Lock* the group code. Reset is handy to help keep students from distributing the code to their friends and the *Lock* option lets you lock the class down and no one can join without being approved.



#### **Settings**

This window may look pretty familiar. Here you can change information about the class. You also have the ability to make new members read-only (they can view but not post anything). You can also *Archive* or *Delete* a group. More on that later.



#### **Members**

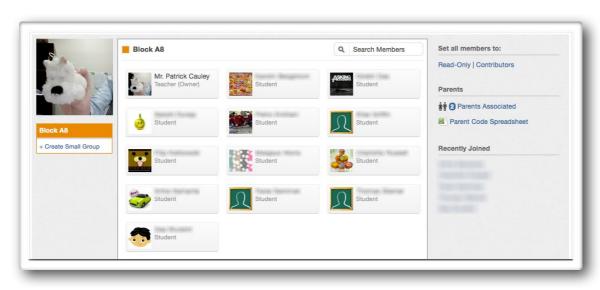
This is probably the most powerful of the Group Options. You can remove students, change their password, get parent codes and more. To get to this feature look on the right hand side and click on the *Manage* button.



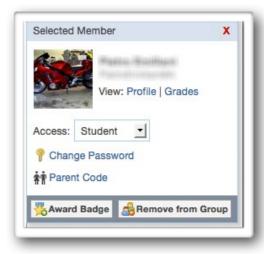
Helpful Tip

If you remove a student from your class,
all their grades and information will be
permanently lost.
\*Be careful\*

When you click on *Manage* it will take you to this page. You see the student's full name, how many parents are associated with the class, the ability to change all members to *Read-Only* or as a *Contributor*. You also have the ability to create smaller groups here as well. If you want details on a particular student, just click on their name.



The window that pops up, will show you the students full name, their username, their parent's code, their profile and grades. You can change (not view) their password and change their access from *Student* to *Read-Only*. You also have the ability to Award a Badge to the student (more on that later) or Remove them from the group. Be careful, once you remove a student all their information will be lost forever.



#### **Feeds**

Clicking on the *Feeds* option will allow you to add an RSS (Really Simple Syndication) feeds to your group. So, if you follow <u>itbabble.com</u> you can add all their new articles to your group! That way when there is new post, it will show up in Edmodo for all to enjoy.



#### **Public**

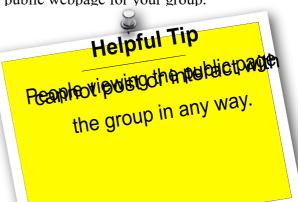
The *Public* feature allows you to make certain posts (notes, assignments, or polls) public for anyone to see. There is no need to be a part of the group or even Edmodo to view it, but the teacher decides what is public (if anything). When you click on *Public* it will take you to the webpage. Copy that URL and distribute it to whoever you want.



To add a post to the *Public* page find a post and look at the bottom of that post you will see

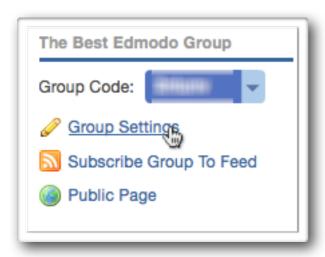
"Public." Click that and it is automatically displayed on the public webpage for your group.

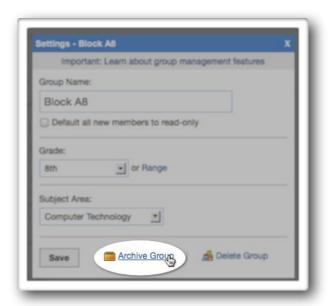




#### **Archive**

This is a handy feature. When you *Archive* a class, no one (including you) can post or add anything to it, but it is available to view and you can always unarchive it later for whatever reason. This will also save student records, all assignments and more. To get to it click on *Group Settings*, then select *Archive Group* at the bottom of the window.

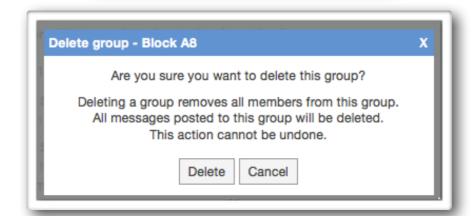




#### **Delete**

Not too much to explain here. If you delete a class everything in that class goes with. Check out the warning below.





# **Parent Code**

This is a feature found by clicking on *Manage* (right hand side of the page). Then click on *Parent Code Spreadsheet*. This will download an Excel file which has the parents code. You cannot change the parents code.





For parents to sign up they need to go to www.edmodo.com and click on Parent Sign Up.



Parents will, of course, need the code to join the Group. Once in, parents can only view information sent from the teacher or from their child (which includes grades on assignments). They cannot send any messages to other students or parents. However, they can send messages to you and their child.

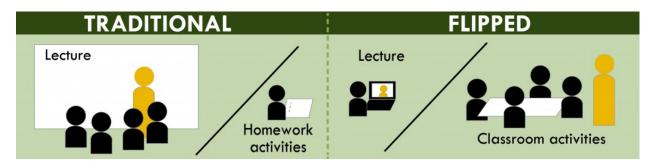
# Innovative practices used by our faculty in Teaching and Learning Process: 2016-17 to 2018-19

## 1. Flipped Class Room:

#### Introduction

The objective of flipped class room technique is to motivate students to learn concepts on their own, obtain timely information (via preliminary assessments) about their learning before class and thereby adapt learning style. Students come to the class with prior knowledge of the concepts and these concepts are reinforced in the class by solving some logical and critical thinking problems based on the topic and ensures long lasting retention of the concepts.

Flipping the classroom is a "pedagogy-first" approach to teaching. In this approach in-class time is "re-purposed" for inquiry, application, and assessment in order to better meet the needs of individual learners. Students gain control of the learning process through studying course material outside of class, using readings, pre-recorded video lectures (using technology such as Panopto), or research assignments. During class time, instructors facilitate the learning process by helping students work through course material individually and in groups.



## **Prerequisite**

Also known as "inverting" a classroom, this approach seeks to preserve the value of lecture (expertise and custom delivery), while freeing up precious in-person class time for active learning strategies. The main goal in flipping a class is to cultivate deeper, richer learning experiences for students when the instructor is present to coach and guide them. Emphasis is on higher-order thinking skills and application to complex problems.

#### **Common activities include:**

- Collaborative learning
- Case-based learning
- Peer instruction
- Problem sets

While technology facilitates flipped instruction, it takes both planning and experimentation to perfect the model. Class Teacher asked three experienced classroom flippers for their tips and best practices.

- Use existing technology to ease faculty and students into a flipped mindset.
- Be up front with your expectations.
- O Step aside and allow students to learn from each other.
- o Assess students' understanding of pre-class assignments to make the best use of class time.
  - Set a specific target for the flip.
- o Build assessments that complement the flipped model.

## **Objective:**

- 1. To motivate students to learn concepts on their own.
- 2. To aid students obtain timely information (via preliminary assessments) about their learning before class and thereby adapt learning style.
- 3. Students come to the class with prior knowledge of the concepts and these concepts are reinforced in the class by solving some logical and critical thinking problems based on the topic.
- 4. Ensures long lasting retention of the concepts.

### **Procedure:**

- 1. Provide student with the learning material video link (handouts/video lectures/text book reference pages etc) of the topic to be covered through website (edmodo, canvas, Google classroom etc). Give students 2 to 3 days time to go through the link, ask them to take notes.
- 2. On the day of the implementation (assessing the flipped class), students can be given a task of solving problems based on the learning material shared with them. Make sure the problems should be such that the student must apply the knowledge gained from learning material / video lecture to solve the problem. prepare as many questions as possible so that no adjacent student should get the same question.
- 3. Role of the faculty is to facilitate the activity.
- 4. Based on the complexity of the task, the duration can be ideally set to 15 to 20 minutes
- 5. Faculty should collect the papers from the students.
- 6. Faculty should summarize the topic/concept and can also give answers to the questions.
- 7. Faculty should correct these papers (not in the class room) and give constructive feedback.

### Goals

- Improves the students own learning
- Learn the concept before coming to the class
- Understand the concept very easily

**Assessment:** The success of the flipped class room activity depends on two parameters.

1. Number of students attended the video lecture / gone through the learning material before coming to the class. Faculty should ensure maximum students come prepared to the class otherwise it will be very tough to handle the class.

- 2. Percentage of students who have completed the task successfully reflects the success rate of the activity.
- 3. Assessment Metrics: At least 80 % students must take part in the pre class activity i.e. video lecture / learning material etc. and at least 65% of students must be able to complete the task successfully.
- 4. Faculty must try to improve these percentages in next flipped class room activity and improvement can shown in a bar graph.
- 5. Student feedback on the activity is a must.

# **Expected Outcomes:**

- 1. Confidence levels of students will improve, when they solve a problem or complete a task on their own without the help of the faculty.
- 2. Improves self learning ability of the students.
- 3. Students will learn at their own pace and helps in retaining concepts for a longer period of time.

#### Flipped Class Room

Sl.No	Name of the faculty	A.Y	Year	Subject	Outcome
1	Mrs.M.Deepika	2016-17 II sem	III	WT	Lean about WAMP installation
2	Mr.K.Rohit Kumar	2017-18 I sem	III	SE	Learn about various Process models in SDLC
3	Mrs.SalarMd/ Mr.V.Biksham	2018-19 Isem	IV	LP	Learn about Linux Utilities and Shell Programming

# 2. Background knowledge Probe:

Begin the discussion with the students by demonstrating concept what we discussed in previous chapter and test the student background knowledge by conducting the activity.

#### **Introduction:**

Begin the discussion with the students by demonstrating concept what we discussed in previous chapter and test the student background knowledge by conducting the activity.

BKPs can be useful to students in helping them identify which areas they are weak in and need to devote study time in preparing for a final exam. In this case, you can give them randomized questions from a test bank over the same content your test items measure and have them rate the questions as above. Next, the students can work in study groups to locate the information for each item in the textbook, class notes, etc., marking page numbers on the BKP for later studying. Active discussion of the items and sharing notes can be a good review also.

## **Implementation:**

At the first class meeting, many college teachers ask students for general information on their level of preparation, often requesting that students list courses they have already taken in the relevant field. This technique is designed to collect much more specific, and more useful, feedback on students' prior learning.

Background Knowledge Probes are short, simple questionnaires prepared by instructors for use at the beginning of a course, at the start of a new unit or lesson, or prior to introducing an important new topic. A given Background Knowledge Probe may require students to write short answers, to circle the correct response to multiple-choice questions, or both.

Before introducing an important new concept, subject, or topic in the course syllabus, consider what the students may already know about it. Recognizing that their knowledge may be partial, fragmentary, simplistic, or even incorrect, try to find at lease one point that most students are likely to know, and use that point to lead into others, less familiar points.

Prepare two or three open-ended questions, a handful of short-answer questions, or ten to twenty multiple-choice questions that will probe the students' existing knowledge of that concept, subject, or topic. These questions need to be carefully phrased, since a vocabulary that may not be familiar to the students can obscure your assessment of how well they know the facts or concepts.

At the next class meeting, or as soon as possible, let students know the results, and tell them how that information will affect what you do as the teacher and how it should affect what they do as learners.

#### Goals:

- Student can revise the connect frequently
- Gain the fundamentals on the concern subject
- Improves student pass percentage

#### **Outcomes:**

- Course-Related Knowledge and Skills
- Learner Attitudes, Values
- Self-Awareness and Learner Reaction to Instruction.

Name of the	A.Y	Course	Class	Topic	Impact
faculty					
Mr. P Naresh	2016-17	PPL	III-I	Python	Students will acquired
	II sem			programming	the basics knowledge
					on python
					programming
Mr.G.Sravan	2017-18	FLAT	II –II	Turing	Students acquires the
Kumar	I sem			Machines	knowledge about
					Turing machines
					concept
	2018-19	OS	II-II	Background	Student will able to
Mrs.	IIsem			Knowledge of	learn about basic
Padmajoshi				OS	fundamentals of OS

# 3. Problem based learning:

Assign a challenging problem to the students to solve in the group of five. Assign a challenging problem to the students to solve in the group of five. Problem-based learning (PBL) is a student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning.

## **Implementation**

Rather than teaching relevant material and subsequently having students apply the knowledge to solve problems, the problem is presented first. PBL assignments can be short, or they can be more involved and take a whole semester. PBL is often group-oriented, so it is beneficial to set aside classroom time to prepare students to work in group's and to allow them to engage in their PBL project.

- Create the problem. Ideally, this will be a real-world situation that resembles something students may encounter in their future careers or lives. Cases are often the basis of PBL activities. Previously developed PBL activities can be found online through the University of Delaware's PBL Clearinghouse of Activities.
- Establish ground rules at the beginning to prepare students to work effectively in groups.
- Introduce students to group processes and do some warm up exercises to allow them to practice assessing both their own work and that of their peers.
- Consider having students take on different roles or divide up the work up amongst themselves. Alternatively, the project might require students to assume various perspectives, such as those of government officials, local business owners, etc.

• Establish how you will evaluate and assess the assignment. Consider making the self and peer assessments a part of the assignment grade.

# **Students generally must:**

- Examine and define the problem.
- Explore what they already know about underlying issues related to it.
- Determine what they need to learn and where they can acquire the information and tools necessary to solve the problem.
- Evaluate possible ways to solve the problem.
- Solve the problem.
- Report on their findings.

## Goals

- Ready to take any challenging task
- Ability to develop any application
- Improve the interpersonal skills

### **Outcomes:**

- Working in teams.
- Managing projects and holding leadership roles.
- Oral and written communication.
- Self-awareness and evaluation of group processes.
- Working independently.
- Critical thinking and analysis.
- Explaining concepts.
- Self-directed learning.
- Applying course content to real-world examples.
- Researching and information literacy.
- Problem solving across disciplines.

## **Problem Based Learning:**

Sl.No	Name of the faculty	A.Y	Year	Remarks
1	Mr.B .Vivekanand	2016-17 II sem	II	JDBC CONNECTIVITY
2	Mrs. K Ramya Laxmi	2017-18 I sem	IV	Pentago tool Database connection in kettle

4. Think Pair Share Activity:

Think phase: Individual students think on question

Pair phase: Students sitting in a single bench form a group and will review their solutions in think

phase and will come out with one best.

Share phase: I will share my solutions; Teams will verify with their solution and will identify new

points. This will be shared with entire class room.

**Introduction:** 

Think-Pair-Share activities pose a question to students that they must consider alone and then

discuss with a neighbor before settling on a final answer. This is a great way to motivate students

and promote higher-level thinking. Even though the activity is called think-"PAIR"-share, this is

the term many instructors use for pairs and small groups (three or four students) alike. Groups

may be formed formally or informally. Often this group discussion "sharing" is followed up with a

larger classroom discussion.

Some think-pair-share activities are short, "quick-response think-pair-share" and sometimes

the activities may be longer and more involved, "extended think-pair-share." The instructor can

use the student responses as a basis for discussion, to motivate a lecture segment, and to obtain

feedback about what students know or are thinking and it is easy to incorporate more than one

think-pair-share activity in a given class period.

Think phase: Individual students think on question

Pair phase: Students sitting in a single bench form a group and will review their solutions in think

phase and will come out with one best.

Share phase: I will share my solutions; Teams will verify with their solution and will identify new

points. This will be shared with entire class room.

**Objectives:** 

To enhance problem solving, creativity and thinking skills in students.

To understand team-based learning as an approach to collaborative learning

To make students understand complex concepts.

To develop oral communication skills, Fosters and develops interpersonal relationships.

43

## **Procedure to conduct Think-Pair-Share:**

Think-pair-share (TPS) is a collaborative learning strategy in which students work together to solve a problem or answer a question about an assigned reading. This technique requires students to

- Think: Teachers begin by asking a specific higher-level question about the topic to the students. Students "think" about what they know or have learned about the topic for a given amount of time (usually 1-3 minutes).
- Pair: Each student should be paired with another student. Teachers may choose whether to assign pairs or let students pick their own partner. Students share their thinking with their partner, discuss ideas, and ask questions of their partner about their thoughts on the topic (2-5 minutes).
- Share: Once partners have had ample time to share their thoughts and have a discussion, teachers expand the "share" into a whole-class discussion. Allow each group to choose who will present their thoughts, ideas, and questions they had to the rest of the class.

# Advantages of think-pair-share

- Instructors find they can have a format change during lecture that only takes a small amount of class time. Preparation is generally easy and takes a short amount of time.
- The personal interaction motivates students who might not generally be interested in the discipline.
- You can ask different kinds and levels of questions.
- It engages the entire class and allows quiet students to answer questions without having to stand out from their classmates.
- You can assess student understanding by listening in on several groups during the activity, and by collecting responses at the end.
- The fluid nature of group formation makes this technique very effective and popular for use by instructors of large classes.
- Full class discussion is generally more fruitful after a think-pair-share and throughout the semester as the frequent use of such activities generally improves student comfort levels and willingness to participate throughout a class period.

## Goals

- Ability to work team
- Share the knowledge
- Discuss and revise the problem

Sl.No	Innovation	Introduced on	Year	Remarks
	Method			
1	Think Pair Share Activity	2017-18 IIsem	III	A group of student can make as group and think-pair-share the given problem in the classwork.

Name of the		Course	Class	Topic	Impact
faculty					
Mr. K Rohit	2017-18	STM	III-II	Types of	Students are able to write a
kumar				Testing and	test case, scenarios on a
				its techniques	requirement to get quality
Mr.Lubna	2018-19	CN	III-I	Network	Students able to learn
Yasmeen				topologies	about networking
				and	topologies and various
				connections	protocols

### **5. Clarification Pauses:**

#### **Introduction:**

"Throughout a lecture, particularly after stating an important point or defining a key concept, stop, let it sink in, and then (after waiting a bit!) Ask if anyone needs to have it clarified. You can also move around the room during these pauses to look at student notes, answer questions, etc. Students who would never ask a question in front of the whole class will ask questions during a clarification pause as you move around the room. Clarification Pause procedure is a technique in which the teacher makes use of strategic pauses to provide students with time during which they can review their notes, discuss among their pairs or undertake any similar activity that allows them to clarify, assimilate and retain the material.

Often, teachers are trying to present maximum information within the allotted time due to which, students have a lot to digest at the end of class. This leaves them with little time to comprehend and analyze the material with most retaining a very small percent of the original content taught in class. Thus "Pausing" in between the lecture should also be planned ahead to ensure that learning occurs within the classroom.

## **Implementation**

Pause procedure is a technique in which the teacher makes use of strategic pauses to provide students with time during which they can review their notes, discuss among their pairs or undertake any similar activity that allows them to clarify, assimilate and retain the material.

Pausing following presentation of key information is most appropriate. Teacher's are suggested the use of at least three two minute pauses in the lecture at 8-12 minute intervals to enhance learning. During the initial phase, to ensure adherence to the strategy use a minute timer set for every 10 minutes to force you to take a pause. This serves as a reminder for teachers as they may forget to use this strategy when caught up in their presentations.

Sometimes students may request for more time to review and discuss the material. In such a situation the timer proves handy, as it signals the end of the pause period and the lecture is continued. Thus students are taught to work within the time period of the pause.

### Goals

- Student can getting cleared where is getting confused
- Improves the subject knowledge
- Improves communication skills

#### **Outcomes**

The pauses are effective only when the activity that follows stimulates and facilitates students to comprehend, reflect and learn the material. Here are some activities that you can follow with after you pause:

**Note taking:** Students can use this time to summarize the information presented in written format, listing down key points or main ideas, creating a graphical representation (mindscaping), filling an exit slip etc that allows them to reflect on the material head.

**Pair review:** A quick discussion among the pairs will help students in recalling facts, clarifying any misconceptions and filling in facts left out.

**Framing questions:** Students can be instructed to frame two questions based on the material that was presented.

**Crossword:** Students are presented with a quick crossword puzzle that they should solve. When called for, these puzzles can also be designed such as to connect previous learning with the present, in turn strengthening the learning.

Name of the faculty	A.Y	Course	Class	Topic	Impact
Dr. M Venkata reddy	2017-18 II sem	OOAD	III-II	Cases, use cases, and sequence diagrams, modeling techniques and forward engineering	Getting knowledge on how to write the code by using the UML diagrams with forward engineering techniques and awareness about drawing UML diagrams for real time applications
Mrs.P.Archana	2018-19	IS	III-I	Public key cryptosystem	Getting knowledge about RSA, Diffe Hellman Security algorithm

## 6. Jigsaw Group:

#### **Introduction:**

Divide the students into group of three or four and assign some discrete part of an assignment to each member of a group to complete, when every member has completed his assigned task, then the group reforms to complete a comprehensive report.

The Jigsaw Strategy is an efficient way to learn the course material in a cooperative learning style. The jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity. Group members must work together as a team to accomplish a common goal; each person depends on all the others. No student can succeed completely unless everyone works well together as a team. This "cooperation by design" facilitates interaction among all students in the class, leading them to value each other as contributors to their common task.

# **Implementation:**

- 1. Divide the material needed to cover a topic into four roughly equal parts.
- 2. Assign a different topic to each team member.
- 3. Develop and assign homework questions or essays over the material. These can be turned in for points or a grade in undergraduate classes.
- 4. When class meets again, students consult with experts from other teams.
  - When students arrive in class, they turn in their homework and then meet in expert groups. If you have a large class, you will have to have more than one expert group for each article: you don't want eight people in one expert group. Give the expert groups instructions on their task.
  - If you simply asked your students to read a chapter and write a summary for homework,

you might give them instructions like these: o Introduce yourselves to the other expert group members. Discuss the reading with the group, coming to consensus on the main points you will teach your teammates. Make sure everyone participates.

- Try to think of at least two examples from your personal experiences to illustrate the main point(s).
- o Plan how you will check your respective teammates for understanding without asking, "Do you understand?"
- o Thank your expert group members for their help.
- If you had them answer focus questions for homework, your instructions might look like this: o Introduce yourselves.
  - O Take turns leading the discussion to compare your responses to the questions. Try to come to consensus on the most important points. If there are things you can't agree on, make note of them to share with your teammates. Also note any interesting or useful examples from any of your expert group members. Check for understanding before moving on to the next question. O Plan your strategy for teaching your teammates in the limited amount of time that you will have.
  - o Thank your expert group members for their help.

#### Goals

- Improves interpersonal skills
- Group learning
- Improves the thesis/report writing skills

## **Procedure to conduct Jigsaw Activity:**

- Divide students into 5- or 6-person jigsaw groups.
- Divide the day's lesson into 5-6 segments.
- Assign each student to learn one segment.
- Give students time to read over their segment at least twice and become familiar with it.
- Form temporary "expert groups" by having one student from each jigsaw group join other students assigned to the same segment.
- Bring the students back into their jigsaw groups.
- Ask each student to present her or his segment to the group.
- Float from group to group, observing the process.
- At the end of the session, give a quiz on the material.

Jigsaw Group:

Name of the faculty	Course	Class	Topic	A.Y	Impact
Dr.R.Nagaraju	Compiler Design	III-II	Phases in Complier	2018-19	Learn about the overall phases of compiler design

# Academic Year 2018-19

Name of the faculty	Course	Class	Topic	Innovations in teaching & Learning	Impact
Mr.V.Biksham	OS	II-II	Background knowledge about OS	Background Knowledge	Student will able to learn about basic fundamentals of OS
Dr.Nagaraju	CD	III-II	Phases in Complier	Jigsaw Group	Learn about the overall phases of compiler design
Mr.Salar Md.	LP	IV-I	Linux Programming	Flipped Class Room	Learn about Linux Utilities and Shell Programming
Mrs.P.Archana/ Mr.V.Biksham	CRNS	III-I	Public key cryptosystem	Clarification Pauses	Getting knowledge about RSA, Diffie Hellman Security algorithm

# Academic Year 2017-18

Name of	Course	Class	Topic	Innovations in	Impact
the faculty				teaching &	
				Learning	
Mrs. K	DW	IV-I	Pentago tool	Demo on	Students can
Ramya			Database	transformations	understand a new tool
Laxmi			connection in	-Problem based	and can work on
			kettle	learning	integration.
Mr. K	STM	III-II	Types of Testing	Real time	Students are able to
Rohit			and its techniques	experience on	write a test case,
kumar				website with	scenarios on a
				different testing	requirement to get
				tools, methods	quality
				and its type -	
				Think Pair Share	
				Activity	

Dr. M Venkata reddy	OOAD	III-II	Cases, use cases, and sequence diagrams, modeling techniques and forward engineering	Explanation with white board and PPT - Clarification Pauses	Getting knowledge on how to write the code by using the UML diagrams with forward engineering techniques and awareness about drawing UML diagrams for real time applications
Mr.Lubna Yasmeen	CN	III-I	Network topologies and connections	Think Pair Share activity	Students able to learn about networking topologies and various protocols
Mr.K.Rohit Kumar	SE	II-II	Software Engineering	Flipped Class Room	Learn about various Process models in SDLC
Mr.G.Srava n Kumar	FLAT	II-II	Turing Machines	Background Knowledge Probe	Students acquires the knowledge about Turing machines concept

# Academic Year 2016-17

Name of the faculty	Course	Class	Topic	Innovations in teaching & Learning	Impact
Mrs. M Deepika	WT	III-II	Database connectivity with server side program	PPT with practical session - Flipped Class Room	Student can develop a website based on this session using WAMP server
Mr. P Naresh	PPL	III-I	Python programming	PPT- Background knowledge Probe:	Students will acquired knowledge on python
Mr.B .Vivekanand	OOPS	II-II	JDBC CONNECTI VITY	Practical Session – Problem based learning	Students will understand how to communicate with different databases.

# PEER REVIEW AND CRITIQUE

The innovative method are submitted to experts for peer review and their suggestions and comments on these methods to reproduce and improves the standards of the methods.

The experts feedback form for peer review the innovative methods in teaching and learning process.

SREYAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi | Affiliated to JNTUH, Hyderabad | Accredited by NAAC)

Hyderabad | PIN: 500068

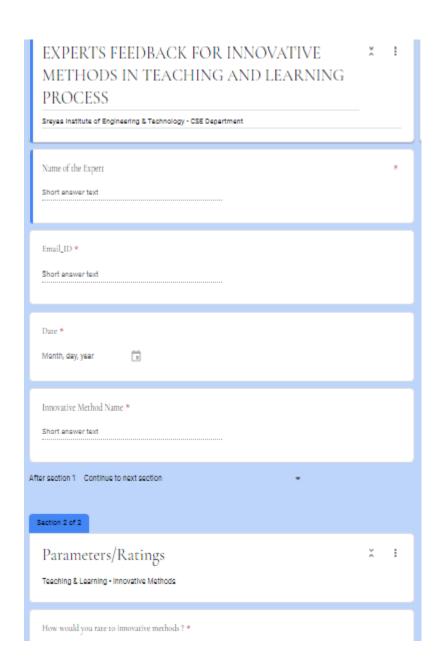
EXPERTS FEEDBACK FOR INNOVATIVE METHODS IN TEACHING AND LEARNING PROCESS									
Please fill out this feedback form so we can ensure top quality methods in teaching and learning process									
EMAIL_ID		NAME O	F THE EXPERT	DATE					
Innovative Method	d:			•					
Parameters/Ratings	EXCELLENT	GOOD	FAIR	POOR					
How would you rate to innovative methods									
How satisfied were you with the clear goals?									
How satisfied were you with usage of approximate methods?									
How satisfied were you with implementation?									
How satisfied were you with Outcomes?									
How satisfied were you with the timeliness of effective presentation?									
Would you recommend our innovative method to others?									
			•						
Please provide any add	ditional comments	or suggestions.							

Signature

## ONLINE FEEDBACK FORM

We also initialed to collect the peer review comments and suggestions through online mode. Here, we created a online form for experts to review and send the critique on these methods.

Web Link: <a href="https://forms.gle/rF592frEjgEuGcey6">https://forms.gle/rF592frEjgEuGcey6</a>



Section 2 of 2		
Parameters/Ratings Teaching & Learning - Innovative Methods	×	:
:::		
How would you rate to innovative methods? *  Excellent		
Good		
Fair		
Poor		
How satisfied were you with the clear goals? *		
Excellent		
Good		
☐ Fair		
Poor		
How satisfied were you with usage of approximate methods? *		
Excellent		
Good		
Fair		
Poor		
How satisfied were you with implementation ? *		
Excellent		
Good		
Fair		
Poor		

How satisfied were you with Outcomes ? *
Excellent
Good
Fair
Poor
How satisfied were you with the timeliness of effective presentation? *
Excellent
Good
Fair
Poor
Would you recommend our innovative method to others? *
Excellent
Good
Fair
Poor
Please Provide any Additional Comments or Suggestions *
Long answer text