Problem Based Learning

Acharya & BM Reddy College of Pharmacy



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Page 1 of 3

PROBLEM BASED LEARNING

a. Objectives of the Practice

Problem Based Learning (PBL) is a student-centered, self-directed teaching method where students learn the course or concept by solving an open-ended problem. It does not focus on getting defined solution. On the other hand, it allows students to develop skills like, working independently as well as with a team with ease, oral and written communication skills, managing projects, inculcating leadership skills, critical thinking skills, both oral and written communication skills along with knowledge acquisition which are required to work efficiently in the industry and meet modern corporate prospects.

b. The Context

The interdisciplinary nature of current challenges, work culture necessitates one to develop transferable attributes and skills alongside getting respective discipline-specific knowledge. PBL, which is a concept based on problem of real world in which students are not taught before. Therefore, the problem given to them triggers doubt and confusion which activates individual knowledge and further leading to exploration of resources, peer learning and group discussions. It is an interactive process of three phases, initial problem analysis phase, phase of self-directed learning and then reporting phase. *This process* inspires the students to understand the relevance of underlying scientific knowledge and principles, develop learning outcomes, finding of solution, preparing report during which students get equipped with other desirable attributes. This approach is tailor made for any professional degree course and holds good for pharmacy programs.

c. The Practice

Teachers should prepare a set of interdisciplinary problems and develop learning outcomes based on which students are expected to learn and develop. After vetting of learning outcomes successfully at different levels, PBL sessions to be planned and facilitators to be assigned. PBL involves three sessions,

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brainstorming and identification of student based learning objectives, discussion with write ups, sharing materials and finally, presentation to whole group and assessment.

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Page 2 of 3

In the first session, students are divided into small groups of 6 to 8 persons, requesting to identify a Leader and a Scribe, further preparing a list for the group members and other details. Around 10 minutes time to be given for all these activities. Students should be made familiar with the respective roles of leader and scribe. After commencement of the session, everyone is allowed to express opinions in an orderly manner, writing important points in this brainstorming session, hypothesis, and learning objectives are prepared for the next session and shared with team members.

In the second session, each member has to come up with the write up regarding the same and each one to be discussed, summarized and the solution to be finalized. This session involves extensive discussions amongst the students. The process of finalizing the solution requires them to understand the importance of prioritisation.

In the last session, the solution should be presented in presence of team members and facilitators. Each student's involvement is evaluated by facilitator in all the sessions and final assessment results are made available. The sessions need to be time bound so that the students get accustomed to meeting the time lines when they are on the job. The roles assigned to the students can be interchanged or rolled over to other students and thereby allow role playing chances to all of them.

d. Evidence of Success

PBL is found suitable for the healthcare industry as it focuses on healthcare management and addressing the problems associated with health. Students expressed satisfaction of learning as it made them develop reflective, critical and collaborative skills along with positive attitudes. It helped them in long term retention of knowledge. Students are progressively given more and more responsibility for their education and become independent of the teacher for their learning. Those who participated in PBL have become

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more active and successful lifelong learners. The students also expressed that the PBL system has given them the confidence to face real time scenarios at work place be it a hospital environment where a collective decision and team working is required to address the health issues of patients or crack business negotiations to win projects from clients amidst stiff competition.

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Page 3 of 3

e. Problems Encountered and Resources Required

Major challenge is time required in defining problem statement and developing and vetting of specific learning outcomes. Its implementation needs enough infrastructure in terms of class rooms/PBL rooms to accommodate 10 to 12 members, furniture, and ICT tools. Teachers in terms of facilitators are required in more number to implement effectively. Apart from these, staffing for each group if it is planned for whole program, their workload, time allocation needs exhaustive managerial skills. Inclusion of PBL as one of the pedagogies in curriculum, allotting part of the curriculum to be taught in the form of PBL, assessment, award of credit points, and grades to students is difficult in current educational scenario of the country and are still in infantile stage in India which needs involvement of administrators, curriculum committees of universities.

Conclusion (Notes)

PBL, as a pedagogy, promotes active participation and learning in students, fosters self-motivation, enhances student's knowledge base, helps to develop reasoning and problem-solving skills, and finally facilitates students to work as efficient members of team. PBL is a part of curriculum in all healthcare related academic institutions in most of the developed countries. India, is on the verge of revolutionizing education system employing National Education Policy, and at this juncture, incorporating PBL, one of the effective pedagogies, as part of curriculum is the need of the time. Organising workshops for teachers on implementation of PBL as a pedagogy goes a long way in exploiting its full benefits.

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TABLE OF CONTENTS

Sl.No.	Contents	Page No.
1.	Definition, Purpose, History	2
2.	Context, Need for the Study	3
3.	Features of PBL, Principles Behind PBL	4
4.	Role Change, Procedure - PBL	5
5.	Advantages, Evaluation Process Involves Assessment	6
6.	Resources Required	7
7.	Practice of PBL	8
8.	Example of a case scenario	22
9.	Facilitator's guide	24
10.	Challenges in implementing PBL	25
11.	Evidence of success	26
12.	Conclusion	29
13.	Problem solving methodologies	30



PROBLEM-BASED LEARNING

DEFINITION

Barrows defined problem-based learning as the individualized learning that results from process involved in working towards the solution of the problem.

Problem-based learning (PBL) is a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material. PBL essentially involves small groups of students discussing some trigger material (the problem/case scenario), determining what they need to study, and then meeting again to share the results of their learning. The problem serves as the stimulus, as well as search for information. The students actively participated in discussion and critical thinking while contributing to a friendly, non-intimidating environment and also willingness to make constructive evaluation of self or group. The students recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PURPOSE

Several research-based teaching programs suggest that instructional designs that employ active engagement, discussion and group work are influential in students' conceptual learning (Hake 1998 Hake, R. R. 1998). PBL is such an approach, developed to foster students' learning via complex and real-life problems. Barrows HS, Tamblyn RM. An evaluation of problem-based learning in a small group utilizing a simulated patient. J Med Educ. 1976;51(1):52–54, was reported over four decades ago. PBL has gained prominence as a way of instruction in a wide variety of disciplines including but not limited to medicine (Barrows and Tamblyn 1980 Barrows, H. S. and Tamblyn, R. M. 1980. Problem-based learning: An approach to medical education, New York: Springer).

THE HISTORY

The history and definition of PBL are covered in detail by de Graaff and Kolmos in 2003 (de Graaff. E. and Kolmos, A. Characteristics of problem-based learning. International Journal of Engineering Education, 2003. 19(5): 657-662. and Gijbels et al. in 2005 (Effects of problem based learning: A meta-analysis from the angle of assessment. Review of Educational Research, 2005, 75(1): 27-61. Characteristics of problem-based learning. International Journal of Engineering Education, 19(5): 657-662, Kolmos (Kolmos, A, Reflections on project work and problem-based learning. European. Journal of Engineering Education, 1996, 21(2): 141-14 and Kolmos, A. 2002. Facilitating change to a problem-based model. The International Journal Journal for Academic Development, 2002, 7(1): 63-74.

The history of PBL has an essential phase of transition from the process of a traditional educational system of lecturing or delivering the knowledge to the students in a typical classroom setup to exploration by the students. In PBL the lecturing role of the faculty has been changed to facilitator of the learning process. The students are not provided with the study material but a problem-based educational model. The characteristics of a problem-based learning model are presented in order to provide a framework for discussion of the scope of these issues. Then the findings of a research study, which examined an actual transition from a



traditional model to a problem-based learning model, are introduced and discussed. An extensive staff development program needs to be introduce teachers to the new model. Some of these were to do with the nature of teaching in the new model, for example, the requirements of project supervision as the new form of teaching, which was quickly brought into focus by teachers involved in the transition. As compared to the traditional lecturing, the teachers have to reselect the content of courses as the number of lectures is substantially reduced. The PBL educational model focuses on the individual and the organization. For faculty and academic developers this means that they have to facilitate all three levels which is a comprehensive challenge and requires a high level of competency.

PBL is generally implemented as a small group tutorial in which students work through scenarios. The scenarios provide the context for learning and involve ill-structured, interesting, open-ended and real-life problems to motivate students and stimulate discussion. Ill-structured problems have no single, right or wrong answers. Therefore, there is no single method of solving these problems. Students try out new and different ways to solve the problem as they read the scenario. In this approach, learning is more student-centered and less teacher-directed. The key characteristic of PBL, according to Gijbels et al. (2005), is posing a concrete problem' to students to initiate the learning process. Torp and Sage 2002, in Problems as possibilities: Problem-based learning for K-16 education, Edition 2, described PBL as focused, experiential learning organized around the investigation and resolution of a complex, real-world problem that does not have a single correct answer. They described students as engaged problem solvers, seeking to identify the root problem and the conditions needed for a good solution and, in the process, becoming self- directed learners. PBL teaches students 'how to learn'. It is an instructional method for lifelong learning and has been shown to be influential in developing new forms of competencies (Kolmos et al. 2004 Kolmos, A., Fink, F. K. and Krogh, L. 2004. The Aalborg PBL model progress. diversity and challenges, Aalborg: Aalborg University Press. We have noticed that students find it more enjoyable and satisfying themselves. It encourages greater understanding for the students.

THE CONTEXT

Several research-based teaching programs suggest that instructional designs that employ active engagement, discussion and group work are influential in students' conceptual learning (Hake 1998 Hake, R. R. 1998). PBL is such an approach, developed to foster students' learning via complex and real-life problems. Journal of Medical Education, 51(1): 52-54. Oover four decades ago. PBL has gained prominence as a way of instruction in a wide variety of disciplines including but not limited to medicine (Barrows and Tamblyn 1980 Barrows, H. S. and Tamblyn, R. M. 1980. Problem-based learning: An approach to medical education, New York: Springer.

NEED FOR THE STUDY

In an increasingly technological world, quality teachers and educators are needed to prepare future generations. Pharmacists who can work in teams have interpersonal, creative and critical thinking skills and problem-solving abilities and logical and analytical decision-making skills are needed to work in today's workplaces that are equipped with high technology. Pharmacy students are also expected to have a good conceptual understanding of basic sciences, including



chemistry. Students' conceptual understanding may be fostered via improving their beliefs about sciences from a novice to a more expert-like level. Several research-based innovative instructional approaches were developed and reported in the literature.

It is said that problem-based learning (PBL) promises a variety of educational outcomes including but not limited to skills in group work and information seeking, self-directed learning, communication skills and developing learners' knowledge base and reasoning skills (Neild 2004 Neild, T. 2004.)

Therefore, it may prove to be useful in improving Pharmacy students' beliefs about and conceptual understanding of chemistry and biology, thereby helping them form a fundamental science basis for their future Pharmacy career.

FEATURES OF PBL

- Understanding comes from our interaction with the environment.
- Cognitive conflicts stimulate learning.
- Knowledge evolves through social negotiation and evaluation of the viability of individual understanding.
- Learning is student centered.
- Learning occurs in small student groups.
- Teachers are facilitators or guides.
- Problems form the organizing focus and stimulus for learning.
- Problems are a vehicle for the development of clinical problem-solving skills.
- New information is acquired through self-directed learning.
- Shifts away from short, isolated teacher centered lessons.
- Integrates real world issues and practices.
- Teaches students to apply what they have learned in university to life-long endeavors

PRINCIPLES BEHIND PBL

- Understanding is built through what we experience
- Meaning is created from efforts to answer our own questions and solve our own problems
- We should appeal to students' natural instincts to investigate and create
- Student-centered strategies build critical thinking and reasoning skills and further their creativity and independence



ROLE CHANGE

- In problem-based learning, the traditional teacher and student roles change.
- The students assume increasing responsibility for their learning, giving them more motivation and more feelings of accomplishment, setting the pattern for them to become successful life-long learners.
- The faculty in turn become resources, tutors, and evaluators, guiding the students in their problem solving efforts.

PROCEDURE - PROBLEM-BASED LEARNING

PBL starts with "a problem posed" then we need to identify what we need to know, learn it and then apply it.

In PBL, it is not the particular subject matter that drives the process but rather the problem. Hence students do not start with a particular subject area. Different areas of their study in the form of knowledge and experience will emerge from the problem identification. Through this approach there is also the learning of the interrelationship of concepts

Generally, the process of PBL involves

- Exploration of the problem, identification of the issues and creating hypotheses
- Students try to solve the problem with current knowledge or experience that may be pertinent to the case/situation
- Students identify what one does not know that can impede the process of better comprehension of the problem and hence problem solving

In other words,

1. The students are divided into a group of not more than ten members. Each group is given with the same case scenario. This has hidden learning objectives and is considered as a problem. In this way students confront a problem.

2. In groups, students organize prior knowledge and attempt to identify the nature of the problem. Here, group discussion is the means of exploration and learning.

3. Students pose questions about what they do not understand. They frame questions based on case scenario and related to the subject for which case scenario is framed.

4. Students design a plan to solve the problem and identify the resources they need. The exploration for the learning outcomes or the questions continues in the group.

5. Students arrange possible explanations and working hypotheses. They compile the possible learning objectives and learning outcomes.

6. Students begin to gather information as they work to solve the problem. By this they arrive at the learning outcomes related to the case scenario.



7. Report back, synthesize explanations, and apply newly acquired information to the problem. The report is presented by the group.

8. The PBL groups submit their report to the PBL coordinator.

ADVANTAGES

- Generic skills and attitudes are improved
- Teamwork skills are developed
- Chairing a group and taking responsibility is built
- Listening actively to other's opinion is developed
- Recording the proceedings of the discussion is learnt
- Cooperation between team members is focused
- Respect for colleagues' views is emphasized
- Critical evaluation of literature is understood
- Self directed learning and use of resources is realized
- Presentation skills are sharpened

EVALUATION PROCESS INVOLVES ASSESSMENT

- Of the group
- Of the student
- Of the tutor
- Of the content.







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Please confirm that you are able to	attend the meeting at the organised time or suggest an alternative date or time.
Thank you in advance for your assi	istance. I look forward to seeing you at our meeting.
Unfeigned Regards,	
M.Prabhu	
(PBL Chief Co-ordinator)	
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Minutes of meeting

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<u>NO.</u>	DETAILS	ACTION BY	REMARK
1.	Welcome address by Chairperson		
	Meeting with all the subject teachers was conducted in connection to B.Pharm first and third semester Problem Based Learning (PBL).		
2.	B. Pharm : Problem Based Learning (PBL)		
	 Mr.M.Prabhu, PBL Chief Coordinator, Faculty of Pharmacy has delivered the welcome address and discussed the purpose of the meeting. As per the suggestion given by Prof.Dr.B.G.Nagavi, Senior Consultant, HESTAR CENTER, Mr.M.Prabhu has conveyed the information to the subject teachers to assign the PBLfor BPharm first and third semesterstudents. He has also informed to all subject teachers from first and third semesters, to prepare a problem scenario and Facilitators guide for their subjects and preliminary vetting to be done by deparment level followed by second vetting done by PBL Committee members. The final vetted copy of problem scenario and Facilitator's guide (Both soft and hard copies) to be send to PBL Chief Coordinator within the simulated period of time. He has also justified the importance of vetting and its processess for conducting PBL efficitively. All the subject teachers are present at the meeting unanimously agreed on the above justification and individually accepted the suggestion. The issues concerned with place to conduct PBL and Facilitator's (1 Persons to be needed for 109 students) were raised by many subject teachers. This was answered by Mr.M.Prabhu that he will discuss wit higher officials and also strongly believe that could be obtained from 	r i i t t h n	

Minutes of meeting

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EXAMPLE OF A CASE SCENARIO



Acharya & BM Reddy College of Pharmacy

Course: Pharmaceutical Microbiology

Course code: BPh303T

Year: 2018-2019 Program: B. Pharm. Semester:3rd

Name of the Author: Dr. Saurabh B

Learning Outcomes:

At the end of the PBL session student shall be able to

- Explain the reasons behind contamination
- Describe the causes for color change in media
- What is the role of agar?
- Determine the root level causes behind the suppression or nonappearance of E.coli in the culture.

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Pharmaceutical microbiology

ACHARYA & BM REDDY COLLEGE OF PHARMCY III SEMESTER B PHARM

Pharmaceutical Microbiology- case scenario for PBL

A graduate student was working on E. coli culture from several days, however due to unforeseen circumstances she went on leave by accidently leaving number of cultures outside the incubator. After a period of time when she rejoined she realized that certain cultures became dark brown without contamination, certain were not having growth at all, number of cultures have developed semisolid mass, some got desirable colonies of E.coli and few cultures got contaminated with fungi.

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FACILITATOR'S GUIDE

Students need to discuss the following in order to achieve the outcome of PBL.

Learning Issues/objectives	Key Answers
1.Explain reasons behind contamination	Lack of sterilization, improper sterilization, lack of aseptic conditions, Inappropriate growth environment.
2. Describe the causes for color change in media	Contamination, secretion of end products, arrival of stationary phase, improper composition of media
3. What is the role of agar?	Improper agar concentration, Inappropriate growth environment
4. Determine the root level causes behind the suppression nonappearance of E.coli in the culture.	Dominant growth of fungi, Production of antibiotic or any or other toxic compound by mold, loop was temperature killed E.coli, insufficient dose of inoculum

References and suggested reading:

- 1. Elements of Microbiology. Michael J. Pelczar, Jr., E. C. S. Chan, Merna Foss Pelczar, 127-137
- 2. Arora D.R Textbook of Microbiology Paperback. CBS; 5 edition (2005)



CHALLENGES IN IMPLEMENTING PBL

General

- Need of more number of classrooms than regular theory classes
- Need of more facilitators than regular teachers required for theory or practical classes
- Need of more number of hours than prescribed as per syllabus for one topic
- Lack of soft skills in some of the students
- Lack of time for team building and rapport development

Specific

- PBL cannot be conducted for all the subjects
- Without introducing a topic PBL case cannot be given for university level of Chemistry subjects
- Case scenario fits well for Pharm D curriculum where clinical conditions can be given for students to study



EVIDENCE OF SUCCESS

AIM: To investigate the relationship between the PBL method and learning outcomes in a Pharmacy course.

OBJECTIVES: The objectives of the present study are:

PRIMARY OBJECTIVE:

1. To compare traditional teaching methods with the PBL method using an experimental design.

SECONDARY OBJECTIVES:

1. To study the impact of problem based learning.

2. To develop the culture of self centered and conceptual learning by means of relating academic knowledge to solve problems related to area of study among students.

MATERIALS AND METHOD:-

Hypothesis: PBL can improve the learning outcomes of pharmacy students more than the traditional teaching method.

STUDY DESIGN & DURATION: This is a qualitative descriptive study.

RESEARCH METHOD:

This study investigates the impact of PBL on teaching outcomes for students divided into two groups as subjects in a teaching experiment.

Category A consisted of students and functioned as a control group who received lessons based on traditional teaching methods.

Category B consisted of students and functioned as the experimental group who received PBL-based instruction.

Both of these are required categories for comparison of results. The period of the experiment spanned for one semester throughout the first and third semesters of 2017 and 2018. Students in both groups spent hours allotted for PBL in the course.

EXPERIMENT DESIGN:

We have planned to adopt a pre-test/post-test design with a control group. For the first eight weeks of the experiment, the two categories of students took the same course using the same teaching method with the same schedule.

Students in both categories were given a sessional exams, assignments and unit tests during the semester to evaluate the progress of students in the acquisition of accounting knowledge in the two categories. The assessment papers were collaboratively designed by the two participating teachers. These exam results were used to determine whether there was a significant difference between the groups with regard to an understanding of course content related to pharmacy.



In the second half of the experiment, the two categories were taught the same content using different teaching methods. On the final week of the semester both categories of students took the final exam. This made it possible to observe differences in learning outcomes between the two categories.

STUDY CENTRE: Acharya & BM Reddy college of Pharmacy

INCLUSION CRITERIA: Students who have attended PBL session already.

EXCLUSION CRITERIA: Students who did not attended PBL session.

STATISTICAL ANALYSIS:

Dependent Variables: Learning outcomes were measured either by the change in the test scores achieved in the midterm and final examinations, or percentage difference between pre-test and post-test scores.

Independent Variable: Teaching method was represented using a dummy variable in which the experimental group was identified as 1 and the control group as 0.

RESULT AND DISCUSSION

The effect of PBL method on learning outcomes was found to be positive (i.e., a more pronounced improvement in the learning outcomes of the experimental group than the control group).

Previous year results show that pass percentage has increased. This may be due to the practice of problem based learning.

Year	Students passed/appeared	Percentage
21-22	83/83	100
20-21	79/85	92.9
19-20	109/132	82.5
18-19	91/107	85.04

Previous year results show that the topics which were covered as PBL scenario had better course outcome attainment.

Year	Subject	CO1	CO2	CO3 (Topic cover	red in	CO4
	-			PBL)		
2018	Pharmaceutical Or	ganic				
	Chemistry II	80	78	93		93

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]	The course outcome attainment related to the PBL topic is better than other topics.								
	Year	Subject		CO1	CO2	CO3 (Topic covered in	CO4		
						PBL)			
	2019	Pharmaceutical	Organic						
		Chemistry II		80	75	93	93		

In most of the cases this correlation cannot be established. The reason is that the contribution of PBL topic in course outcomes is less.

LIST OF REFERENCES:

Barrows, H. S. (1986). A taxonomy of problem-based learning methods. Medical education, 20(6), 481-486.http://dx.doi.org/10.1111/j.1365-2923.1986.tb01386.x

Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. New directions for teaching and learning, 1996(68), 3-12. http://dx.doi.org/10.1002/tl.37219966804 Breton, G. (1999).



CONCLUSION

Problem based learning:

- This is a participatory learning method.
- In problem based learning the students are given a case scenario through which they learn to arrive at the learning objectives.
- Students are made into groups and through group discussion students prepare questions.
- From the information provided in the case scenario they prepare the questions and answers.

In this way students experience more evolved way of learning.

In the process of PBL

- Students confront a problem.
- In groups, students organize prior knowledge and attempt to identify the nature of the problem.
- Students pose questions about what they do not understand.
- Students design a plan to solve the problem and identify the resources they need.
- Arrange possible explanations and working hypotheses
- Students begin to gather information as they work to solve the problem.
- Report back, synthesize explanations, and apply newly acquired information to the problem.

BIBLIOGRAPHY

- Devi Sanatombi Elsa, Manipal Manual of nursing Education, 1st edition, CBS publishers and distributers, New Delhi, 2012, chapter 6,pg no- 181-188.
- Baswanthappa BT, Nursing Education, 2nd edition, Jaypee medical publishers, New Delhi, 2009, chapter 2, pg no-310-317.
- Internet Sourceresults?q=problem%20based%20learning
- Yew EH, Goh K. Problem-based learning: An overview of its process and impact on learning. Health professions education. 2016;2(2):75-9.
- Amir S, Mehboob U, Sethi A, Jamil B. PROBLEM-BASED LEARNING: AN OVERVIEW OF ITS PROCESS AND IMPACT ON LEARNING. Pakistan Journal of Physiology. 2022 Mar 31;18(1):68-9.
- Schmidt HG, Rotgans JI, Yew EH. The process of problem-based learning: what works and why. Medical education. 2011 Aug;45(8):792-806.

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Problem based learning is encouraged in students. In this method the students are given a case scenario through which they arrive at the learning objectives. Students are divided into groups and through group discussions, students prepare questions. From the information provided in the case scenario they prepare the answers. This is participatory learning method. In this way students experience more evolved way of learning.







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Facilitator'sGu

Acharya & BM Reddy College of Pharmacy

Course: Pharmaceutical Organic Chemistry II Course code: BP301T

Year: 2021-2022 Program: B. Pharm. Semester:3

Name of the Author: Ms. Ekta Singh

Learning Outcomes: At the end of the PBL session student shall be able to

- 1. Illustrate rancidity.
- 2. Enlist the reasons for rancidity.
- 3. Compare the normal good quality oil and rancid oil.
- 4. Analyze the effect of exposure to atmosphere on chemical nature of oils and fats.

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Student'sCopy



Acharya & BM Reddy College of Pharmacy

Course: Pharmaceutical Organic Chemistry II Course code: BP301T Year: 2021-22 Program: B. Pharm. Semester:3

Date of PBL Sessions : 26/03/2022

ACHARYA & BM REDDY COLLEGE OF PHARMCY III SEMESTER B PHARM

Pharmaceutical Organic Chemistry - II - scenario for PBL

Ms. Latha left the hair oil open on the window near the washbasin and few droplets of water entered in the container. She thought of removing water from the container, so she left it open in the corner of the window slab. After some time she forgot the task of removal of water from the oil container. Two days later she noticed change of texture and foul odour in the oil. She bought a new oil container and compared the fresh oil with the old one.

Name of Facilitator: 1. Ms. Ekta Singh

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A Handbook on ALIVE

A Digital Classroom Designed by Acharya Institutes

Acharya & BM Reddy College of Pharmacy





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BEST PRACTICES 2021-22

1043

ACHARYA ALIVE

ALIVE

a. Objectives of the Practice

Class room teaching is the core of any educational system. This has to be facilitated even in the challenging times to accomplish the academic requirements of time bound courses. The extraordinary circumstances of Corona pandemic threatened the very existence of class room teaching. Therefore, the Acharya Group of Institutions created the necessary IT infrastructure to enable class room teaching in the virtual mode. The same facility also enabled conducting online tests and recording of attendances. This IT infrastructure supported the entire group of institutions and received the name of 'ALIVE'. It is available in a fully managed and hosted manner. It is a house-installed deployment which enables even students in remote areas to access online classes and take tests.

b. The Context

The Corona pandemic affected the whole world. The Government of India and the Karnataka state government imposed several tough measures to curb man movement and arrest of spread of the infection. Educational institutions were shut down for more than an year. However, disruption of academic schedules would jeopardise the future aspirations of next generation and spoil the ecosystem of education. A virtual system of teaching and evaluation to reach out to the vast and diverse demography of the student community was the need of the hour. The Acharya Group rose to the occasion and created a powerful and efficient virtual teaching platform called ACHARYA ALIVE. This IT infrastructure addressed the needs of virtual class room teaching and online assessment of students in accordance with the Rajiv Gandhi University of Health Sciences.

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• Ph: +91-80-2255 5555 / 2839 6011 Extn.: 2302 / 2303 • Fax: +91-80-2839 3541 • E-mail: principalabmrcp@acharya.ac.in, abmrcp@acharya.ac.in

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Page 1 of 4



..... 1042

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c. The Practice

The ALIVE is deployed at one of Acharya's data centres and managed fully by them. The virtual classes were taken as per time tables provided by the academic council of Acharya & BM Reddy College of Pharmacy. Login IDs were provided to all the teaching faculty and the students of the college. The teachers prepared power point presentations as per the scheduled classes in accordance with the syllabus of Rajiv Gandhi University of Health Sciences. They also prepared the study material wherever necessary as soft copy and shared online with the students. The students logged in from home and attended the virtual classes.

The ALIVE has tools to record online attendance of classes and enabled live interactions during the classes. The teachers could also create online tests and conduct online too with camera of students focusing on them which ensured a proper invigilation. Students and teachers have access to the recordings for their use.

The ALIVE has been reviewed by several faculty members as being more advanced and user friendly compared to many online webinar platforms and e-learning services. This virtual classroom can also be used to conduct live webinars and for social learning and meetings, Making Alive the best solution to the modern-day education problems. One of the key features of Alive is the audit of live classes. Auditing takes place across various levels. Alive can be used to give special privileges as required by the institution. The platform is designed to

• Work on all operating systems seamlessly unlike most of the conventional webinar platforms.

• Alive can be integrated with any existing ERP and attendance is taken in real-time making the learning experience more user friendly.

• Designed for interactive sessions rather than one-way delivery

· From teaching to assignments & assessments on one platform

Acharya & BM Reddy College of Pharmacu Bengaluru - 560 107 Page 2 of 4

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• Clearly defined roles give appropriate access and control of the platform from students to the Principal.

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• A provision is provided for the students to register their feedback after every session.

d. Evidence of Success

The Acharya Alive virtual classroom platform has enabled an easy transition during the time of Corona as it has helped not just in setting up an online infrastructure for classes but also to effectively track the progress made by each individual. It enabled to share learning materials, conduct training programs, create courses and deliver, engage in social learning and do much more. This facility has enabled students living in remote areas also to access the online classes through mobile phone if they do not have access to a desktop or a laptop.

The statistics of exam performance of the students has revealed that the teachers and the students could cope up with the online LMS since the college secured about 55 ranks across all the programs in the Corona affected academic years.

e. Problems Encountered and Resources Required

To come up with relevant modules that would work seamlessly across all platforms for a campus of 15,000 was the first challenge. A team of experts were given the problem and assigned to develop a method to make the entry/retrieval of data easy, with emphasis on conveying information relevant to each user. It also was important to ensure that access was given need based and hence division of privileges had to be made according to each department within the campus. The next problem was the potential risk of having a surge of users, this was dealt with upgrading to a to a more stable server. For students it was important to create an application as the number of mobile users are on the higher end.

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1044

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The biggest challenge was to give a real class room experience to the teachers and the students through a virtual platform. The ALIVE LMS had enough bandwidth to ensure live stream of classes with camera ON mode from both teachers and students. It ensured an efficient online assessment tool. The camera mode ensured proper invigilation by the teachers. The attendance also could be recorded and archived. The facilitation through the mobile phone helped the students who were not having access to the laptops or desktops.

Conclusion (notes)

Acharya ALIVE has proved to be a transformational achievement for ABMRCP to cope up with situations like Corona pandemic which disrupt traditional class room teaching. ALIVE has reached the entire Acharyans during the pandemic and avoided disruptions to the academic eco system as well as future aspirations of students.

Principal . scharya & BM Reddy College of Pharmac. Bengaluru - 560 107

Page 4 of 4



TABLE OF CONTENTS

Sl.No.	Contents	Page No.
1.	Introduction	2
2.	Objectives of the Practice	2
3.	Practice at Acharya & BM Reddy College of Pharmacy	3
4.	Resources required for implementation of ALIVE	5
5.	Advantages of ALIVE	6
6.	Applications of ALIVE	6
7.	Components of Acharya Alive	7
8.	Evidence of Success	8
9.	Problems Encountered	9
10.	Conclusion	9
11.	Components of ALIVE – Teacher Perception	10
12.	Components of ALIVE – Student Perception	14
13.	Uploading Study Material	16
14.	Create Assignment	19
15.	Create Exam	21
16.	Take Online Class	25



<u>ALIVE</u>

1. <u>Introduction:</u>

The Institution recognizes the role of the 'Digital India' program as a revolutionary initiative of the central government which has the potential to transform India into a knowledge-based economy and digitally empowered society. Traditional classroom environments have gradually shifted towards digital platforms and tools, especially with the rise of technology in education. Today there are several Software and virtual platforms that are used to deliver online classes. The truth is most of these Software are neither school nor colleges/university friendly and flexible to meet the needs of universities/colleges. We at Acharya Institutes designed and developed indigenously our own virtual classroom platform (ALIVE) for effective online delivery of curriculum content. ALIVE is a Learning Management System (LMS) that can transform the future of learning in academic institutions. Development and implementation of ALIVE, our own virtual classroom platform built and integrated with Institute ERP for effective curriculum delivery, assessment and monitoring. The best feature of Alive is that the platform can be customized to suit needs. Further, the functionalities of ALIVE were enhanced by integrating the same with the Institute ERP to monitor/review the curriculum delivery by higher authorities and the attendance of the students. We also conducted web proctored internal assessment (CIE) for effective assessment of students' performance, through ALIVE integrated with ERP. Apart from that, the world witnessed the requirement for delivering the curriculum content in a virtual mode, owing to the pandemic situation.

2. Objectives of the Practice:

- To be part of the national mission on 'Digital India'.
- To adopt ICT practices.
- To impart technology-based education to the students.
- To enhance the digital infrastructure of the campus to promote online learning.
- To shift into a paperless campus.
- To enhance e-governance practices in the campus.
- To improve digital literacy and digital skills of the students.



Apart from the above listed, the primary objectives of ALIVE, a web-based platform developed by Acharya Institutes, are to facilitate effective communication and collaboration between teachers and students, streamline the process of assigning and submitting assignments, and provide a centralized digital space for managing classroom activities. Here are the main objectives of ALIVE:

- Simplify Classroom Management: ALIVE aims to simplify the management of the classroom by providing teachers with a centralized platform to organize and distribute assignments, announcements, and resources to students. It streamlines administrative tasks, such as creating and sharing documents, tracking student progress, and grading assignments.
- Streamline Assignment Workflow: One of the primary objectives of ALIVE is to streamline the assignment workflow. Teachers can create and distribute assignments digitally, eliminating the need for physical copies. Students can access and submit assignments online, reducing paperwork and providing a more efficient process for both teachers and students.
- **Integration with ERP:** ALIVE seamlessly integrates with ERP ecosystem for teaching and learning. This integration enhances the productivity and efficiency of both teachers and students, enabling them to leverage continuity and resources.

Overall, the objectives of ALIVE revolve around creating a digital learning environment that simplifies classroom management, fosters communication and collaboration, streamlines assignment workflows, and promotes effective feedback and assessment, ultimately enhancing the teaching and learning experience for both educators and students.

3. <u>Practice at Acharya & BM Reddy College of Pharmacy:</u>

In 2019, Acharya Institutes, rolled out its indigenous platform to facilitate online learning – "ALIVE". The service is utilized by all the Institutions of Acharya Institutes including Acharya & BM Reddy College of Pharmacy (ABMRCP). The platform is designed to facilitate optimal e – learning for students across various disciplines. Classes may be engaged on audio – video as well as only audio mode. The platform is equipped with a screen–sharing facility which facilitates PPT and video – based learning. The ALIVE LMS has been reviewed by several faculty members as being more advanced and user friendly compared to the other online webinar platforms and e-learning services. This virtual classroom tool can also be used to conduct live webinars and in the current scenario used for social learning and meetings, making



ALIVE the best solution to modern-day education problems. The ALIVE LMS is deployed and managed by Acharya's data centre. ABMRCP conducted virtual classes as per timetables. The teachers prepared PPTs as per the RGUHS syllabus, conducted virtual classes, and shared soft copies of study material online with students. ALIVE enables recording online attendance, live interactions, and online tests with camera mode to ensure proper invigilation. Students and teachers can record sessions. One of the key features of ALIVE is the ability to audit live classes. Auditing takes place across various levels. ALIVE can be used to give special privileges as required by the institution. Breakout rooms' facility is available which allows faculty to facilitate small group discussions. Additionally, faculty have the option to also utilize the platform to share learning resources and provide assignments to students. Facility for recording classes is available too. Faculty members may conduct student polls or surveys on the platform. Attendance for classes is automated. Students can interact with faculty during classes by unmuting themselves or using the chat box to ask questions and clear their doubts. The online learning experience is also rigorously monitored for quality by Subject Matter Experts and management representatives.

The platform is designed to:

- Work on all operating systems seamlessly unlike most of the conventional webinar platforms.
- Alive can be integrated with any existing ERP and attendance is taken in real-time making the learning experience more user friendly.
- Designed for interactive sessions rather than one-way delivery.
- From teaching to assignments & assessments on one platform.
- Clearly defined roles give appropriate access and control of the platform from students to the Chancellor / Principal.
- Acharya Institutes framed a standard operating procedure (SOP) clearly explaining the procedures to be followed for delivery and monitoring of curriculum content, monitoring of students' attendance and conduction of web proctored CIE for online sessions.
- A provision is provided for the students to register their feedback after every session.

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4. Resources required for implementation of ALIVE:

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To develop, implement, and use ALIVE, you will need several key resources. Here are the main requirements:

- Hardware:
 - Computers or laptops: You will need devices for teachers and students to access ALIVE.
 These devices should have internet connectivity.
 - Mobile devices: ALIVE also supports mobile devices, so smartphones or tablets can be used to access the platform.
- Internet Connectivity: A reliable internet connection is necessary for accessing ALIVE and its features. Make sure the connection is stable and provides sufficient bandwidths for all users.
- **ERP Account:** Teachers and students will need ERP accounts to access ALIVE. If they don't have one, they can access the classes as a guest by obtaining permission from the Human Resources Department of Acharya Institutes.
- Web Browser: ALIVE works on popular web browsers such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge. Ensure that the browsers are up to date to provide the best user experience.
- ALIVE Application: You can access ALIVE through a web browser, but there is also a mobile application available for Android and iOS devices. Students and teachers can download the app from the respective app stores.
- Administrator Access: For implementing ALIVE at an organizational level, an administrator account with the necessary permissions will be required to manage and configure the system.
- **Training and Support:** Familiarize yourself and your users with the features and functionality of ALIVE. Administration department of Acharya Institutes provides extensive documentation along with training for both the students and teachers, and a dedicated support community for to help in understanding ALIVE usage.

Remember that ALIVE is a cloud-based service, so you won't need to install any software locally. However, it's important to ensure that the hardware, internet connectivity, and user accounts are in place to effectively use and implement ALIVE within the institution.



5. Advantages of ALIVE:

ALIVE offers a range of features to facilitate teaching and learning, including creating and organizing classes, distributing assignments, providing timely feedback, and conducting discussions. It provides a user-friendly interface for educators to manage their classrooms efficiently and students to access resources easily.

- Enhanced Communication and Collaboration: ALIVE promotes effective communication between teachers and students, allowing them to interact through online classes and group discussions. It also facilitates submitting assignments by students and for conducting quizzes.
- Streamlined Workflow and Organization: With ALIVE, teachers can seamlessly distribute assignments, collect submissions, and provide feedback, eliminating the need for physical paperwork. Students can keep track of assignments, due dates, and resources in a centralized digital space, promoting better organization and time management.
- Easy Assignment Management and Feedback: Teachers can create and share assignments, attach resources, set deadlines, and automatically grade certain types of assignments using ALIVE. It simplifies the assignment management process and provides opportunities for timely feedback, enabling students to monitor their progress and improve their learning outcomes.
- Increased Accessibility and Flexibility: ALIVE allows students to access course materials and assignments from any device with an internet connection, fostering greater accessibility and flexibility. It caters to different learning styles and accommodates diverse student needs, enabling asynchronous learning and providing options for personalized instruction.

6. Applications of ALIVE:

- Classroom Integration and Teacher Experiences: Numerous educators have successfully integrated ALIVE into their teaching practices, reporting positive experiences. This illustrates how teachers have effectively used ALIVE to engage students, manage assignments, and provide individualized support, thereby improving overall classroom dynamics and student outcomes.
- **Student Perspectives and Engagement:** Students have expressed enthusiasm for ALIVE, appreciating its user-friendly interface, the ability to collaborate with peers, and the convenience it offers. Case studies highlight how students' active participation and engagement have increased using ALIVE, leading to enhanced learning experiences.



• Institutional Implementations and Success Stories during COVID: Acharya institutions have embraced ALIVE as a valuable tool in our teaching and learning strategies during the pandemic outburst. This demonstrates successful institutional implementations, showcasing how ALIVE has streamlined administrative processes, facilitated distance learning, and fostered a sense of community among students and teachers.

7. <u>Components of Acharya Alive:</u>

ALIVE is an online learning management system developed by Acharya Institutes. It provides a digital platform for teachers and students to communicate, collaborate, and manage assignments and classes. The main components of ALIVE include:

- Assignments: Teachers can create and distribute assignments through ALIVE. They can attach documents, links, or other resources, and set due dates. Students can view and complete assignments within the platform.
- **Grading and Feedback:** Once students submit their assignments, teachers can review and provide grades and feedback.
- Home screen / Dashboard: ALIVE integrates with ERP, allowing teachers to schedule and share class and exam events, due dates, and other important dates which will be reflected on home screen. The class calendar helps students stay organized and aware of upcoming deadlines.
- Materials and Resources: Teachers can upload and share course materials, such as documents, presentations, recorded classes, and links, with students. These resources can be organized into topics or units for easy access and reference.
- **Integration with ERP:** ALIVE seamlessly integrates with ERP tools and services for collecting attendance and organizing classes. The same email ID and password as of ERP are applicable to access ALIVE for both the students and teachers.
- **Mobile Apps:** ALIVE has mobile apps for iOS and Android devices, enabling students and teachers to access their courses, assignments, and class materials on the go.
- FAQs: Comprehensive FAQs section is provided for both the faculty and students for efficient usage and understanding applications of ALIVE.

These components collectively create a comprehensive online learning environment that simplifies the process of managing and delivering educational content.



8. Evidence of Success:

- Academic Performance and Learning Outcomes: Studies indicate a positive correlation between the use of ALIVE and academic performance. The platform provides opportunities for active engagement, individualized feedback, and differentiated instruction, resulting in improved learning outcomes and student achievement.
- **Student Engagement and Motivation:** ALIVE's interactive features and collaborative tools have been found to increase student engagement and motivation. The platform encourages active participation, peer interaction, and personalized learning experiences, fostering a positive learning environment.
- **Teacher Efficiency and Satisfaction:** Teachers using ALIVE have reported increased efficiency in managing assignments, providing feedback, and communicating with students. The platform streamlines administrative tasks, allowing teachers to focus more on instructional activities and individualized support, leading to higher levels of job satisfaction.
- The Pandemic: Classroom teaching, the core of any educational system, faced existential challenges because of the Corona pandemic. The Covid pandemic struck a huge blow at theory and skill based higher education. It necessitated a paradigm shift from offline mode to blended/online learning mode. The Acharya Group responded through ALIVE LMS (Learning Management System) which provided virtual teaching and online assessment as required by Rajiv Gandhi University of Health Sciences (RGUHS). ALIVE successfully transitioned traditional teaching to virtual one during Corona pandemic in all academic aspects of teaching, attendance management, sharing of study material, and creation of courses and tests and also effectively tracked the progress made by everyone. The system has also passed a test run in one of India's largest universities with 15,000 students. Since mid-2020 we have conducted online courses, live streaming classes and live events on Alive platform successfully. Students from remote areas without laptops participated through mobile phones. The exam results revealed that the teachers and the students could cope up with the online LMS since ABMRCP secured 50+ ranks across programs during Corona affected academic years.

9. Problems Encountered:

To come up with relevant modules that would work seamlessly across all platforms for a campus of 15,000 students was the first challenge. A team of experts were given the problem



and were assigned to develop a method to make the entry/retrieval of data easy, with emphasis on conveying information relevant to each user. It also was important to ensure that access was given need based and hence division of privileges had to be made according to each department within the campus. The next problem was the potential risk of having a surge of users, this was dealt with by upgrading to a more stable server. For students it was important to create an application as the number of mobile users is at the higher end.

- **Technical Issues and Connectivity:** ALIVE heavily relies on stable internet connectivity and adequate technological infrastructure. In areas with limited access to the internet or inconsistent connectivity, students and teachers may face challenges in accessing and using the platform effectively.
- Learning Curve and Training Requirements: While ALIVE offers a user-friendly interface, teachers may require training and support to effectively utilize its features. A learning curve exists for both teachers and students, necessitating resources and professional development opportunities to maximize the platform's potential.

The platform is a work in progress and is continuously upgraded by technical experts. Technical glitches that occasionally occur, especially when class – load is high, interfere with student learning experience. Though the team of experts devise timely innovative plans to tackle the issues, it remains a challenge in teaching-learning. An adequate allocation of funds from governing agencies would be helpful to work towards appropriate and effective solutions.

10. Conclusion:

ALIVE has emerged as a powerful online learning management system, offering numerous benefits such as enhanced communication, streamlined workflow, easy assignment management, and increased accessibility. This highlights successful classroom integration and positive experiences from both teachers and students. Acharya ALIVE has proved to be a transformational achievement for ABMRCP to cope with situations like Corona pandemic which disrupts traditional classroom teaching. ALIVE has reached the entire Acharyans during the pandemic and avoided disruptions to the academic ecosystem as well as the future aspirations of students. ALIVE's effectiveness in improving academic performance, student engagement, and teacher efficiency has implications for the future of education. It promotes student-centred learning, fosters collaboration, and prepares students for the digital age. In conclusion, ALIVE has revolutionized the education landscape by providing an efficient and user-friendly platform for teaching and learning at Acharya Institutes. While challenges and



limitations exist, its numerous benefits and effectiveness in enhancing academic performance,

student engagement, and teacher efficiency make it a valuable tool.

11. <u>Components of ALIVE – Teacher Perception:</u>



Figure 1: Faculty Login Page

		Alive Digital Classrooms		Ekta Singh FACULTY	8
	ALIVE Digital Classroom	Online Classes			Î
	Home				
	Study Material				
Ê A	Assignment		D No classes for today!		
[? E	Exam 🗸 🗸		no classes for locay:		-
Xe A	Attendance	Upcoming Exams	Assignments		
R R	Recordings				
F.	FAQs		i i		
		No Exams!	No assignments!		
					- 1
		Figure 2: Hon	ne Screen		



ALIVE	Alive Digital Classrooms			Ekta Singh FACULTY
Digital Classroom	Your Study Materials Manage your study materials here		Q s	earch by subjects
Home	Material Name	Created By	Subject-Code	Document cou
Study Material	Unit V	EKTA SINGH	Pharmaceutical Organic Chemistry III-BP401T	
Exam	Unit IV	EKTA SINGH	Pharmaceutical Organic Chemistry II-BP301T	
Recordings	Unit I	EKTA SINGH	Pharmaceutical Organic Chemistry II-BP301T	
FAQs	Unit III	EKTA SINGH	Pharmaceutical Organic Chemistry II-BP301T	
	Duit II	EKTA SINGH	Pharmaceutical Organic Chemistry II-BP301T	
			Pharmaceutical Ormanic Rows per page: 10 +	1-6 of 6

Figure 3: Study Material Page

ALIVE	-					TAC
- Desire Classicolin	Assignments					
Home	Q Search Assignments					
Study Material						
Assignment	Assignment 2 Due Date : 2023-04-30	Assignment 2 Due Date : 2023-04-30	Assignment 1 Due Date : 2023-03-31	Assignment 1 Due Date : 2023-03-31	Cholinergic drugs Due Date : 2021-07-18	Second sessional Due Date : 2021-07-13
Attendance	ENTA SINGH Created On: 28-03-2023	EKTA SINCH Created On: 28-03-2023	EXTA SINGH Oreated On: 29-03-2023	EXTA SINGH Created On: 28-03-2028	EKTA SINGH Created On: 13-07-2021	EXTA SINGH Created 0n: 12-06-2021
Recordings FAQs	EVALUATE 🖍 📱	EVALUATE 🖍 🔋	EVALUATE 🖌 📕	EVALUATE 🖍 🔋	EVALUATE 🖍 🔋	EVALUATE 🖍 📋
	Write the structur Due Date : 2021-05-27	Synthesis of Adre Due Date : 2021-05-27	CYP cycle Due Date : 2021-07-13			
	EKTA SINGH Created On: 26-05-2821	EKTA SINGH Created On: 26-05-2021	EXTA SINGH Created On: 17-05-2021			
	EVALUATE 🦯 🛢	EVALUATE 💉 📱	EVALUATE 💉 📕			





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ALIVE	Alive Digital Classro	ooms					Ekta Singh FACULTY	; (
Digital Classroom	Search		Date	Subject	Duration	Attendance		
Home	From Date 01-03-2021		2021-05-07	Chem of Natural Pro	09:00 AM-10:00 AM	4		
Study Material	To Date	-	2021-04-27	Med. Chem-I (Th)	09:00 AM-10:00 AM	80		
Assignment	31-08-2021		2021-04-29	Med. Chem-I (Th)	09:00 AM-10:00 AM	83		
Exam	SEARCH		2021-05-19	Med. Chem-I (Th)	09:00 AM-10:00 AM	80		
Exams			2021-06-05	Chem of Natural Pro	10:00 AM-11:00 AM	5		
Participations			2021-06-10	Med. Chem-I (Th)	09:00 AM-10:00 AM	83		
Attendance			2021-06-07	Med. Chem-I (Th)	11:00 AM-12:00 PM	75		
Recordings			2021-07-19	Med. Chem-I (Th)	11:00 AM-12:00 PM	60		
FAQs			2021-05-31	Med. Chem-I (Th)	11:00 AM-12:00 PM	77		
			2021-06-09	Med. Chem-I (Th)	09:00 AM-10:00 AM	77		
			2021-05-04	Med. Chem-I (Th)	09:00 AM-10:00 AM	78		

Figure 5: Attendance Page

	ALIVE	Alive Digital Classrooms	Kola Srinivas Navya Sree
Carrie	Digital Classroom	Recordings Manage all your recordings.	
A	Home		
8	Study Material		
Ê	Assignment		
?	Exam 🗸	You doesn't seem to have any recordings!	
Ť	Attendance		
	Recordings		
?	FAQs		

Figure 6: Recordings Page



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		Alive Digital Classrooms	Moumita Banerjee	e
	ALIVE Digital Classroom			
		Frequently asked questions		
÷	Home	Online classes		
	Study Material	+ How to join a class?		
e	Assignment	+ How to take attendence?		
2	Exam •	+ How to schedule online classes?		
	Exams	Exam		
	Participations	+ How to create an exam?		
Ť	Attendance	+ How to add questions to an exam?		
-	Recordings	+ Is the question restricted to english language only?		
?	FAQs	Study Material		
		+ What are the supported file formats?		
		+ Can files be added after creation of study material?		
		+ Which students has access to my notes?		

Figure 7: FAQs Section for Faculty



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12. <u>Components of ALIVE – Student Perception:</u>

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VPS SIL	Password	DVD 90
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Figure 8: Student Login Page

	ALIVE	Alive Digital Classrooms			Animesh Dhar STUDENT
CAN	Digital Classroom	Digital Clessroom Study Materials Browse study materials here ACHARYA & BM REDDY COLLEGE OF PHARMACY (C) (C) Search by subjects ne Material Name Created By Subject-Code Document count dy Material Pharmacological screening methods-1 MANJUNATH P M Toxicological screening Methods-4MPL103T 51 agrinment Immediance Clinical Pharmacological screening methods-1 MANJUNATH P M Clinical Pharmacological screening Methods-4MPL103T 51 agrinment Immediance Clinical Pharmacological screening methods-1 MANJUNATH P M Clinical Pharmacological screening Methods-4MPL103T 51 agrinment Immediance Clinical Pharmacological screening methods-1 MANJUNATH P M Toxicological screening Methods-4MPL103T 51 agrinment Immediance Clinical Pharmacological screening 1 agrinment Immediance Immediance			
^	Home	Material Name	Created By	Subject-Code	Document count
Ê	Study Material	Alive Digital Classrooms Study Materials ActHARYA & BM REDDY COLLEGE OF PHARMACY Search by subjects ** Material Name Created By Subject Code Document count ** Material Name Created By Subject Code Document count ** Material Name Created By Subject Code Document count ** Pharmacology & Toxicological screening methods-I MANJUNATH P M Pharmacological and Toxicological Screening 51 ** ** Clinical Pharmacology & Toxicological screening methods-I MANJUNATH P M Clinical Pharmacological and Pharmacology & Toxicological screening methods-I 1 ** ** Clinical Pharmacology & Toxicological screening methods-I MANJUNATH P M Toxicological Screening monitoringP1059317 51 ** ** Community pharmacy notes Geetha Jayaprakash Hospital and clinical Pharmacov-PB1027 4 ** Code of ethics in community pharmacy Geetha Jayaprakash Pharmaceutical Chemistry 1 ** DP102T 6 Rows per page: 10 + 1-10 of 112 >			
۳ ۲	Exam V Attendance	СРКТОМ	Laigin Sebastian	Clinical Pharmacokinetics and Pharmacotherapeutic Drug monitoring-PD503T	1
?	FAQ's	Community pharmacy notes	Geetha Jayaprakash	ACHARYA & BM REDDY COLLEGE OF PHARMACY * C Search by subjects Subject-Code Document count TH P M Pharmacological and Toxicological Screening Methods-HMPL103T 51 astian Clinical Pharmacokinetics and Pharmacothergeulto Prug monitoring-PD503T 1 raprakash Hospital & Community Pharmacy-PB102T 4 kR Pharmaceutical Chemistry-H DP102T 6 Rows per page: 10 * 1-10 of 112 5	4
		Code of ethics in community pharmacy	Geetha Jayaprakash	Hospital and clinical Pharmacy- DP206T	1
		Pharmaceutical chemistry	Jayashree K R	Pharmaceutical Chemistry-I- DP102T	6
				Rows per page: 10	▼ 1-10 of 112 < >

Figure 9: Study Material Page



A	ALIVE	Alive Digital Classrooms	gital Classrooms Animesh Dhar success gmments your assignments here gearch Assignments search Assignments st of Assignme Date: 2023-04-05 Pub Date: 2023-04-12 Mounits Banerjee Created On 05-04-2023 Store: Hot Evaluated Due Date: 2023-04-12 Mounits Banerjee Created On 05-04-2023 Store: Hot Evaluated Due Date: 005-02023 Due Date: 1002-0050 Store: Hot Evaluated Assignment 3 Due Date: 00000005				
CAVE	Digital Classroom	Assignments View all your assignments here					
A	Home	Q Search Assignments					
	Study Material					_	
Û	Assignment	List of Assignme	Assignment -2	Assignment -1	Question papers		
?	Exam 🗸 🗸		Due Dute - 2020-04-12	Due Duite . 2020 04-12	Due Dure : 2020-03-01		
Ť	Attendance	UDAY RAJ SHARMA Created On: 05-04-2023 Score : Not Evaluated	Moumita Banerjee Created On: 05-04-2023 Score : Not Evaluated	Moumita Banerjee Created On: 05-04-2023 Score : Not Evaluated	AMBUJAKSHI H R Created On: 31-03-2023 Score : Not Evaluated		
2	FAQ's	DUE DATE OVER	ASSIGNMENT SUBMITTED	ASSIGNMENT SUBMITTED	DUE DATE OVER		
		Assigment 3 Due Date : 2023-04-05	Assigment 6 Qui Due Date : 2023-03-29				
		UDAY RAJ SHARMA Created On: 28-03-2023 Score : Not Evaluated	UDAY RAJ SHARMA Created On: 28-03-2023 Score : Not Evaluated				
			DHE DATE OVED				



ALIVE	Alive Digital Classroo	oms						Animesh Dhar STUDENT	8
Digital Classroom	Search		Date	Faculty Name	Subject	Duration	Time		
Home	From Date 01-01-2020		2020-12-14	SAJEEV KUMAR B	Pharmaceutics I	60	09:00 AM-10:00 AM		
Study Material	To Date	-	2020-12-14	RASHMI P	Pharm Inorg Chem- (60	10:00 AM-11:00 AM		
Assignment	01-01-2021		2020-12-15	SELVAKUMAR K	Pharm Analysis-I	60	10:00 AM-11:00 AM		
Exam 🔨	SEARCH		2020-12-16	RASHMI P	Pharm Inorg Chem- (60	09:00 AM-10:00 AM		
Exams			2020-12-16	SAJEEV KUMAR B	Pharmaceutics I	60	10:00 AM-11:00 AM		
Scores			2020-12-16	Gayathri S V	Hum. Anat. & Physio	60	11:00 AM-12:00 PM		
Attendance			2020-12-17	SELVAKUMAR K	Pharm Analysis-I	60	09:00 AM-10:00 AM		
FAQ's			2020-12-17	Gayathri S V	Hum. Anat. & Physio	60	10:00 AM-11:00 AM		
			2020-12-18	SAJEEV KUMAR B	Pharmaceutics I	60	11:00 AM-12:00 PM		
			2020-12-21	SAJEEV KUMAR B	Pharmaceutics I	60	09:00 AM-10:00 AM		
			2020-12-21	RASHMI P	Pharm Inorg Chem- (60	10:00 AM-11:00 AM		

Figure 11: List of Attended Classes Page



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	Orginal Classicon	Frequently asked questions	
	Home	Online Classes	
8	Study Material	+ How to join a class?	
Ê	Assignment	Exam	
?	Exam 🔨	+ Can exams be taken on mobile devices?	
	Exams	+ Is fullscreen mandatory while taking the exam?	
	Scores	+ What happens if window focus is changes during the exam?	
Ť	Attendance	Study Material	
?	FAQ's	+ Can study materials of other branch are accessible	
		+ Is it possible to dowload entire study material?	



13. Uploading Study Material:



Figure 13: Flow Chart to Upload Study Material



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Step 1: Login as Faculty

A		Alive Digital Classrooms	Kola Srinivas Navya Sree
	ALIVE Digital Classroom	Online Classes	
 ↑ ↑ ↓ ↓	Home Study Material Assignment		No classes for today!
?	Exam 🔨	Upcoming Exams	Assignments
	Exams Participations		
Ť	Attendance	4	
	Recordings		Ž
Ŗ	FAQs	No Exams!	No assignments!

Step 2: Select "Study Material"



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	ALIVE	Alive Digital Classrooms	Kola Srinivas Navya Sree
Cave	Digital Classroom	Your Study Materials Manage your study materials here	Q Search by subjects
A	Home		
	Study Material		
Ê	Assignment	No Materiais	
?	Exam 🔷		
	Exams	You doesn't seem to have any materials!	
	Participations	Add One	
Ť	Attendance		
	Recordings		
2	FAQS		
			•



	ALINE	Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	8
	ALIVE Digital Classroom	Material name		
Ĥ	Home	Material description		
	Study Material			
Ê	Assignment			
?	Exam 🔨	Subject	•	
	Exams	If subject not displayed in the dropdown then you already have a material for that subject		
	Participations	Add Tags (Type tags as comma seperated values)		
Ť	Attendance	Add new tag		
	Recordings			
2	FAQs			
		Drag and drop to upload attachments		
		Supported file formats: .pdf,.docx, .ppsx, .pptx,.odp		
		<u>Ur click to prowse</u>		
		Add New Material Cancel		*

Step 4: Fill the Prompted Information, Upload Supporting Documents and Click "Add New Material"

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14. Create Assignment:





		Q W T B #
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	Password	
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	Login	
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Step 1: Login	as Faculty	





	ALIVE	Alive Digital Classrooms	Kola Srinivas Navya Sree
Calle	Digital Classroom	Unline Classes	
A	Home		
=	Study Material		
Ê	Assignment		No classes for today!
?	Exam ^		
	Exams	Upcoming Exams	Assignments
	Participations		
Ť	Attendance		
Ľ	Recordings		
2	FAQs	No Exams!	No assignments!

Step 2: Select "Assignment"

	ALIVE	Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	8
	Digital Classroom	Assignments Manage all your assignments here.		
A	Home	Q Search Assignments		
	Study Material			
Ê	Assignment			
?	Exam			
	Exams			
	Participations			
Ť	Attendance	No assignments!		
	Recordings			
2	FAQs		×	
			Č	+

Step 3: Click on "+" Symbol in Right Bottom of Screen





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		Alive Digital Classrooms Kola Srinivas Nat	FACULTY	8
	ALIVE Digital Classroom	Assignment Title *		
ń	Home	Description *		
B	Study Material			
Ê	Assignment	Select way of appendix is batch t		
?	Exam ^	Select year of academic barch *	•	
	Exams	Select batch	Ŧ	
	Participations	Last Submission Date *		ĥ
Ť	Attendance	30-06-2023		
	Recordings			1
2	FAQs	Drag and Drop or click to Upload file		
]
		Create Cancel		

Step 4: Fill the Prompted Information, Upload Supporting Documents and Click "Create"

15. Create Exam:





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		18 #
	10 P	AR
6 L II . W II I I I I I I I I I I I I I I I	STUDENT FACULTY	、111
The by La		AAA B
	Welcome Back!	
	Please login to your account.	18 4
	User name	DQ
		人間。
	Password	
	Login	AAA B
		18 4
POD TRODUTY	> C O O T, P C O O T,	DQ.

Step 1: Login as Faculty

		Alive Digital Classrooms	Kola Srinivas Navya Sree
	ALIVE Digital Classroom	Online Classes	
A	Home		
B	Study Material	0.00	
Ê	Assignment	No classes for today!	
?	Exam	Liberarda Carro	
	Exams	Opcoming Exams Assignme	ints
	Participations		<u>à</u>
ľ.	Attendance		à
?	FAQs	No Exams!	N.
			No assignments!
		Step 2: Select "Exam"	



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		Alive Digital Classrooms	Kola Srinivas Navya Sree
	ALIVE Digital Classroom	Online Classes	
 ↑ 1 1	Home Study Material Assignment		No classes for today!
?	Exam Exams	Ipcoming Exams	Assignments
¥	Participations Attendance		
2	Recordings FAQs	No Exams!	No assignments!

Step 3: Select "Exams" from the Drop Down Menu

	ALINE	Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	0
	ALIVE Digital Classroom	Exams View all your exams	≔ 8	38
n	Home			
	Study Material			
Ê	Assignment	> *		
?	Exam 🔨			
	Exams	No exams to snow!		
	Participations	Create one		
Ť	Attendance			
	Recordings			
?	FAQs		× .	

Step 4: Click on "+" Symbol in Right Bottom of Screen



	Renner and Andrews	Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	6
	ALIVE Digital Classroom	Create New Exam		
	Home	Exam title*		
•	Study Material	Exam description*		
Ê	Assignment			
?	Exam ^			
	Exams	Topics*		
	Participations	Enter topics as comma separated values.		
	Attendance	- Select year of academic batch		
ł	Recordings	Select academic year Select student batch	٣	
)	FAQs	Exam related attachments(optinal)		
		Upload Attachments		
		- Maximum attempts*		
		1		



		Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	8
	ALIVE Digital Classroom	Enter topics as comma separated values.		
		Select year of academic batch Select student batch	*	
f	Home			
	Study Material	Exam related attachments(optinal)		
Ê	Assignment	Upload Attachments		
?	Exam 🔨	Maximum attempts*		
	Exams	1		
	Participations	Start date and time		
Ť	Attendance	SU-UD-2023 02:45 PM a		
	Recordings	End date and time		
?	FAQs	30-06-2023 02:45 PM 💼		
		Enter end date and time.		
		Is open exam?		
		Randamize questions and options?		
		Create Exam		
		Step 6: Click "Create"		Ŧ
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16. Take Online Class:



Step 1: Login as Faculty

ACHARYA

uve	Digital Classroom		Online Classes	
	Hann		Pharm. Manufacturing Techly Lecture Class	Time 09:00 AM-10:00 AM
	Home Study Material		Upcoming Exams	Assignments
	Assignment			Factors Influencing Pharmaceutical Plant Longtion And Plant Layour
	Exam	~		Kola Srinivas Navya Sree Due: 10-07-2023
	Attendance		≥ ₩	
K	Recordings		No Exams!	
	FAQs			



		Alive Digital Classrooms			Kola Srinivas Navya Sree FACULTY
	ALIVE Digital Classroom	MESSAGES	< Public Chat : C	1242819 01:01	a :
f	Home	NOTES	Welcome to 1242819!	d 3	
B	Study Material	Shared Notes	This server is running BigBlueButton.		20
Ê	Assignment	USERS (5)			
?	Exam 🗸 🗸	D SHANTHINI			. I
Ť	Attendance	Sa Samarth Jadagoudar		LIVE	5
	Recordings	Si Siyona Suresh Babu		Online Classroom	Ŵ
2	FAQs	UDAYKUMAR DASHARATH			5
				< Slide 1 🗸 👌	\bigcirc 100% \oplus \leftrightarrow
				Click 🖉 to unmute yourself.	
			Send message to Public Chat	🐼 🧑 🕲	. 10

Step 3: Conduct the Class Online

ACHARYA

	ALIVE	Alive Digital Classroor	ns		Kola Srinivas Navya Sree FACULTY	8
	Digital Classroom	MESSAGES	୵ଌ	1242819 💽 14:34	۵	:
A	Home	NOTES				
	Study Material	USERS (6)	ŵ	Kola Sinihas Naya Sire D SHATTIAN 0 Rapid Surgita - 0 UDAVICIAR DASHARA		
8	Assignment	Kola Srinivas Navya Sree (You) =>Webcam			X	
	Attendance					
	Recordings	Rupchi Sangma te Webcam				0
2	FAQs	Samarth Jadagoudar		Online Classroom		5
		Si Siyona Suresh Babu				5
		e Webcam				~
				Click 发 to unmute yourself. 🕞 🛛	0% ⊕ ↔	
			+	ــــــ		٥)

Step 4: Conduct the Online Class Via Webcam

	ALINE	Alive Digital Classrooms	Kola Srinivas Navya Sree FACULTY	0
	ALIVE Digital Classroom	MESSAGES	< <u>2</u> 1242819 O 0524	:
A	Home	NOTES		20
P	Study Material	Shared Notes	😧 🗟 이 🕖 및 두 Pharmandood Plan Layout - Rowelliott 🖉 Salirch Layout - 여 Rie Home Insert Draw Design Transitions Asimations Sidd Show, Record Review View Help Köfelement (43	× share -
Ê	Assignment	USERS (6) 🔅		
?	Exam 🗸	D SHANTHINI	The second secon	-
₽	Attendance Recordings	Rug Rupchi Sangma	8 • Functional layout maybe defined as the arrangement of	1
2	FAQs	Samarth Jadagoudar	machines of particular class doing a particular type of work or process as a separate department.	
		UDAYKUMAR DASHARATH	Ex: All cutting machines may be placed in one department, i.e., cutting department.	
				Ť
			Uirk to add notes Star 7 or 28 Star Arcenia By Star Click & to unmute yourself. ≜sets ⊡Consent: ⊠ SS ≅ ♥ - +	65 Ø
).

Step 5: Share the Screen





Step 6: Ask Questions in Public Chat



Step 7: Share Notes in 'Shared Notes' Section



	ALINE	Alive Digital Classro	oms		Kola Srinivas Navya Sree
	Digital Classroom	MESSAGES	<u>رم</u>	1242819 06:05	
A	Home	NOTES	🚯 🚍 つった) 😳 🗧 Pharmanatical Plant Lavout - PreserPrint	9 Search	Serie 0 - 0 ×
	Study Material	Shared Notes	File <u>Home</u> Insert Draw Design Transitions Animations 3	lide Show Record Review View Help PDFelement	ල් Share -
ê	Assignment	USERS (6)	Image: Section v Image: Section v Parte Image: Section v V Image: Section v Cipboard Image: Section v Sider v Feet		A Shape Fill - P Find ange Outlot E Shape Outlot = * Shint @ Shape Effects - * Shint @
?	Exam		I Station I		
T	Attendance	Run Rupchi Sangma	The manufact Part Layord	Plant layout is a coordinated effort to achieve the final or integrate machines, materials, and personnel for	objective to economic
	Recordings	Samarth Jadagoudar	A Registrowshired for starts for starts of sta	production.	
?	FAQs	Sijona Suresh Babu	Start a private chat	Plant layout refers to the arrangement of physical facilit	ies such as
		UDAYKUMAR DASHARATH	Make presenter Promote to moderator Remove user	machinery, equipment, furniture etc. with in the factory such a manner so as to have quickest flow of material at cost and with the least amount of handling in processing t from the receipt of material to the shipmenl of the finishe	building in the lowest ihe product d product.
			Click to add notes	≜ Notes □Comm	ents 🔝 88 📾 🏆 - — 🛊 - — → 645 0
				۵ 🥐 🕲	

Step 8: Conduct private chat / Make the Student Presenter

		Alive Digital Classrooms			Kola Srinivas	Navya Sree FACULTY	3
	ALIVE Digital Classroom	MESSAGES	C Private Chat with Rupchi Sangma X	1	242819 💽 11:07	a :	
Ĥ	Home	Ru Rupchi Sangma	Hi Rupchi, Can you please get ready for next presentation?			5	8
	Study Material	NOTES	4 田 2	- () 🗄 + (Remained Partieux - Rembin	8 tein	915 <i>d' - a</i> i	
2	Assignment Exam V	USERS (6)	File Storm	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Record Rover tipe Note Direction Direction Ap □) O First ins - U first ins - U firstes - m - D Select - stang	
Ť	Attendance	Kola Srinivas Navya Sree (You)	1 Designed	energy 1			ŝ
2	Recordings	Rupchi Sangma	2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				
		Samarth Jadagoudar	B 	en en en en en en en en en en el el en en en en en en e	Pharmaceutical Plant Layout		
		Sijo Siyona Suresh Babu	4 (10.4 min) 10.4 min	An and the second secon	•		***
		~	5000 T of 25	g ionaing remaps	Anto Closert (18) 2 B	Q · · · · · · · · · · · · · · · · · · ·	*
			Send message to Private	Click & to	o unmute yourself.		
			Chat with Rupchi Sangma) 🧠 🙆	<u> </u>	-

Step 9: Private Chat with Student



		Alive Digital Classrooms Kola Srinivas Navya Sree (scalar) MESSAGES Q 12/2819 © 15:1 Image: Classroom (Classroom		
	ALIVE Digital Classroom	MESSAGES	৻ঽ	12472819 • 15:11
^	Home Study Material	V Public Chat NOTES Shared Notes USERS (6)	٥	Make fullscreen Make fullscreen Settings About Make fullscreen Settings About Make fullscreen Settings Setting Settings Settings Settings Set
2	Assignment Exam	Kola Srinivas Navya Sree (You) • Webcam D SHANTHINI • Webcam		End meeting
۲ ا	Attendance Recordings	Rupchi Sangma		
3	FAQs	Siyona Suresh Babu UDAYKUMAR DASHARATH DA Webcam		Online Classroom
				\langle Slide 1 \checkmark \rangle \bigcirc 100% \oplus \leftrightarrow
			(ی 😔 🚭 🚭 😒

Step 10: Click 'End Meeting' to End Class

		Alive Digital Classrooms			Kola Srinivas Navya Sree FACULTY	8
	ALIVE Digital Classroom	MESSAGES	<u>८</u>	1242819 🛛 🔘 15:37	۵	÷
↑	Home Study Material	NOTES Shared Notes USERS (6)		25 Total Sciences Range See		
ê ?	Assignment Exam	Kola Srinivas Navya Sree (You) ra Widcam D O SHANTHINI			22	
۲ ۲	Attendance Recordings	Ru ₀ Rupchi Sangma		End 1242819 × This action will end the session for 5 active user(s). Are you sure you want to end this session?		0
R	FAQS	Sing Syona Suresh Babu Udu VDAYKUMAR DASHARATH		Ves No		
				Click 🖉 to unmute yourself.	1076 🕑 🛏	
			+			9)

Step 11: Give Confirmation for Ending Meeting

	A1 8/5		Alive Digital Classrooms		Kola Srinivas Navya Sree FACULTY	8
	ALIVE Digital Classroom					
	llerer					
T B	Home Study Material					
Ê	Assignment					
?	Exam	~				
¥	Attendance			This session was ended by Kola Srinivas Navya Sree		
	Recordings			Open Learning Dashboard		
8	FAQs			You will be forwarded back to the home screen		

Step 12: Class Conducted Successfully

	ALIVE	Alive Digital Classrooms						Kola Sri	inivas Navya	ya Sree FACULTY	0
	Digital Classroom	Search		Date	Subject	Duration	Attendance				
f	Ноте	07-07-2023		2023-07-07	Pharm. Manufacturi	09:00 AM-10:00 AM	6				
	Study Material	To Date 07-07-2023	ä	1 row selected			Rows per page:	100 👻	1-1 of 1	<	>
Ê	Assignment	Student(s) with 50% attendance									
?	Exam 🗸	Note: Attendance will be only considered	if								
Ť	Attendance	Student is present atleast 50% time of the	e session.								
	Recordings	SEARCH									
?	FAQs										

Step 13: Click 'Attendance' to Check Class Attendance





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	Digital Classroom	Search		Date	Subject	Duration	Attendance		
A		From Date 07-07-2023		2023-07-07	Pharm. Manufacturi	09:00 AM-10:00 AM	6		
		To Date 07-07-2023	Attendance List				Rows per page:	100 👻 1-1 of 1	
ê		Student(s) with 50	AI002647						
2		Note: Attendance will	ACP22QUAS003			_			
Ť	Attendance	Student is present atle	ACP22QUAS008			_			
		s	ACP22QUAS007						
Ø			ACP22QUAS004			_			
			ACP22QUAS005						

Step 14: Attendance of the Class