



2.3.1. Student centric methods like experiential learning, participative learning, problem-solving methodologies and teachers use ICT- enabled tools including online resources for effective teaching and learning process.

INDEX

Student Centric Methods of Teaching and learning

Experiential learning

Participative learning

Problem-based learning

Teachers use ICT- enabled tools




Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001



Student Centric Methods Of Teaching and learning

With the traditional implementation of Teacher-Centered Learning in the curriculum and the shift to student-centered learning because in current times, skills have widened the educational system to more competent and personalized learning is required in all phases of life. To meet up with challenges and readiness of the student learning process genuine implementation is required.

Student Centric Learning approach uses curricula to engage learners' skill interests and communicates with their teachers to prepare for critical skills, desired goals, and professional development.

Student-centered learning allows for more flexibility of working class individuals to engage academically by studying remotely as individuals or in small groups. Technique individualized learning with a skill-set approach aided by blended and remote learning methods and extended learning options. The student exhibits an increased sense of autonomy and shares the charge of their learning with their teachers. Technology has been an added advantage as teachers use technology to communicate instruction, model learning, and engage students in deep learning. At the same time, the students use technology to access information, cooperate and communicate with their peers, and establish their learning path.

The student-centered learning methods and learning approaches are different from the method and models implemented in traditional teacher-centered learning. Adopting a student-centered approach with emphasis on students having full responsibility and accountability for their learning is challenging for teachers. It requires teachers to be facilitators and assessors in their teaching approach. Student Centered Learning requires




Principal
Vaagdevi College of Pharmacy
Hanamakonda, Warangal-506 001



teachers to be responsive and evaluative as learners are active and accountable for their learning process.

This student-centered learning method is based on Learners communication, critical thinking, creativity, and collaboration. Learners have the opportunity to decide on what to learn and things of real-life scenarios. Teachers' assessment changes from summative assessment to formative assessment as learners are involved in the assessment.

Student-Centered Learning includes increased students' autonomy towards learning.

Transformation of passive learner to an active learner.

Reliance of deep learning and understanding

Enhanced responsibility and accountability on the part of the learner.

Developing a mutual respect between the learner-teacher relationships.

Adopting and recognizing students view in the teaching process.

Interdependent relationship between the learner and teacher.

The learning experience can be tailored to learners' capabilities. There are various Student Centric Learning techniques, ranging from easy implementation to higher complexity.

Methods of the student-centered learning approach include:

Experiential learning

Experiential Learning is a powerful foundational approach to all forms of learning, development and change. Experiential learning describes the ideal process of learning, invites you to understand yourself as a learner, and empowers you to take charge of your own learning and development




Principal
Vaagdevi College of Pharmacy
Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY
 (Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
 Ramnagar Dist. Hanamakonda- 506001, (T.S)



Fig1. Students of B. Pharmacy experiencing to attend classes in Vaagdevi College of Pharmacy, Hanamkonda.

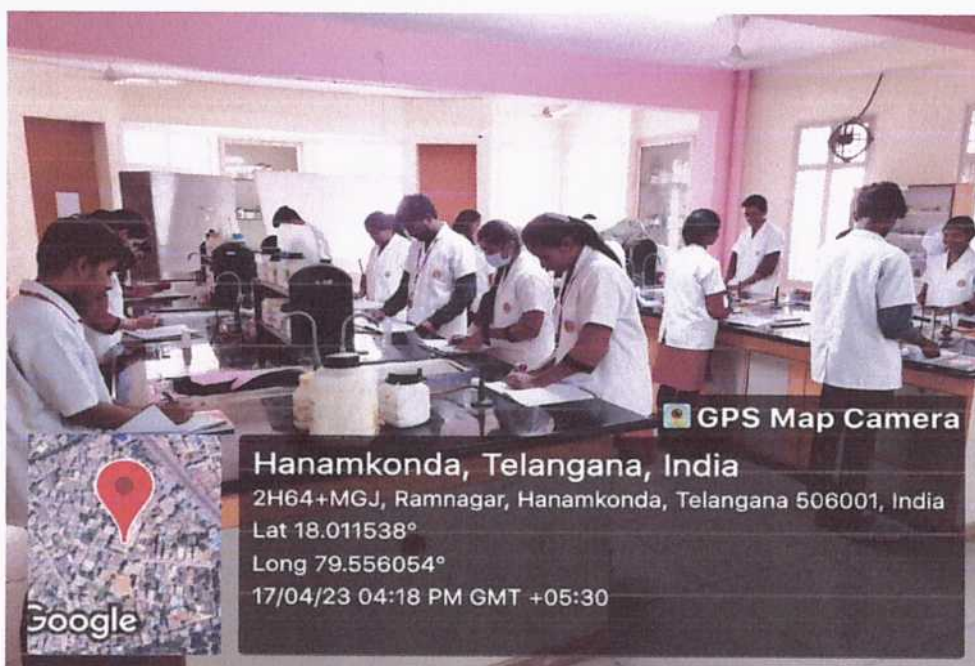


Fig2. Students of B. Pharmacy IV semester involving in experiments in laboratories of Vaagdevi College of Pharmacy



Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506 001

Participative learning

Participative learning involves the strategies and techniques that are focused on encouraging students to become actively involved in their learning process. They also aim to raise students' awareness and sense of responsibility about the organization, management and evaluation of their educational experience.



Fig3. Pharm D Students of Vaagdevi College of Pharmacy participating in Group discussion



Fig4. Pharm. D students of Vaagdevi College of Pharmacy participating in the Awareness program by Pharmacovigilance at Mahatma Gandhi Memorial Hospital, Warangal




Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001



Fig4. Students of M. Pharmacy participating and presenting the research work in Conference RTPSR-2019 in Vaagdevi College of Pharmacy



Fig5. Students of Vaagdevi College of Pharmacy participating in Quiz as the part of student centric learning process




Principal
Vaagdevi College of Pharmacy
 Hanamkonda, Warangal-506 001

Problem solving methodology

Problem solving is a teaching strategy that employs the scientific method in searching for information. It is arriving at decisions based prior knowledge and reasoning. This approach requires students to solve shorter problems in a short time In Vaagdevi College Of Pharmacy students learning the solving of problems in subjects like mathematics, Biostatistics and research methodology, Bio-pharmaceutics and pharmacokinetics, Hospital pharmacy, Pharmaceutical engineering, Physical pharmaceutics and Pharmaceutics.



Fig 6. Students of Pharm. D Vaagdevi College of Pharmacy inquiring about the medication and physician prescription of patients.




Principal
Vaagdevi College of Pharmacy
 Hanamkonda, Warangal-506 001

Project-based learning

This approach requires students to solve a complex real-world problem in an extensive period. Students are allotted by pharmaceutical sciences departments to submit their research projects to complete their respective courses.

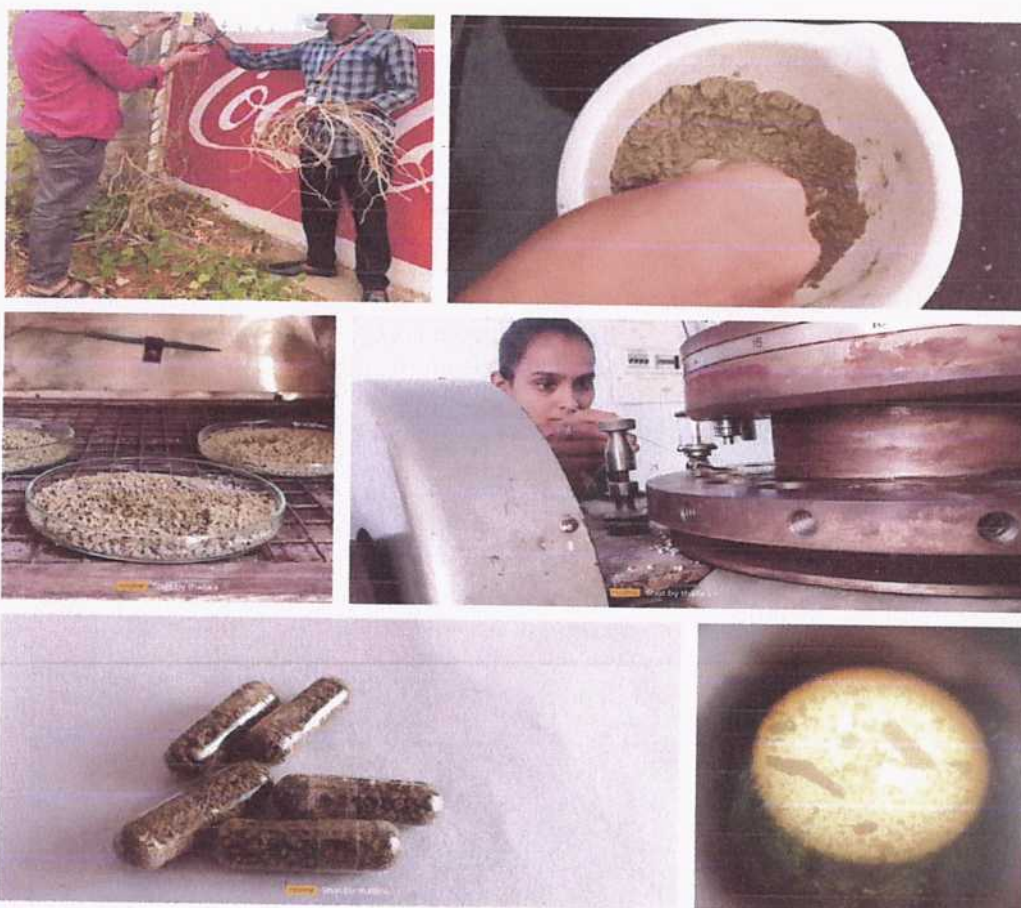


Fig.7. Students of Vaagdevi College Of Pharmacy B. Pharmacy VIII semester collecting plant material from medicinal garden to partial fulfillment of their minor project work submission.




Principal
Vaagdevi College of Pharmacy
 Hanamkonda, Warangal-506 001

Inquiry-based learning: This approach requires students to solve a scenario leading to a shift from basic knowledge to a deeper understanding of critical thinking and evidence-based reasoning. Students in Vaagdevi College College of Pharmacy implementing inquiry based learning from the patients prescription which is given by physician.



Fig 8. Students of Pharm. D Vaagdevi College of Pharmacy inquiring about the medication and physician prescription of patients.

Co-operative learning: This approach requires students to work in small groups to discover new concepts together. These methods can be also be carried out in groups, promoting co-operative learning. Hospital pharmacy is one area where patients,



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY
 (Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
 Ramnagar Dist. Hanamakonda- 506001, (T.S)

physicians and pharmacists' services required simultaneously. Co-operating in the process of learning by students is actively encouraged in Vaagdevi College of Pharmacy.



Fig 9. Pharm. D Students of Vaagdevi College of Pharmacy are co-operating at Mahathma Gandhi Memorial hospital pharmacy Warangal.



Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanumakonda- 506001, (T.S)



Fig 9. Students of B. Pharmacy VIII semester Vaagdevi College of Pharmacy during industrial visit EUGIA PHARMA SOLUTIONS PVT LTD at Hyderabad, Telangana.



Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001

Teachers use ICT- enabled tools



Fig 10. Pharm. D students of Vaagdevi College Of Pharmacy Attending for the Awareness program by Pharmacovigilance at Mahathma Gandhi Memorial Hospital, Warangal




Principal
Vaagdevi College of Pharmacy,
Hanamkonda, Warangal-506 001

 **VISWAMBHARA EDUCATIONAL SOCIETY**
VAAGDEVI COLLEGE OF PHARMACY
(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanamakonda- 506001, (T.S)

Mrs. A. APARNA (Ph.D)
INTERNATIONAL CONFERENCE
“PHARMA RESEARCH AND DEVELOPMENT”
AT PHILADELPHIA, USA



Fig11. Faculty member of Vaagdevi College of Pharmacy presenting research paper in international conference “Pharma Research and development” at Philadelphia, USA




Principal
Vaagdevi College of Pharmacy
Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY
 (Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
 Ramnagar Dist. Hanamakonda- 506001, (T.S)

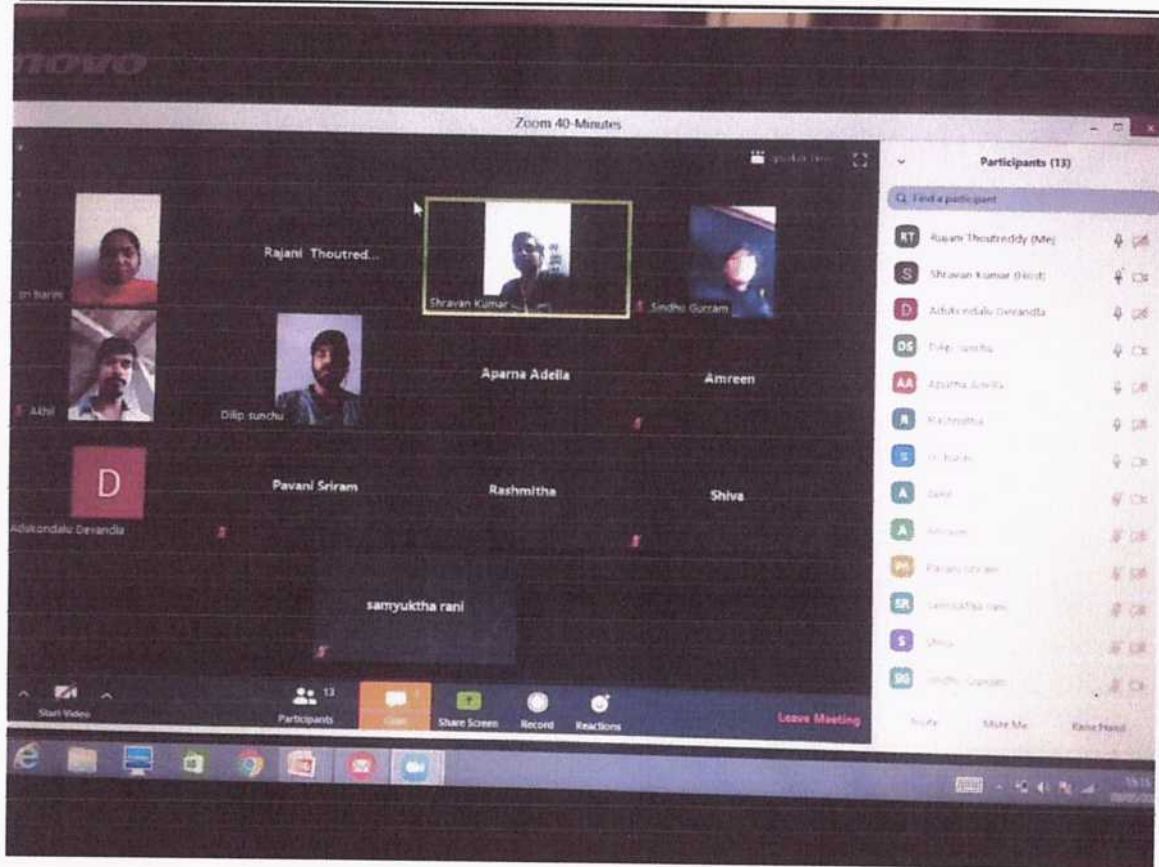


Fig12. Students of Vaagdevi College of pharmacy M. Pharmacy Pharmaceutics Department attending online classes



[Handwritten Signature]
Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanamakonda- 506001, (T.S)

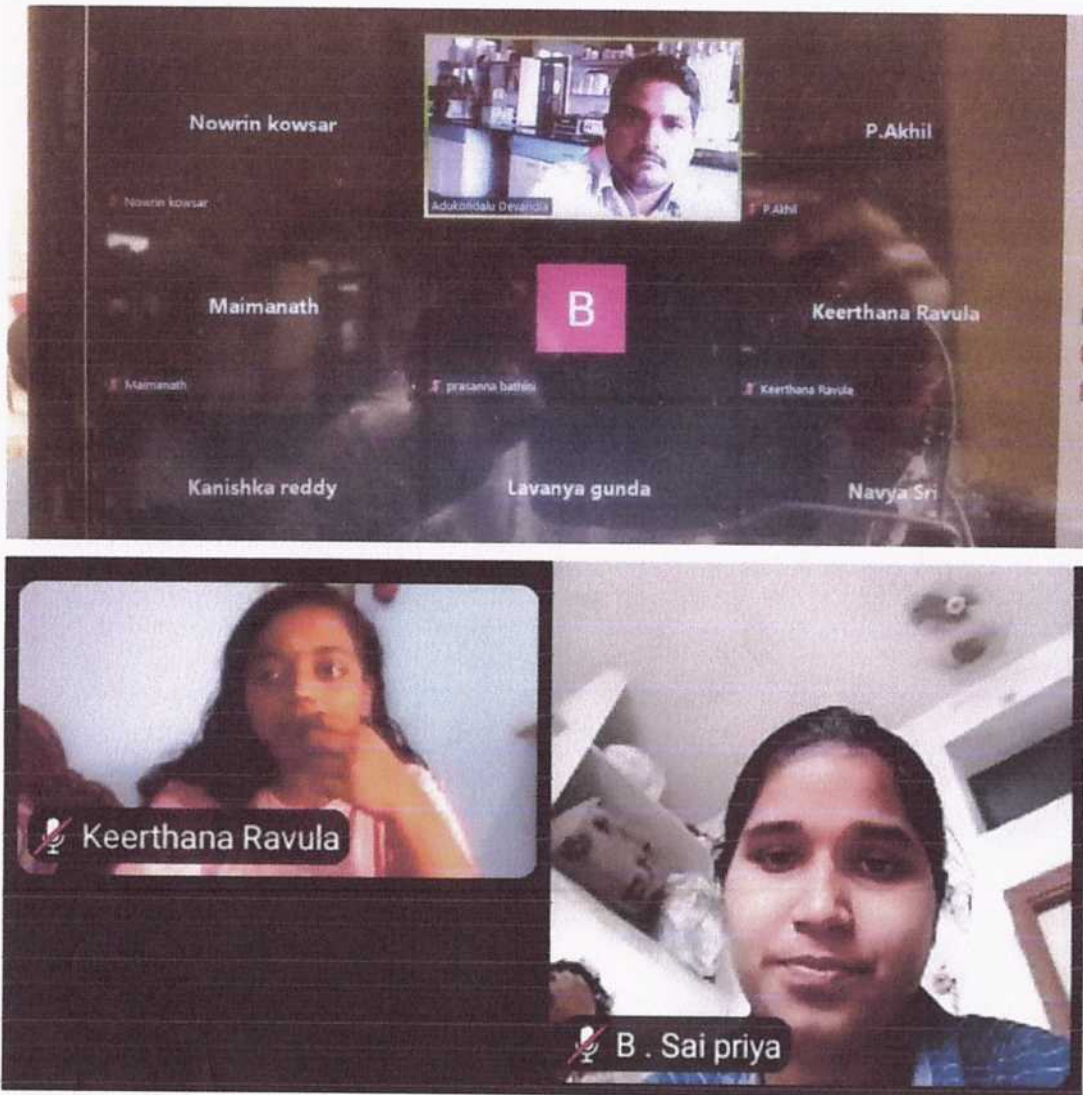


Fig13. Students of Vaagdevi College of pharmacy Pharm. D attending online classes



[Signature]
Principal
Vaagdevi College of Pharmacy
Hanamakonda, Warangal-506001

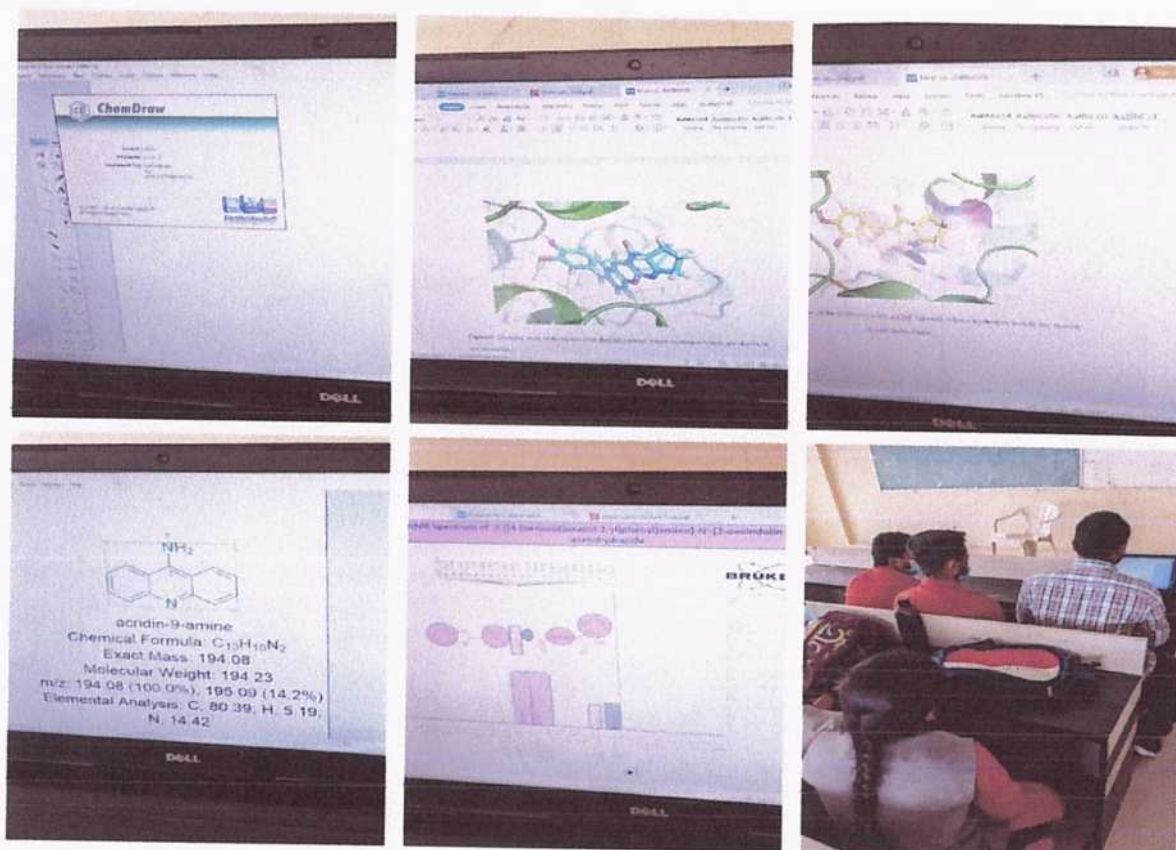


Fig13. Students of Vaagdevi College of Pharmacy Attending to the learning of Chem Draw, Molecular Docking (Schridoinger) and QSAR studies with the help of Information and Communication Technical Tools.




Principal
Vaagdevi College of Pharmacy,
 Hanamkonda, Warangal-506 001

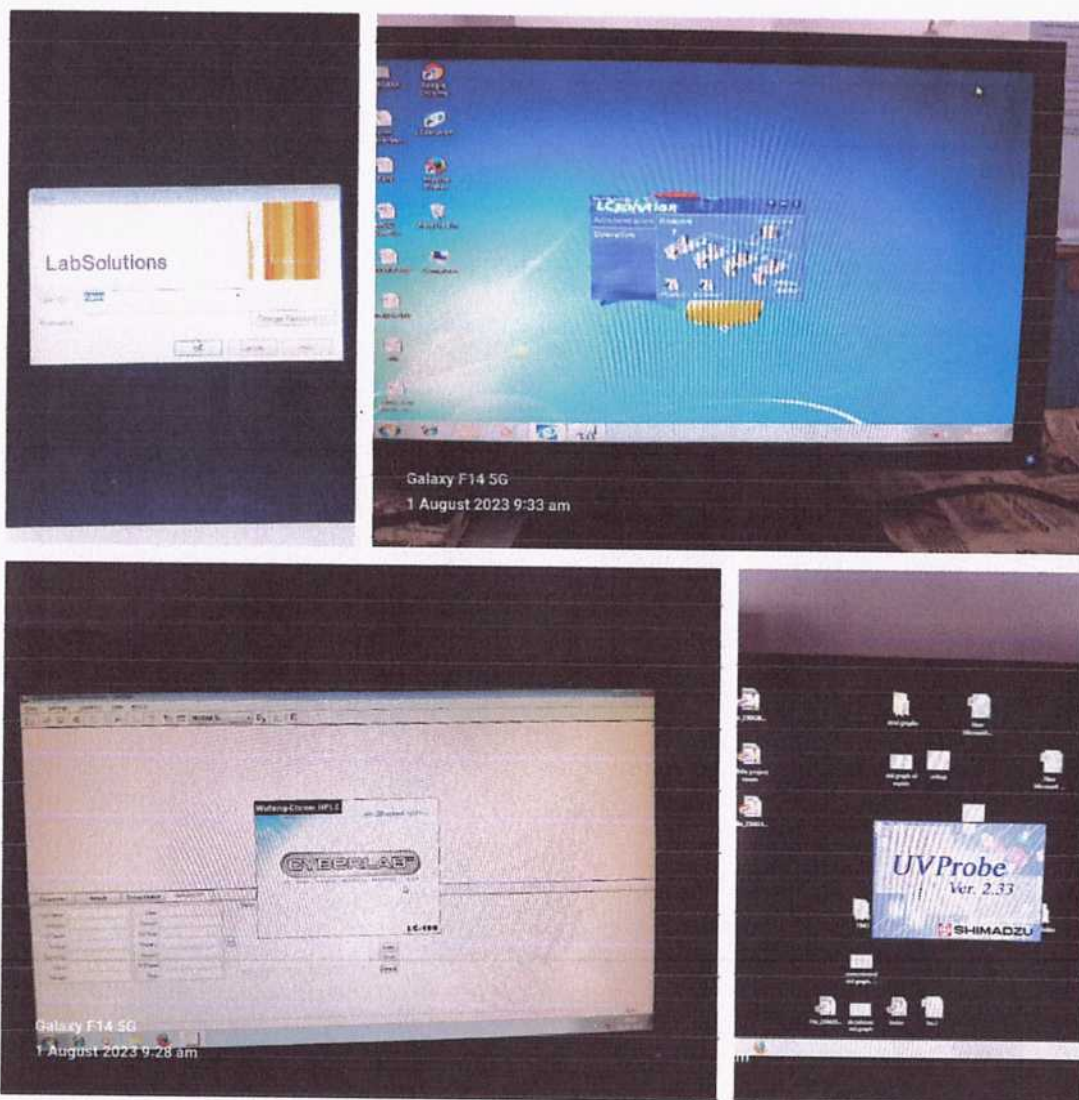


Fig 14. Students of Vaagdevi College of Pharmacy using the LC Solution, Labsolution and cybercal softwares (HPLC systems) and UV probe software studies with the help of Information and Communication Technical Tools.




Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506 001

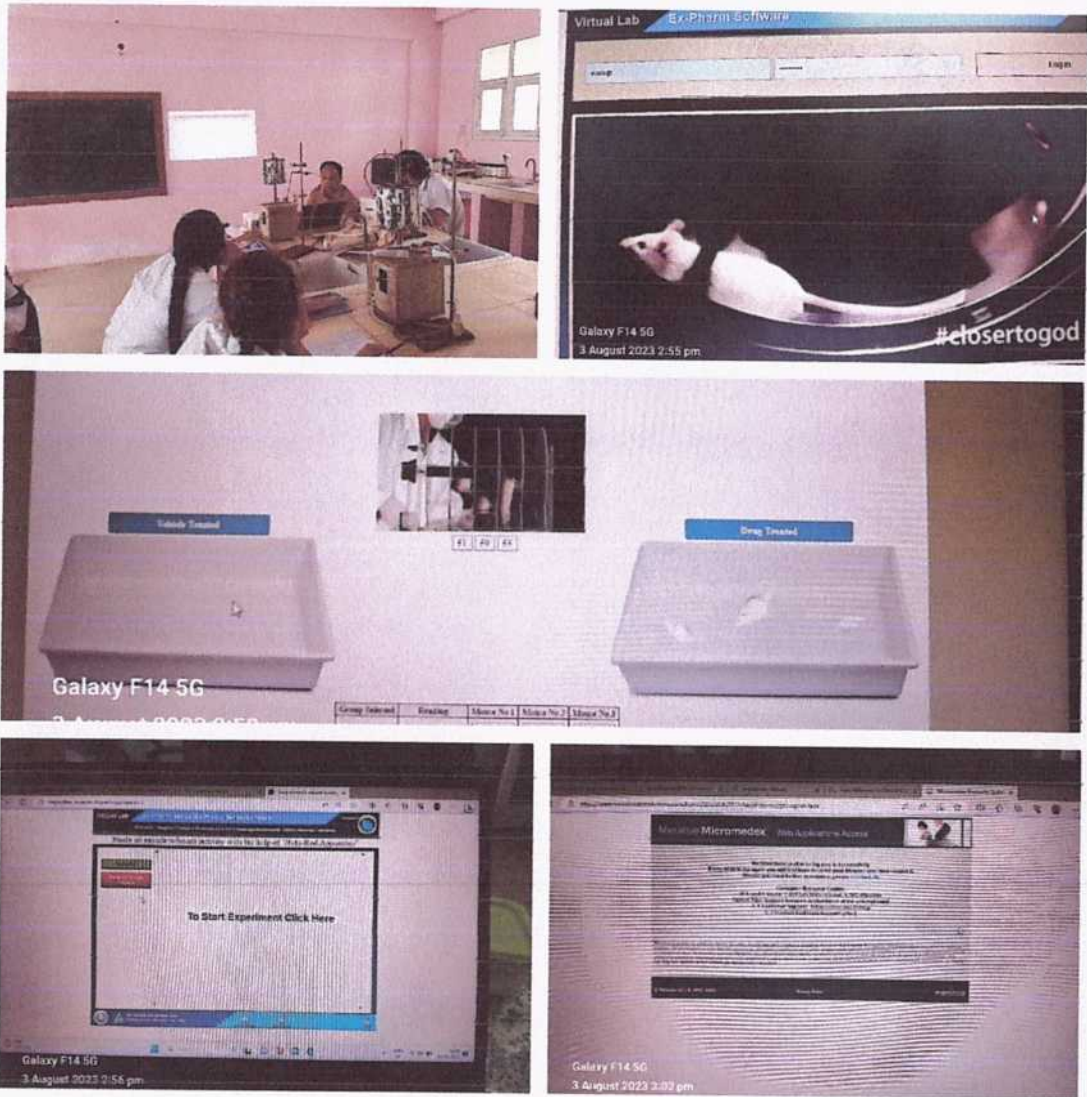


Fig 15. Students at Vaagdevi College of pharmacy attending to Micromedex Software learning in laboratory class




Principal
Vaagdevi College of Pharm.
 Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanumakonda- 506001, (T.S)

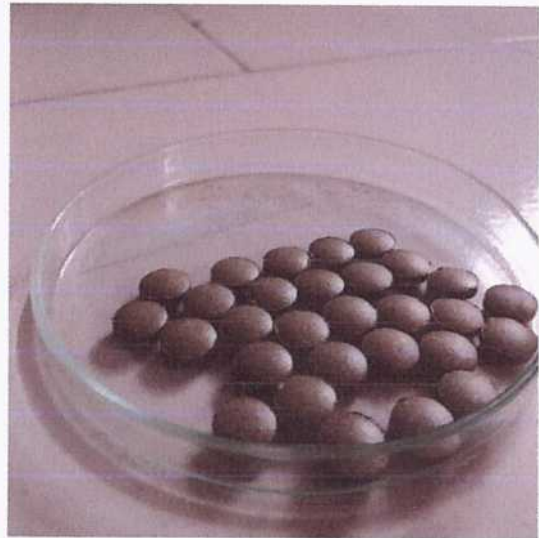


Fig.16 Students of Vaagdevi College of Pharmacy learning tablet coating process




Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001

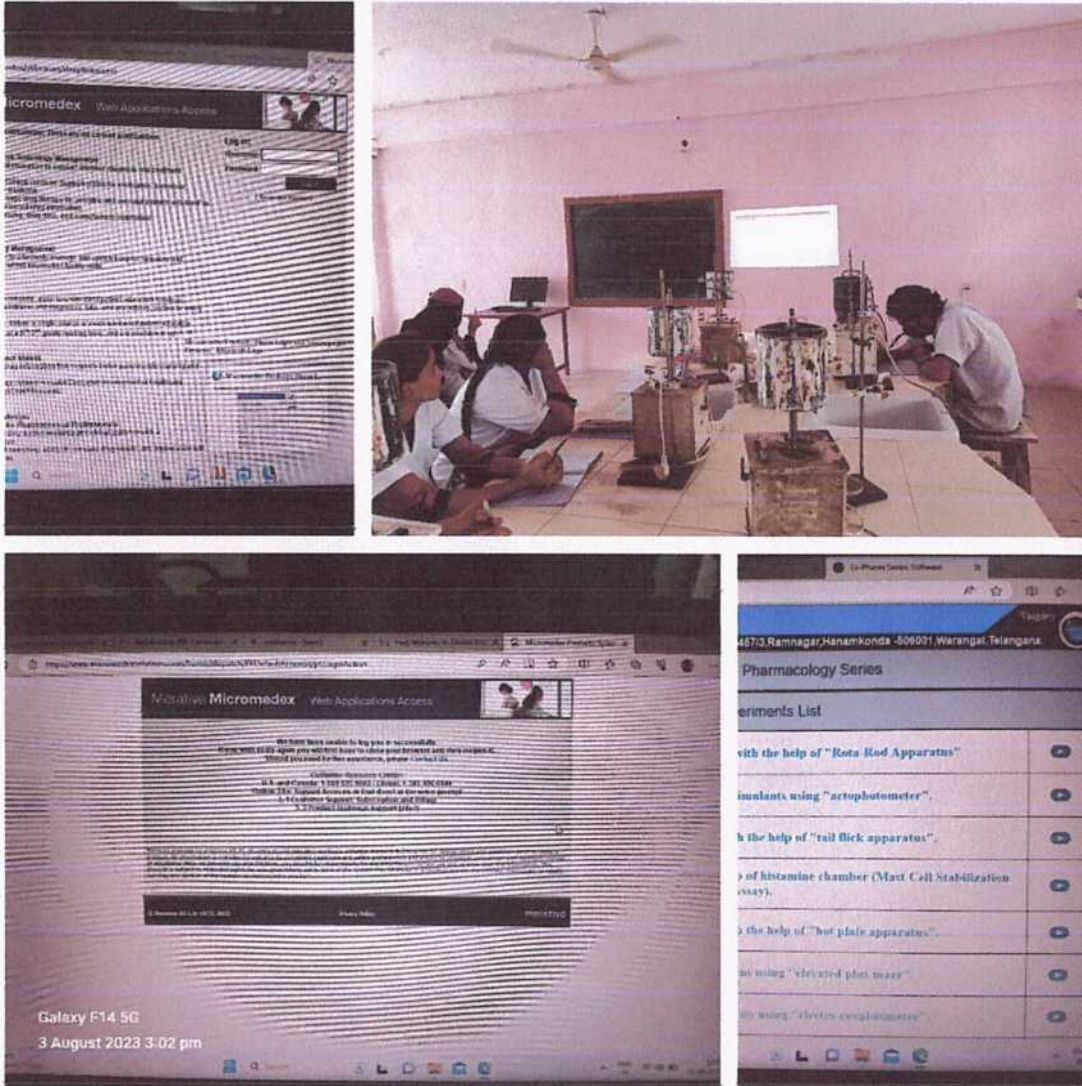


Fig 17. Students at Vaagdevi College of pharmacy attending to Expharama solutions Software learning in laboratory class




Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506 001



Fig.18. Student of Vaagdevi College of Pharmacy Ms. S. Priyanka achieved Guinness book of World record for continuous lecture for 24 hrs without any break.




Principal
Vaagdevi College of Pharmacy
Hanamakonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanamakonda- 506001, (T.S)

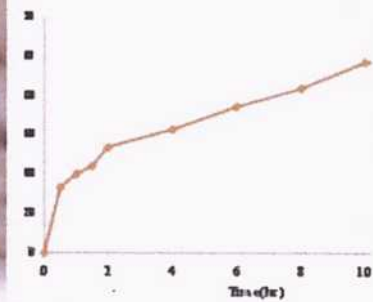
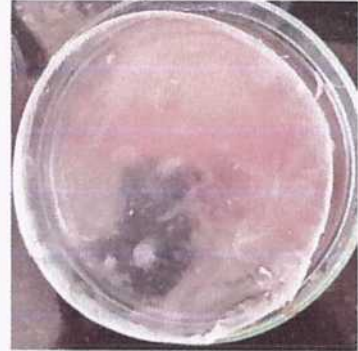


Fig 19. Students of Vaagdevi College of Pharmacy conducting experiment on abdominal skin of Abino-wistar rats to check drug diffusion from Novel transdermal patches



Principal
Vaagdevi College of Pharm
Hanamakonda, Warangal-506 001

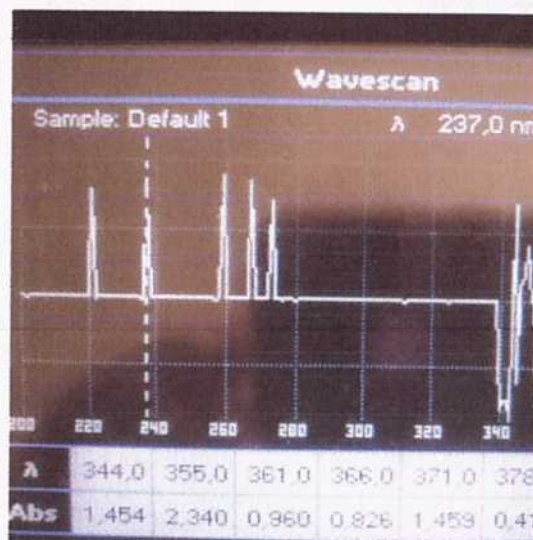


Fig 20. Students of Vaagdevi College of Pharmacy are finding the unknown concentrations of drug using UV Visibke Spectrophotmetrg.




Principal
Vaagdevi College of Pharmacy
 Hanamkonda, Warangal-506 001

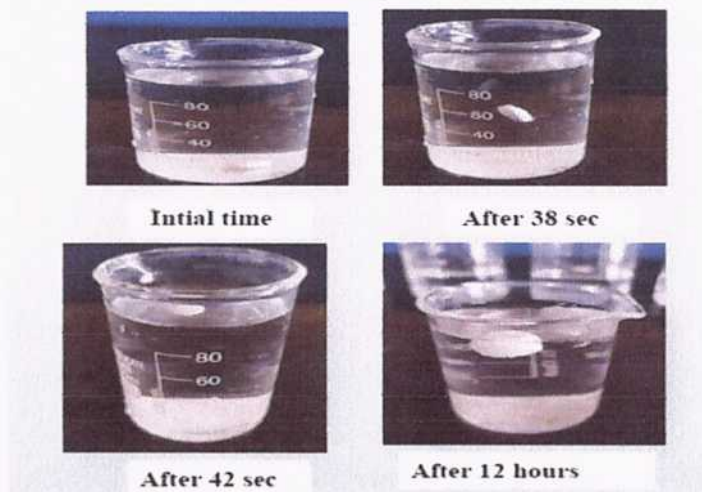


Fig 21. Students of Vaagdevi College of Pharmacy developed Novel floating drug delivery systems



Fig 22 Students of Vaagdevi College of Pharmacy conducting drug release studies using Dissolution rate testing apparatus

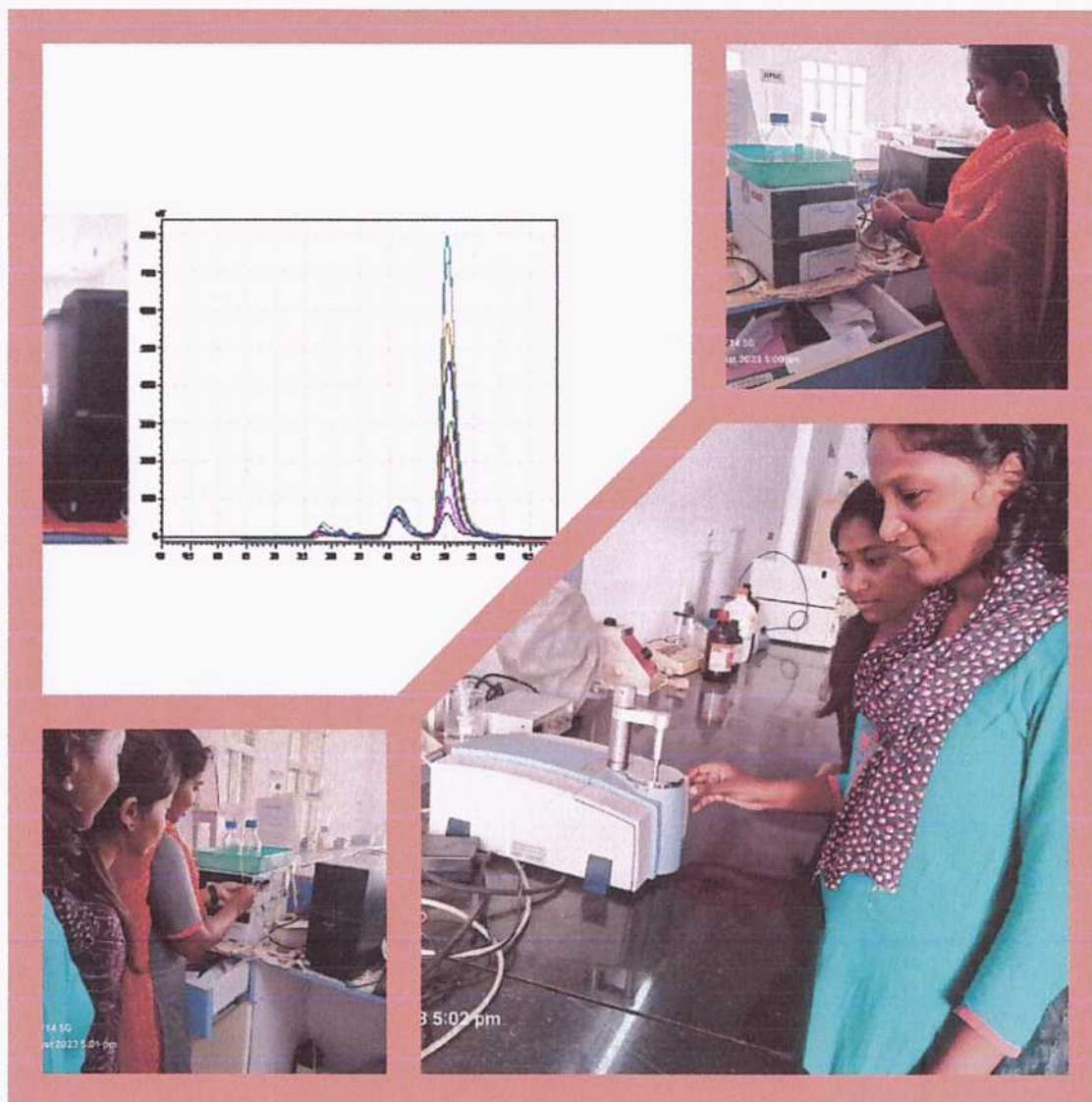


Fig 23. Students of Vaagdevi College of Pharmacy Performing the studies on HPLC and FTIR




Principal
Vaagdevi College of Pharmacy
 Hanamakonda, Warangal-506001



Fig 24. Students at Vaagdevi College of Pharmacy participating in Experiments with Seive shaker, Drying equipment, Ball mill and Bulk density apparatus





Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001



Fig 25. Students at Vaagdevi College of Pharmacy participating in project work presentation




Principal
Vaagdevi College of Pharmacy
 Hanamkonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanumakonda- 506001, (T.S)



Fig 26. Students of Vaagdevi College of Pharmacy involving in synthesis of Pharmaceutical Substances.



Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanumakonda- 506001, (T.S)

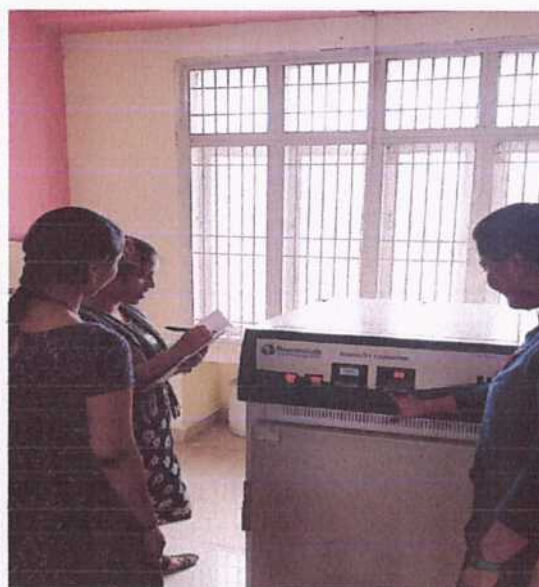


Fig 27 Students of Vaagdevi College of Pharmacy Participating in conducting stability studies for Pharmaceutical dosage forms



Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001