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Name: K MANJULA

**Designation**: School Assistant (Biology)

Place of Working: Z P HIGH SCHOOL, PALASAMUDRAM, GORANTLA (M), ANANTAPAUR(D), ANDHRA PRADESH

#### Appreciation Certificate

Ms. K Manjula has introduced many innovative practices in teaching learning process in the classroom by integrating ICT. She is always interested in making the teaching and learning process joyful and inclusive. She has introduced teaching the abstract concepts by using videos in the computer lab. She also has prepared many competency-based study materials and shared with the teachers throughout Andhra Pradesh. She has also introduced Interactive contents, quiz, games, ect to make the learning more objective and experimental. She is also trying to train the students to improve the  $21^{\rm st}$  century Global skills. She takes active part in conducting different meets in the school and mobilize the parents and community to provide infrastructure for school development.

She also trains co-teachers regarding the ict integration in the teaching that enhances the transformation of education. She has played a key role in many of the energizing text book project. She has been awarded with Diksha Award in 2019. She has also exhibited digital technology in education in science exhibitions at District, State and South Indian levels and awarded with prizes many times. Recently she has also won best New Media Content award in 24thICT mela. She has participated in many module writing workshops by RMSA and RAA at state level. She has actively participated in the preparation of study material for D grade students. She is enabling the children to learn at home even through her YouTube channel "My Science Classroom. She is rendering her services since 2000 by her innovative practices in the rural areas for enhancing transformation of education and teachers.

HEADMASTER
Z.P.HIGH SCHOOL
PALASAMUDRAM
Gorantla (Mdl) Anantapuramu (Dist)

#### **My Profile**

#### My Journey in the world of Education

I, K Manjula, has been trained in Regional Institute of Education, Mysore ( BSc.Ed) during 1996-2000 and entered the profession of Teaching with a passion of spending time and guiding the blossoms in the schools. I have started my service from December 2000 as a primary school teacher and in 2002 I have been appointed as School Assistant in an UP School. In 2009 I have been transferred into a High School. As I could experience all grades of children at all levels, I could develop an inclusive concept of Classroom management by undertaking many projects and experiments in the classroom. I used to engage the children in many activities to make them to explore the nature and technological things. I used to encourage the girl child education and mobilized the parents and community to increase the enrolment of the school. I actively participate in many meets conducted by the school to mobilize the students, parents and community to contribute the digital equipment to the school. I use all the resources available in the school such as science lab, library, computer lab, etc. to enhance the learning process. I have worked as a resource person in many trainings and also played a key role in the school complex meetings by enriching the teachers with the skills, content and pedagogy.





Practice of surya namaskaram





## My Journey in the world of Digital Education

I started believing that the technology as a tool that bridges the barriers in the teaching and learning process in the classroom by allowing virtual experiences to the children. I started adopting the technology to integrate with pedagogy.

I have started integrating ICT in teaching learning process in the classroom by taking prints of colourful and original pictures of different organ systems in human body from internet in 2015. Later I switched to collect videos regarding the science concepts which cannot be displayed or demonstrated in the classroom and exhibited them in the classroom while teaching learning processes. I have used educapm computers which were provided to school for this purpose. I used to share them with other teachers of our division. This collection of videos made me most familiar among teacher community. In this process admins of www.bioscienceguru.com have approached me and asked me to prepare study material to the students with the questions on the basis of learning outcomes. Then I started working on study materials, lab activities, etc. At this point I have got an opportunity to attend training on NTP - DIKSHA content creation at SCERT ANDHRA PRADESH. With this training I have created a lot of content in ekstep community portal which made me more passionate towards tech teaching. The content which I have prepared in ekstep made my students more fascinating towards science classes. I have also shared this content with other science teachers.



#### **Initiations:**

As a content creator in National Teachers Platform I have got an opportunity to participate in the Vision Documentation meet by The State of Andhra Pradesh. So that I could analyse the need and awareness of digital content creation, collaboration and communication in the education. I have been picked to participate in the workshop of Energizing Text Books with pooling and tagging contents with the QR codes. I have played a great role in this work and showcased with many highlighted digital contents in the subject of Biological Science. I have also created awareness among the teachers and student's community to utilize the contents in the QR codes. I have coordinated the Biological Science subject in the Exam Prep project and mobilized the student's community to use them. I have also acted as core team member to the ETB of languages. I have taken lead role in creation of teacher guiding videos for the training of teachers.

#### Vision Documentation on the Role of Andhra Pradesh In NTP (DIKSHA)





### **Participation in Energizing text books:**

































## Sample contents in DIKSHA

#### **VIII CLASS:**

1. Parts of a cell (Telugu medium):

https://diksha.gov.in/play/content/do 31239989759310233626481?contentType=R esource

2. Diversity in cells: (Telugu medium)

https://diksha.gov.in/play/content/do 312462199857897472113769?contentType=Resource

3. Cell – the basic unit of life: (Telugu medium)

https://diksha.gov.in/play/content/do 31249003924376780822380?contentType=R esource

4. Work sheet on diseases: (English medium)

https://diksha.gov.in/play/content/do 312336950458458112214?contentType=Resource

5. Dicot stem: (English medium)

https://diksha.gov.in/play/content/do 3123534160221552642160?contentType=Re source

6. Environment: (English medium)

https://diksha.gov.in/play/content/do 312351923066773504127?contentType=Resource

7. Virus: (English medium):

https://diksha.gov.in/play/content/do 3123420379050475522667?contentType=Re source

8. Disease due to microorganism: (Telugu medium)

https://diksha.gov.in/play/content/do 31240806300844851222366?contentType=R esource

9. Virus: (Telugu medium):

https://diksha.gov.in/play/content/do 312466780060876800216927?contentType=Resource

10. Diseases in human beings due to microorganisms: (Telugu medium)

https://diksha.gov.in/play/content/do 31240872174892646412578?contentType=R esource

## **BIOLOGY\_PRACTICE NOTES**

- Click on the name of the lesson and get practice notes including one-word answer questions, very short answer questions, short answer questions and long answer questions.
- Long answer questions include diagram based, experiment-based questions, drawing practice resource, hotspots,

NUIRIION
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REPIRATION

**TRANSPORTATION** 

**EXCRETION** 

COORDINATION

**REPRODUCTION** 

**COORDINATION IN LIFE PROCESS** 

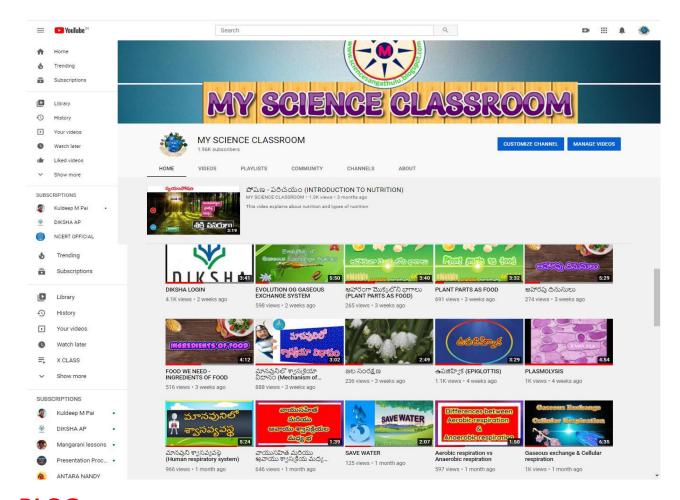
**HEREDITY** 

**OUR ENVIRONMENT** 

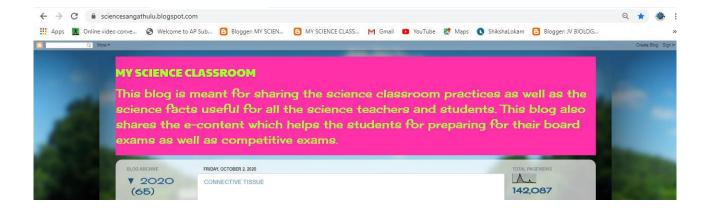
**NATURAL RESOURCES** 

## **Blog & Channel:**

#### You Tube channel:



#### **BLOG:**



CLASSROOM" to make my students to access to the e-content. I have created many numbers of videos with high quality and made available in this channel. It is being viewed by number of students regularly. It has reached nearly 2 lack views and 2k subscribers. I have also created a blog <a href="https://www.sciencesangathulu.blogspot.com">www.sciencesangathulu.blogspot.com</a> through which I share many interactive contents by using H5p, genial.ly, etc, also games by using wordwall.net and study materials with the students. It has nearly 2 laks views.

**Sample contents in you tube channel:** Click on the titles of the content. They are hyperlinked with the url.

Contents in you tube channel	Contents in you tube channel	
T S of leaf	Gaseous exchange & cellular	
	respiration	
Mechanism of photosynthesis part 1	Heterotrophic nutrition	
Mechanism of photosynthesis part 2	Observation of onion peel cells	
Human digestive system part 1	Plant parts as food	
Human digestive system part 2	<u>Draw it easy</u>	
Vitamins and deficiency diseases	<u>Chloroplast</u>	
Human respiratory system	Roots and functions	
Mechanism of Respiration	<u>Epiglottis</u>	

#### You Tube channel link:

https://www.youtube.com/channel/UC43qqEnGectFY0dP6oOThzA/videos

**Sample games and hotspots in blog:** Click on the titles given below. They are hyper linked with content url.

- 1. Connective tissue
- 2. Transportation system Fun game
- 3. Differences between Photosynthesis & Respiration
- 4. Nephron Hotspots
- 5. Human Heart Hotspots

Blog URL: https://sciencesangathulu.blogspot.com/

#### Integration of ICT in teaching learning process:

There is great impact of ICT in my classroom. If the student experiences the conceptual understanding, he/she can inspire and may analyse to ignite creative response. I tried to give visual experiences about the concepts of photosynthesis, respiration, excretion, etc to the students. So, I have planned each and every session integrating ICT wherever it is required while teaching learning process in my classroom. Wherever it is necessary and possible I have created videos, pdf and interactive assessments by using tools like Diksha and H5P. I also use audacity and free video editing tools. I have also planned to make the students to acces to the content in QR code by scanning through mobile phone and school tab too. I used to share these assessments through WhatsApp. I have my own laptop and make the children to watch the videos and while playing he interactive content. While playing the interactive content a lot of discussion takes place in my classroom. I used to conduct quiz by using assessment tools like testmoz, quizizz, wordwall, etc. Even during this pandemic period all the contents which I have created helped our students to sustainable knowledge gaining and experiences. I used to discuss with the children even with basic phone in a conference call by using the **FREE CONFERENCE CALL app.** I can interact with 50 students at a time in this app.











# **Classroom Practice**





Scanning and finding the content in the QR codes with school tab





Utilizing the different digital resources in the school for teaching learning process and assessment.





Assigning the work at home to the students during exams as a quick review. After completion of tasks I adopt the alternative experiences for good result.





Summary and assessment after completion of the lesson





Either it is interaction or assessment Technology made everything easy and enjoyable. By integrating the ICT in the pedagogy made my work more systematic, constructive and creative.

#### As a resource person of ICT in Andhra Pradesh:



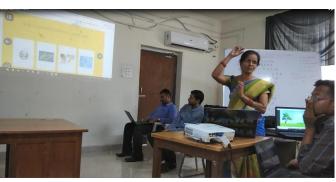


I have taken a key role as one of the core team members in Energizing text books in Andhra Pradesh. I have also coordinated Biology Subject in Exam Prep in 2019. I have trained thousands of teachers about DIKSHA workspace through the webinars conducted by School Education Department, Andhra Pradesh. I have also visited the TECH 2019 conference as a resource person from Andhra Pradesh and

enriched with many tools which helps us to collaborate our content and communicating them to the students. The experiences gained in this conference have helped me a lot in my classroom transaction, especially the tools like collabrify, Wakelet, Kahoot, etc. These tools helped me a lot during Pandemic time to communicate the content with the students. With the integration of ICT the education is enabled to our students and sustained the learning process. I have also created a sample student course for the chapter NUTRITION in DIKSHA. Till now 2500 members have joined this course from different states of India. It helps the students to gain the education during this pandemic time by staying at home. Any student can access to this course by registering themselves in DIKSHA.



**Training the teachers during ETB** 



As a key resource person in our school complex I have trained our school teachers and complex teachers in School complex meetings.



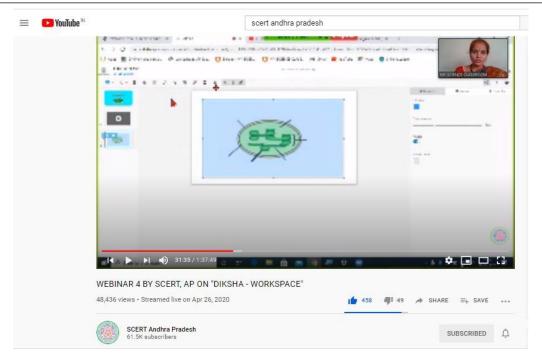




Giving hands on experience to the teachers in School Complex meeting

My presentation on DIKSHA work space in the Webinar conducted by School Education Department, Andhra Pradesh.

URL of the presentation: https://youtu.be/rv9ktGAiVr0

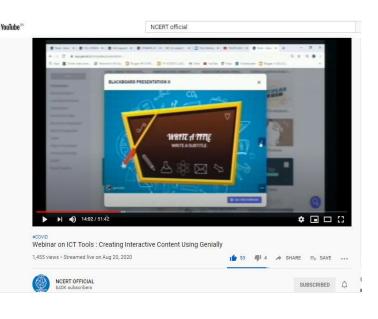




URL of the presentation: https://youtu.be/ONIWds9PTLE

My presentation on ICT tool, genial.ly in webinar on ICT tools by NCERT





**URL** of the presentation: https://youtu.be/TREBoomTZLI

#### **Experiences at TECH 2019 – Learnt tools and ICT integration**







Interacting with Microsoft team about artificial intelligence in TECH 2019



**Worked with Minecraft** 

#### **Achievements:**

I have also been awarded with prizes when I exhibited my content in science exhibitions at state and South Indian level.

1. Received Diksha content creation award in 2019 by the Education Department Andhra Pradesh. It is the recognition for the content creation and usage of Diksha platform for integrating technology in pedagogy in the classroom. With this I have been honoured as **Best Teacher** at District level.





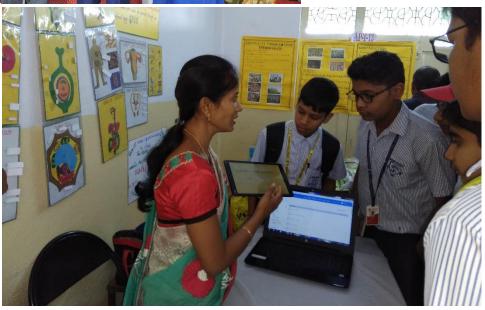
2. I have participated in many Science exhibitions with exploration of technology in Education And warded with prizes at district, state and south Indian level.









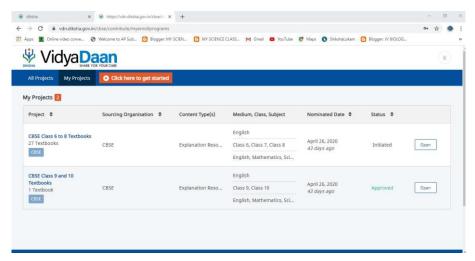


3. I have participated in 24<sup>th</sup> All India Children's Educational Audio Video Festival – ICT mela organized at CUSAT, Cochin, Kerala. I have presented the New Media Content in the category of Teachers (Secondary level) with the title DOUBLE CIRCULATION. This content has been selected for BEST NEW MEDIA CONTENT AWARD. It has been appreciated by many teachers and students. This content is an interactive content which includes a video, interactive assets and assessment. It helps the D Grade students to learn the concept of DOUBLE CIRCULATION very easily.



This achievement has left me an idea of developing the skills in our students who are much more enthusiastic and native users of technology. I started teaching our students about some software and apps which may help them in their presentation and exploration.

**Contribution to Vidyadaan:** I have contributed 13 videos for Vidyadaan\_CBSE. At Present I have submitted nominations to AP Vidyadaan – APEKX.



## **EXPERIMENT:**

DIKSHA is a platform which serves as a content repository. I strongly agree that It has to be accessed by all the students. During this pandemic period a time line has to be maintained to enable the students to access to the content. Hence, I have created a course on the first lesson of X class Biology – Nutrition. It contains content videos, Practice notes, Final Quiz as assessment. Nearly 3000 members have been joined in the course throughout the country. I am trying to continue for the next lessons.

#### The url of the Student Course:

https://diksha.gov.in/explore-course/course/do\_3131205014418391041419



#### **PHOTO GALARY OF EVIDENCES:**

#### Participation in Science Exhibitions about digital technology in education to create awareness





#### One of the DIKSHA steering committee member in Andhra Pradesh:

File No.ESE02-22/87/2019-SCERT

#### Mutes of the Stearing Committee Meeting **DKSHA** - Teacher Education Samagra Shiksha Andhra Pradesh

Date: 19-12-2019

Venue: Samagra Shiksha Office, Patamata, Vijayawada

Meeting Chaired by: Shri V. Chinaveerabhadrudu, IAS, State Project Director, Samagr

As per the instructions of the State Project Director, Samagra Shiksha, Amaravati, the first steering committee meeting of DIKSHA was held on 19.12.2019. The meeting was chaired by Shri V. Chinaveerabhadrudu, IAS, State Project Director, Samagra Shiksha and the following members/officers had attended the meeting and discussed the above-said

- ${\bf 1.\ \ Prof.\ G.\ Viswanathappa,\ Director,\ SIEMAT,\ Samagra\ Shiksha}$ Nodal Officer, DIKSHA
- 2. Mr. Pratapa Reddy, JD (EE), SCERT Member
- 3. Mr. A. Subba Reddy, JD (TET)

- 4. Mr. Y. Raghava Reddy, DD (IT), SCERT Member 5. Dr. K. Pandurangaswamy, DEO (Retd.), Consultant, SCERT, AP
- 6. Mr. K. Chitti Babu, Consultant, NICEF Invitee
- 7. Mr. Pokuri Srinivasa Rao, HoD, Digital Education Member
  8. Ms. Y.D. Bhavani, HoD, Assessment Cell, SCERT Member
- 9. Mr. N. Kodandarama Naidu, Asst. Engineer, SIET SCERT Invitee
- 10. Mr. A. Kishore Kumar, Producer, SIET SCERT Invitee
- Mr. V. Chandranna, Asst. Professor AP State Coordinator, NCERT RIEM

Invitee

12. Mr. G. Gangadhar Naidu, SA (Telugu) YVSMPC GHSchool, Proddutur, Kadapa

Member

13. Mr. R.V. Raghavendra Rao, PGT Biology, INV Vizianagaram

14. Ms. K. Manjula, SA (BS) ZPHS, Palasamudram, Gorantla Mandal, Ananthapur Member

15. Dr. N. Srinivasu, Lecturer, SIEMAT, Samagra Shiksha

Invitee

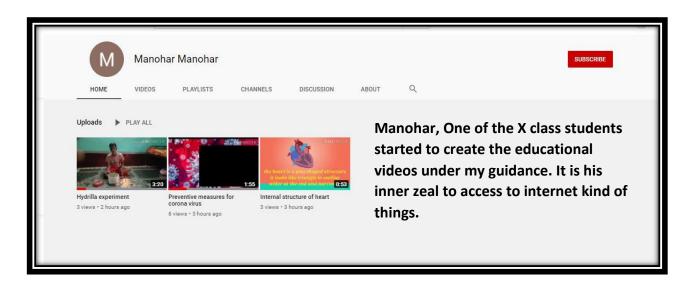
### Interacting with One of the Delegates in Tech 2019 at Vizag



### Trained the students about the video making and the reflection:



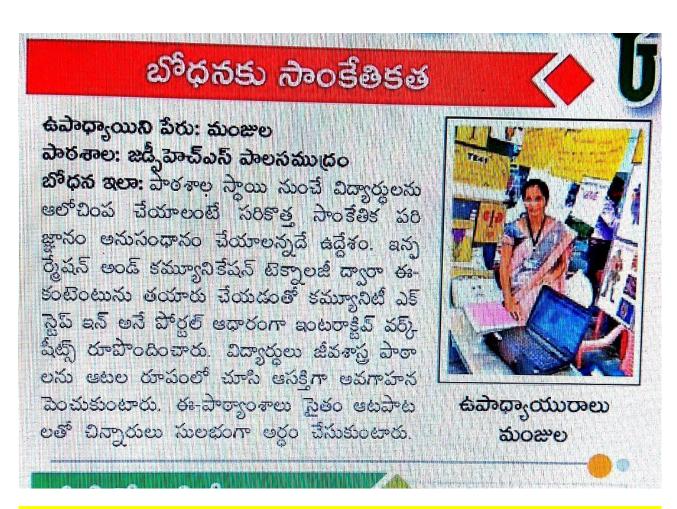




#### **NEWS COVERAGE:**



News coverage about my initiation of preparing digital content and make it available to the students.



News coverage about the participation in State level Science exhibition with the concept of Integration of ICT in teaching – learning process. Exhibited the interactive contents prepared in Ekstep. Appreciated by many teachers, students and delegates. And also awarded with 3<sup>rd</sup> prize and selected for South Indian Level Science Exhibition.





ఈనెల 22 నుండి 24 వరకు మూదు రోజుల పాటు జరిగిన ఆల్ ఇండియా చైల్రెన్స్ ఎద్యుతేషన్ ఫిల్మ్ ఫెస్టివల్ ఐసిటి మేళాలో గోరంట్ల మందలం పాలనముద్రం జిల్లా పరిషత్ ఉన్నత పాఠశాలలో జీవశాగ్ర ఉపాధ్యాయినిగా పనిచేస్తున్న కె. మంజుల ద్వి వలయ రక్త (వసరణ వ్యవస్థ అనే ఈ కంటెంట్ న్యూ మీడియా సెకండరీ, హయ్యర్ సెకండరీ విభాగంలో బెస్ట్ న్యూ మీడియా కంటెంట్గా ఎంపికై జ్ఞాపికతో పాటు సర్టిఫికెట్ను అందుకున్నారు. ఈసందర్భంగా పాఠశాల హెచ్ఎం ఫణికుమార్తతో పాటు

ఉపాధ్యాయులు ఆమెకు శుభాకాంక్షలు తెలియజేశారు.

News coverage
About AWARD
winning at ICT
mela at CUSAT,
Cochin



Participated in Srujanothsavam conducted by SCERT, Andhra Pradesh on the occasion of SCIENCE DAY on Feb 28<sup>th</sup>. The talk was about the digital technology in Biological Science classroom. I have highlighted the important of Digital Technology in the biology science classroom so as to bridge the barriers of visualization of different concepts. The usage of e content has been emphasized in this meet. I have also emphasized the importance of content creation, collaboration and communication through the subject forums, portals and instance massaging. The access to the e content by the children is emphasized majorly to remove the barriers in the biological science classroom.









As core team member in ETB languages



మంజుల

# రాష్ట్రసాయి పోటీల్లో ఉపాధ్యాయిని ప్రతిభ

పాలసముడం (గోరంట్ల): లాక్డౌన్ కౌనసాగుతున్న వేళ ప్రభుత్వ ఉపా ద్యాయుల్లో బోధనాభ్యసన సామ్మగ్ రూపకల్పనను బ్రౌత్సహించడానికి రాష్ట్ర విద్యాపరిశోధన సంస్థ (ఏపీఎస్సీఈఆర్టీ) ఆన్లైన్ ద్వారా నిర్వహించిన రాష్ట్రస్థాయి పోటీల్లో గోరంట్ల మండలం పాలసముడం జిల్లా పరిషత్తు ఉన్నత పాఠశాలలో జీవశాస్త్ర ఉపాధ్యాయినిగా పనిచేస్తున్న మంజుల ప్రతిభ కనబరిచారు. వ్యర్థ వస్తువులను వినియోగిస్తూ మానవ జీర్లవ్యవస్థ

పార్యాంశం విద్యార్మలకు మలభంగా ఆర్థమయ్యేలా నమూనా రూపొందించి సైన్స్ విభాగంలో రాష్ట్రస్థాయిలో ద్వితీయ స్థానంలో నిలిచారు. రాష్ట్రస్థాయిలో ద్వితీయ స్థాయి విజేతగా నిలిచిన ఆమెను పాఠశాల హెచ్ఎం ఫణికుమార్, ఉపాధ్యాయ బృందం ఆభినందించారు.



# THANK TOU