



Department of Instrumentation and Control Innovative Teaching Method 27.01.2020

Class:	TE
Name of Method :	Role Play
Learning Objective: <ol style="list-style-type: none"> 1. Students will understand the complete cardiovascular system 2. Students will understand generation of waveforms from heart 	
Outcomes: On completion students were able to <ol style="list-style-type: none"> 1. Explain the structure of heart. 2. Identify the role of SA node, AV node, Bundle of His & Purkinjee fibers. 3. Explain the conduction of heart & ECG Theory 	
Description : <p>Role play, including acting out scenarios to problem solve, story making through dramatic play and practice in coping with real life situations will support student’s social-emotional growth and development. Role play helps to develop the skills to handle problematic social interactions. In the role play, each student was assigned the application (with role of each component) was discussed with the students. Each student was assigned particular role of the act. Students presented their role with its function, structure, role and its importance.</p> <p>Complete structure of heart was discussed with students through video lectures. Working of heart, conduction system of heart was discussed through animation & ppts. Then Students were assigned the role of heart valves, heart chambers, arteries, veins, SA node, AV node, Bundle of HIS, Purkinjee fibers with rules and regulations. During role play students acted as assigned components and presented their roles. E.g, I am SA (sino atrial)node, I am the natural pacemaker of the heart. I generate the contraction impulse in the heart which circulates through out the various chambers of the heart & there by generates the ECG. This is how every student plays his/her role.</p>	
Impact of Innovative Method: This activity helps students to enhance communication skills, interpersonal skills, understanding the concept, self-confidence, team work, self-learning, analytical skills & participating in front of audience.	

Rubrics used:

Skills/Criterion/C ategory	4 Points	3 Points	2 Points	1 Points
Objective of the Role-play	Objective of the role-play was very clearly understood.	Objective of the role-play was clearly understood.	Objective of the role-play was understood.	Objective of the role-play was not clearly understood.

Content delivery by each participant.	Participant delivered all the contents as per role.	Participant delivered most of the contents as per role.	Participant delivered some of the contents as per role.	Participant delivered none of the contents as per role.
Props (creativity while playing role)	Participant used several props that accurately fit the period, shown considerable work/creativity and made the role-play best.	Participant used 1-2 props that accurately fit the period, and made the role-play better.	Participant used 1-2 props which made the role-play good.	Participant used No props OR the props chosen distracted from the role-play.
Overall of the Impact	All information appeared to be accurate and in chronological order.	Almost all information appeared to be accurate and in chronological order.	Most of the information was accurate and in chronological order.	Very little of the information was accurate and/or in chronological order.

Roll no.	Name of student	Objective of the Role-play	Content delivery by each participant.	Props	Overall of the Impact	Total
1	Pratiksha Aher	3	4	3	3	13
2	Pranav Ahire	4	4	3	3	14
3	Rushikesh Bhagwat	4	3	4	4	15
4	Suyash Gadhave	3	3	3	4	13
5	Damini Jadhav	4	4	4	3	15
7	Nishant Joshi	3	3	4	3	13
10	Shirish More	3	4	3	3	13
11	Mayuri Narkhede	4	3	3	3	13
12	Aishwarya Rao	3	3	3	4	13
13	Yash Shelke	4	4	3	4	15
15	Ankit Rai	4	4	3	3	14
17	Bhushan Karanjkar	3	3	3	4	13



Innovative Teaching Method 23.01.2020

Class:	BE
Name of Method :	Role Play
Learning Objective: 3. Students will understand the concept of renewable energy source 4. Students will understand importance of renewable energy source	
Outcomes: On completion students were able to 4. Explain the electricity generation by solar, wind & hydro renewable energy source 5. Compare various renewable energy sources.	
Description : <p>Role play, including acting out scenarios to problem solve, story making through dramatic play and practice in coping with real life situations will support student's social-emotional growth and development. Role play helps to develop the skills to handle problematic social interactions. In the role play, each student was assigned the application (with role of each component) was discussed with the students. Each student was assigned particular role of the act. Students presented their role with its working principle, function, structure, limitations and its importance.</p> <p>Complete working of solar, wind & hydro renewable power plant was discussed with students through Animated video lectures & ppts. Need of renewable energy sources, its importance & comparison of various renewable energy sources were discussed with students. Then Students were assigned the role of Solar cell, Electrons, flow of current, solar panel, charge controller, Inverter, Wind blades, Turbine, generator, water reservoir, turbine with rules and regulations. During role play students acted as assigned components and presented their roles. E.g, I am a solar cell, when sunlight falls upon me, electrons & holes move apart at the boundary of my cell, thereby creating the potential difference & generating the electricity, it is given to charge controller, battery, inverter & then used in household applications. My capacity of delivering the electricity is increased by connecting number of solar cells in series i.e designing of solar panels. This is how every student plays his/her role.</p>	
Impact of Innovative Method: This activity helps students to enhance communication skills, interpersonal skills, understanding the concept, self-confidence, team work, self-learning, analytical skills & participating in front of audience.	

Rubrics used:

Skills/Criterion/C ategory	4 Points	3 Points	2 Points	1 Points
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Objective of the Role-play	Objective of the role-play was very clearly understood.	Objective of the role-play was clearly understood.	Objective of the role-play was understood.	Objective of the role-play was not clearly understood.
Content delivery by each participant.	Participant delivered all the contents as per role.	Participant delivered most of the contents as per role.	Participant delivered some of the contents as per role.	Participant delivered none of the contents as per role.
Props (creativity while playing role)	Participant used several props that accurately fit the period, shown considerable work/creativity and made the role-play best.	Participant used 1-2 props that accurately fit the period, and made the role-play better.	Participant used 1-2 props which made the role-play good.	Participant used No props OR the props chosen distracted from the role-play.
Overall of the Impact	All information appeared to be accurate and in chronological order.	Almost all information appeared to be accurate and in chronological order.	Most of the information was accurate and in chronological order.	Very little of the information was accurate and/or in chronological order.

Roll no.	Name of student	Objective of the Role-play	Content delivery by each participant.	Props	Overall of the Impact	Total
3	Suyog Bhambar	4	4	4	3	15
4	Sumit Bhusari	4	4	3	3	14
11	Shubham Gade	4	3	3	3	13
12	Pratik Gaikwad	3	3	2	3	11
14	Manoj Jadhav	4	4	3	3	14
16	Nishant Jadhav	4	4	4	3	15
18	Vishal Kairi	4	4	3	4	15
20	Suraj Khairnar	3	4	3	3	13
22	Shubham Magare	4	4	4	3	13
24	Akshay Nimbalkar	2	3	2	3	10
25	Swapnil Pagar	3	4	3	3	13
27	Yogesh Patil	3	3	3	3	12
30	Kunal Satpute	4	4	4	3	15
33	Dipak Vadnere	3	4	3	3	13



