

Step by Step Instructions to Utilize Gagne's Model of Instructional Outline in Educating Psychomotor Aptitudes

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Abstract: Gagne's nine steps is an instructional framework to achieve better learning results, Applying Gagne's nine steps model is a superb method to guarantee a successful and methodical learning program as it offers structure to the lesson designs and encompassing all prospects to education. Simulators fall into the broad context of simulation-based medical education (SBME). It uses simulative guides with a specific end goal to upgrade the instructive message by reenacting the clinical situation. Reenactment gadgets fill in as a contrasting option to the genuine patient and allow teachers to increase full control of a pre-chosen clinical scene without the danger of upsetting patients or experiencing other unsafe part of learning on genuine patients. It isn't contrasting option to bedside educating but instead correlative expansion. It became an integral part of the medical curriculum, across all medical professions and throughout medical careers. It will be incorporated as the leading standardized performance assessment method of health professional's competencies

Keywords:

Introduction

Gagne's instructional model has been used comprehensively to educate procedural skills.^{1, 2} it is ordered the five learning results as academic aptitudes, verbal data, psychological approaches, states of mind and its capacities, the Gagne's nine occasions of direction giving an instructional framework to achieve these results.³ Applying Gagne's instructional model is a great method to guarantee a successful and precise learning program as it offers structure to the lesson designs and encompassing all prospects to the education

We thought on the contextualization procedure of Gagne's instructional model in showing NG intubation for second year MBBS students in integrated modular system.

Lesson plan (Approximate time hours)

Interactive session

Learners Level: Undergraduate, 2nd Year MBBS

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Outcome: 1. Define Nasogastric (NG) intubation, 2. Explain type of tubes, 3. Discuss indication of Nasogastric (NG) intubation, 4. Discuss the risk and complication Nasogastric (NG) intubation, 5. Practice Steps in Inserting a Nasogastric Tube with minimal assistance on Manikin

Contents: Following steps to learn during practical session

1. Step by step procedure in inserting a Nasogastric tube,
2. Take Consent
3. Position head
4. Check nasal Pathway for any polyp obstruction
5. Apply xylocaine into nasal opening & on the tip of NG tube
6. Gently insert NG tube (manikin)
7. Deglutinate,
8. When NG reaches the mark attached it with 10 cc empty syringe & push in
9. Place stethoscope on the left hypochondria & listen the bubbling sound
10. Apply the surgical bandage around the nasal part of NG
11. Attach I/V drip set with NG tube & N/Saline.

Check list is attached as Annexure 1

(Please see it on www.jpathology.com)

1. Types of tube
2. Indication, Risk and complication

Teaching & Learning method

- Interactive session

Resources:

1. Multimedia
2. Manikin
3. Gloves
4. Nasogastric tube
5. Protective towel
6. Emesis basin
7. Xylocaine gel
8. Tape for marking placement and securing tube
Deglutinate
9. 10cc syringe
10. Stethoscope IV drip set
11. N/ Saline
12. Covering
13. Suction equipment or tube feeding equipment

Timing: 3 Hours

Lesson Plan (Approximate time 3 hours)

1. Gaining attention: Approximate duration 5 minutes

To connect with students toward the start of a lesson, we will point out for their watch an impactful video that shows how a legitimate NG intubation can have a major effect to a patient's life (initial 03 minute). This video is utilized to catch the consideration of visual and auditory learners. ⁴ there is pity related with a dowager thinking back about her late spouse would draw in the students sincerely and trigger them to be more upright in legitimate NG intubation procedures, and in this way be more prepared to learn. ⁵

We are mindful that an emotional video may trigger previous bad experiences. In such cases, rather than to dwell into the negativities of bad experiences, staying focused on the learning the objectives and being positive toward a safer and better health care is a preferred option. ^{6,7}

2. Informing learner of objectives: Approximate duration 5 minutes

Promptly after the video, we will proceed onward to express the lesson objectives. This aides in setting up the students for the impending learning process and building up the students' achievable desires for the lesson. To keep up the students' advantage, we will relate the significance of the objectives to the video just observed, with the goal that the students can value

them in genuine settings. Such practice agrees with the law of intensity. ⁸ For this lesson, the goals are exhibited as:

After finishing this lesson, students will have the capacity to:

1. Define Nasogastric (NG) intubation
2. Explain type of tubes
3. Discuss indication of Nasogastric (NG) intubation
4. Discuss the risk and complication Nasogastric (NG) intubation
5. Practice Steps in Inserting a Nasogastric Tube with minimal assistance on Manikin

3. Stimulate recall of prior learning: Approximate duration 15 minutes

The constructivism theory set forth that the learning procedure is encouraged if earlier information and individual experience can be related with new information. ⁹ hence, it is important to stimulate recall of earlier learning. However, for this lesson, the students have no significant clinical involvement in dealing with patients.

To defeat this, the students will be requested to review their current involvement in doing NG intubation done while we anticipate a photo of a taunt NG intubation provide details regarding it on projector screen. Here, the students are set on the help end and they could remark on the standard of method they gave as facilitator. With questions like, "Did NG Intubation method conventions were taken after?" If yes, "What are standard strategies for NG intubation?" If no, "What was missing?", and, "What might you do another way in the event that you would they say they were facilitator?". The students are activated to consider on the systems, pondering on the best way to have any kind of effect from an individual point of view. This reasoning and sharing procedure offers to visual and auditory learners, ⁴ and connects with semantic, intrapersonal, and relational intelligences. ¹⁰ Subsequent to spending roughly 5 minutes on reviewing, we will proceed onward to convey my Presentation. The goal isn't to drag the reviewing stage so long that the students lose center and interests.

4. Presenting stimulus: Approximate duration 15 minutes

We will convey my substance utilizing PowerPoint introduction. Objective of will be concealed in power point presentation. Pictures and topical classified

agendas are incorporated to help the students to learn in "pieces" and help them to absorb the new information.^{11,12}To connect with the students, we urge them to review the strategy they performed amid NG intubation. This procedure connects with their semantic and intrapersonal insights and bids to visual, sound-related, and sensation styles of learners.^{4,10}

5. Providing learning guidance
Approximate duration 20 minutes

The principal legitimate exhibition with well-ordered clarification is a decent beginning stage for learning. This training agrees with the law of supremacy and the initial phase in the Peyton's four-advance way to deal with educating (demonstration- deconstruction- comprehension- performance).^{8, 13}To start, we "illustrate" how we approach the Manikin; perform technique of NG intubation in an opportune way. Next, we approach by clarifying the justification for each progression taken and urge the students to make inquiries for better "perception." This procedure connects with the students' semantic, sensation, and relational knowledge, and invigorates the reflectors to ponder.^{10,14}Furthermore, the read/compose style of students can be locked in by urging them to scribble down notes for future references.⁴

6. Eliciting performance
Approximate duration 60 minutes

In this session, students are gathered in little gatherings to rehearse the aptitude of moving toward the manikin via the role-play activity. I have picked the manikin since it can mimic real work conditions and have its attention on correspondence and full of affective interaction.¹⁵ An itemized situation must be composed deliberately to oblige the learning targets of the lesson. Students need to comprehend the motivation behind the role-play activity and subsequently time is expected to set them up enough. Students are advised to alternate to "perform" as a Professional, and a spectator for NG intubation. An onlooker is urged to share or talk about with the performing "Experts" on what was done well and what should be made strides. Such movement connects with the understudies' linguistic, kinesthetic, intrapersonal, and relational insight, and fortifies the activists and logical thinkers to act.^{10, 14}It is vital to urge all students to assume a participative part. Which is productive and meaningful.¹⁶

7. Providing feedback
Approximate duration 20 minutes

As the students are honing in their role play, I watch them intently and give quick criticism on the off chance that they have done well or have passed up a major opportunity certain issues. Auspicious input is basic for good learning forms and for imparting great clinical practices.^{16, 17}An upright endeavor must be made for this convenient criticism. Furthermore, to support the spectators, criticism from the eyewitnesses can be consolidated accordingly.¹⁶

8. Assessing performance
Approximate duration 30 minutes

Once the students are prepared to show the moving toward aptitudes without incite, we evaluate the students in sets, each alternate. I will watch how NG intubation and achieves every required undertaking. The appraisal will be impartially done utilizing a checklist. Students can keep the reviewed checklist for their learning record and this will empower the scholars to break down and the reflectors to consider upon their evaluated skills.¹⁵

9. Enhancing retention and transfer
Approximate duration 10 minutes

As specified, students can keep the reviewed graded checklist for their learning record. I urge them to explain on their reviewed graded checklist what they have done well and what should be moved forward. Along these lines, it causes them to hold the great practices that they have illustrated. Besides, by enabling students to share among themselves their learning accomplishments, students learn cooperatively and move the abilities into clinical practices when they are out for their clinical practicum. Such practices connect with students' etymology, intrapersonal, and between individual intelligence.^{8, 10}At the finish of the lesson, a lesson outline shot pointing the learning destinations that has been secured is given. We will likewise distribute some an opportunity to illuminate any questions that the students may have.

Simulation Justification/ Importance:

Simulators fall into the broad context of simulation-based medical education (SBME). It uses simulative guides with a specific end goal to improve the instructive message by recreating the clinical situation. Simulation gadgets fill in as a contrasting option to the genuine patient and allow instructors to increase full control of a pre-chosen clinical scene without the

danger of upsetting patients or experiencing other destructive part of learning on genuine patients.

It is not alternative to bedside teaching but rather complementary addition.^{18,19} it became an integral part of the medical curriculum, across all medical professions and throughout medical careers. It will be incorporated as the leading standardized performance assessment method of health professional's competencies

We will be utilizing Basic plastic manikin and perform NG intubation issue and understudy will rehash a similar method. Reenactment is a sheltered domain where students can gain from their blunders without the danger of hurting a genuine patient. Errors and missteps are incredible learning openings, recreation is the specialty of gaining from botches in a protected situation. It offers a learner focused condition that can give complete consideration to his or her individual needs, pace, qualities and inadequacies. It empowers controlled proactive clinical presentation of students to bit by bit more intricate clinical difficulties, including the more exceptional.

Hazardous 'bad dream' situations" As it is 'hands-on' (experiential learning) instructive methodology, recognized by adult learning hypotheses to be more effective.²⁰ Simulation gives exceptional chances to group preparing; this is only here and there tended to in customary restorative instruction, and absence of such preparing is progressively perceived as a central point in framework mistakes and security disappointments in field of medicine.

In Northwest school of medicine we have three hour slot per week for simulation base medical education in skills labs which yielding fruitful results.

The simulation base training decreasing the fear of students to face real patients and enhancing their output in clinical OSCE examinations. (Time table attached as Annexure 2 on www.jpathology.com)

No of hours / Week	Total weeks	Total Skill lab hours
3	29	87

Conclusion

Gagne's instructional model is an extraordinary strategy to guarantee a feasible and exact learning program as it offers structure to the lesson designs and a comprehensive perspective of the educating. Simulation subordinate getting the hang of utilizing Gagne's 9 stages of instruction for psychomotor abilities enable a decent choice to diminish the perils

to patients life and increment the understudies learning. Be that as it may it just looks like and not recreates reality still more research is required in this respects. We have to remember that the correct type of these events isn't something that can be indicated when all is said in done for all lessons, but instead must be chosen for each learning objective.

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