

Exploring the Scope of the Jigsaw Classroom: An Innovative Teaching-learning Method for Ayurveda Undergraduates

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Dear Editor,

Various innovative teaching-learning methods have been incorporated into medical education to enhance skills such as communication, critical thinking, and attitude development among students. However, the challenge lies in selecting and implementing strategies that are both feasible and impactful for learners. Didactic lectures are often teacher-centred and monotonous, which ultimately reduces students' interest in the classroom.

The Jigsaw teaching method is a unique cooperative learning strategy introduced in 1971 by Professor Elliot Aronson. It is a student-centred teaching-learning approach that enhances student participation and active learning by creating a supportive and motivating environment. This method helps students grasp complex concepts more easily through collaborative group work. Consequently, it encourages active participation, teamwork, group interaction, and mutual learning among students from diverse backgrounds [1,2].

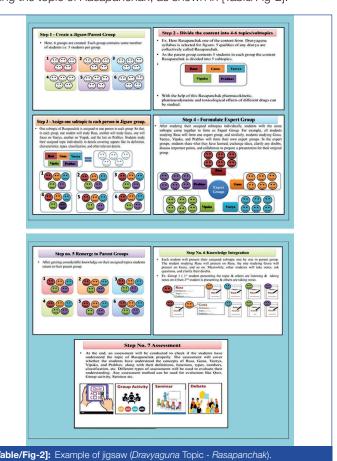
In this method, two types of groups are formed — the parent group (primary group) and the expert group (temporary group). The steps involved in the Jigsaw method are shown in [Table/Fig-1] [3,4].

Step No.1 - Creat a Jigsaw/Parent Group Divide the students into 4-6 groups. Each group contains same number of students. It is important that numbers of topics/subtopics should be equal to no. of students in each group $Step\ No.\ 3-Assignment\ of\ topic/subtopics\ to.\ students$ After studying their assigned subtopics independently students with same subtopics are gather together and forms an Expert group. Here students share their knowledge, ideas, clarify their doubts, discuss key ponits and work together to give a presentation to their parent group. After gaining considerable expertise on their assigined topics students rejoined to their parent group Step No. 6 Knowledge Integration Here each students should present their assigned topics one by one and share their knowledge. Meanwhile the other students take notes, ask questions and clear their doubts. Assessment of students should be done to check their knowledge and basic understanding of all the subtopics of [Table/Fig-1]: Step involved in jigsaw method.

In the traditional system of medicine, Ayurveda, a unique teaching method known as the Gurukul system was used to transfer knowledge from teachers to students. Although the principles of Ayurveda are eternal, there is a growing need to modernise Ayurveda

education by incorporating emerging technologies and innovative teaching tools. Recognising this need, the National Commission for Indian System of Medicine (NCISM) has introduced various innovative teaching-learning methods in Ayurveda education [5].

Implementing the Jigsaw Classroom in Ayurveda teaching has the potential to offer significant benefits to students. This method can be effectively applied to achieve learning objectives across a wide range of topics. For the first professional year, it can be used for topics such as Peshi (muscles), Asthi (bones), Dhatu (major structural components of the body), Prakruti (body constitution), Trividha Nyaya, and Tantrayukti etc. For the second professional year, it is suitable for topics such as various Vyadhi (diseases), Herbal drugs, Rasapanchak, Dincharya, Rutucharya, Ashtang Yoga, Rasashastra formulations, and different Visha Dravyas (poisonous substances). In the third professional year, the Jigsaw method can be used for topics such as parasurgical procedures in Shalya (surgery), parasurgical procedures in Shalakya (ENT), and Panchakarma (detoxification therapy). Teachers can also adopt this method for many other subjects and topics to further enrich the learning experience. An example of the Jigsaw method is illustrated using the topic of Rasapanchak, as shown in [Table/Fig-2].



[Table/Fig-2]: Example of jigsaw (Dravyaguna Topic - Rasapanchak).

REFERENCES

- $\textbf{[1]} \quad \mathsf{Dnyanesh}\,\mathsf{S}, \mathsf{Pattanshetti}\,\mathsf{SV}, \mathsf{Bhimalli}\,\mathsf{SM}, \mathsf{Dixit}\,\mathsf{D}.\,\mathsf{Jigsaw}\,\mathsf{technique} : \mathsf{An}\,\mathsf{innovative}$ teaching strategy in anatomy. J Scientific Society. 2022;49(3):322-25.
- Chauhan A, Chauhan A, Mann R, Madaik TS. Doctor-patient relationship: Effectiveness of the "Jigsaw" method of teaching among Phase I MBBS students in a tertiary care teaching hospital. Natl J Physiol Pharm Pharmacol. 2022;12(11):1785.
- Safkolam R, Ahmad Zaky El Islami R, Sari IJ. The effects of jigsaw technique on learning achievement and retention of science teacher students. Shanlax Int J Educ. 2023;11(2):37-42.
- [4] Krishnan DG, Keloth AV, Ubedulla S, Mohandas PG. Effectiveness of Jigsaw active learning method in promoting knowledge gain and retention among medical students: A quasi-experimental study. J Clin Diagn Res. 2021;15(12):JC05-JC08.
- [5] Jibkate B, Pargaonkar AS. Recent advances in teaching-learning methodologies of the Ayurveda education system. J Educ Health Promot. 2024;13(1):448.

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