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Competition 2023

Reconnoitering Innovative Ideas in Postnormal Times

iTAC

2023

iTAC 2023
INTERNATIONAL TEACHING AID COMPETITION
E-PROCEEDINGS

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PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee
Special Interest Group, Public Interest Centre of Excellence (SIG PICE)
UiTM Kedah Branch
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ACTIVE LEARNING STRATEGIES USING PICTAV FOR OCCUPATIONAL THERAPY STUDENTS

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ABSTRACT

Introduction: Formal lectures and laboratory demonstrations sometimes are less interesting. The Orthotic and Pressure Garment course is an elective course for occupational therapy students, and they are required to pass this subject. However, some students had difficulty scoring higher marks for the theory topic and lack of skills in designing and fabricating splint and pressure garments. The use of Patients' Involvement, Collaborative Teaching, and Audio-video (PICTAV) teaching aids can help students to understand concepts and ideas better. **Methods:** 14 students were involved in this course. A burning case patient was invited for learning history-taking and interviews in a patients' involvement session. An invited guest lecture by an industry expert for collaborative teaching was done to share knowledge and demonstrations on splint fabrication. All lesson content was uploaded to the Orthotic and Pressure garment Instagram. **Results:** The result from the student feedback form in all activities showed higher satisfaction. About 92.9% (n=13) of students agree that the patients' involvement session had increased knowledge in history-taking and interviews. Similar to collaborative teaching, about 92.9% (n=13) of students agree that the program had increased knowledge in designing and fabricating splints. All students respond well with all materials uploaded on Instagram and found that it was really helpful for them to do revisions. **Conclusion:** Patients' involvement session provides students with a real situation in the field work and makes them understand everything better. Demonstrations by experts raised student confidence and interest. Meanwhile, recorded practice sessions or lecture notes help to recall. These active learning strategies are some innovative ideas in post-normal times that can be used

for other laboratory courses in occupational therapy programs to improve students' understanding.

Keywords: active learning strategies, audio-visual aids, collaborative, occupational therapy, patients' involvement

INTRODUCTION

Occupational therapy education should use a combination of theoretical knowledge, practical skills, and clinical skills to achieve the learning objectives. The study program's content and scope, which are based on competence in knowledge, abilities, and attitude to produce capable, competent occupational therapy professionals can improve learning outcomes (Bennet, S. et al., 2017). Preparing qualified and capable entry-level therapists is one of the main objectives of undergraduate occupational therapy programs (Koski, K.J. et. al., 2013). Some courses, such as splinting and pressure garment fabrication, use lecture and laboratory demonstrations as teaching methods. There is a knowledge gap in how patient involvement, collaborative teaching by an expert in the area, and the use of social media for revision are useful to improve professional skills and learning outcomes for occupational therapy students.

Active learning is a teaching strategy rather than a single, specialized approach. It involved active student participation in precisely planned classroom activities. By actively immersing students in their classroom and experiential learning contexts, this technique can promote student engagement, boost relevance, and improve motivation (Brenda, L.G. et. al. 2011). In conventional lectures, passive learning is prevalent and offers one-way delivery of information and course content from teacher to learners.

A patient which describes as those who experienced in their own lives health, social care, and carers. Present studies highlighted the various roles that patients play in medical education and demonstrate effective effects that encourage their involvement (A. Bennet-Weston et al. 2022). There are different styles of teaching history-taking and Patient Involvement (PI) is one of the most effective methods to apply for teaching students (A. Bennet-Weston et al. 2022). Traditional university teaching methods had to be modified to make it possible for work-integrated education, in which students gain information and abilities that are immediately useful for their future careers (Gentelli, L. 2015). Talks or Collaborative Teaching (CT) by health practitioners with specialized knowledge in a range of fields improve learning. They can relate their experiences for the benefit of undergraduates, and the delivery relevant to the profession, with real-life examples of the workplace. In return, the students received knowledge of expectations in the workplace. Furthermore, it is important to gather all available information on the subject because we need to demonstrate and support its use for the student's development. Audio-visual (AV) aids, as a teaching strategy, encourage a shift from the traditional educational system to an improved way of learning that integrates technological

advancements and resources to enhance education (Adiel, AS. et al. 2016).

Two outcomes for the Orthotics and Pressure Garment course are: (i) explaining basic knowledge of orthotics and pressure garments, and (ii) displaying skills in designing and fabrication of splinting and pressure garments. Using the conventional teaching method, there are some students had difficulty scoring higher marks for the theory topic and lack of skills in designing and fabricating splints and pressure garments. Therefore, to help students to understand concepts and ideas better, the Patients' Involvement, Collaborative Teaching, and Audio-video (PICTAV) teaching aids have been implemented. Therefore, this study aims to answer the following questions:

- (1) To what extent do you agree or disagree with the following teaching aid methods: (i) patient involvement (PI) session, (ii) collaborative teaching (CT) by an expert, and, (iii) audio-visual (AV) aids using the social media platform Instagram,
- (2) What is your level of knowledge and understanding before and after participating in the following teaching aid methods: (i) patient involvement (PI) session, (ii) collaborative teaching (CT) by an expert, and, (iii) audio-visual (AV) aids using the social media platform Instagram,

MATERIALS AND METHOD

About fourteen, 14 occupational therapy students (HS115) from part 4 have been involved in this study. The Patients' Involvement, Collaborative Teaching, and Audio-video (PICTAV) teaching aids have been used in this study.

Patient Involvement

Mr. S, a 47-year-old man is diagnosed with a burn on the right side of his body. Currently, he was on medical leave. He has been interviewed by the students to get information about his experience in life backgrounds, pre-morbid and post-morbid history, medication, surgery, and rehabilitation at the occupational therapy department. The online Google Meet platform has been used for the interview session. All students were asked to fill up the evaluation feedback form after the session.

Collaborative Teaching

Mr. U, an occupational therapist from Raja Permaisuri Bainun Hospital, Ipoh who has more than ten years of experience in splint fabrication has been invited as a guest speaker. The session was conducted at the orthotics and pressure garment laboratory for two hours. All students were asked to fill up the evaluation feedback form after the session.

Audio-Visual

An electronic media social media platform which is Instagram has been used to promote student engagement and collaboration throughout the course. The use of video records allows for more efficient processing and memory recall, as well as providing an opportunity for active learning. All students were asked to fill up the evaluation feedback form after the session.

RESULTS AND DISCUSSIONS

The result from the student feedback form in all activities showed higher satisfaction.

Table 1. To what extent do you agree or disagree with the following teaching aids

	Strongly agree	Agree	Neither agree of disagree	Strongly disagree	Don't Know
Patient involvement	13 (92.9%)	0	1 (7.14%)	0	0
Collaborative teaching	13 (92.9%)	0	1 (7.14%)	0	0
Audio-Visual	13 (92.9%)	1 (7.14%)	0	0	0

Table 1 showed the result of agree and disagree with the teaching aids method. About 92.9% (n=13) of students agree that the PI session had increased knowledge in history-taking and interviews. Similar to CT, about 92.9% (n=13) of students agree that the program had increased knowledge in designing and fabricating splints. All students respond well to all materials uploaded on Instagram and found that it was really helpful for them to do revisions (n=13, 92.9%) The active learning strategies method using PICTAV has been recommended by most students to be used in the future and is suitable for other occupational therapy courses. Active learning that is well-designed can promote more thorough learning as students connect new facts and concepts to prior knowledge and the abilities they already have (Brenda, L.G. et. al. 2011).

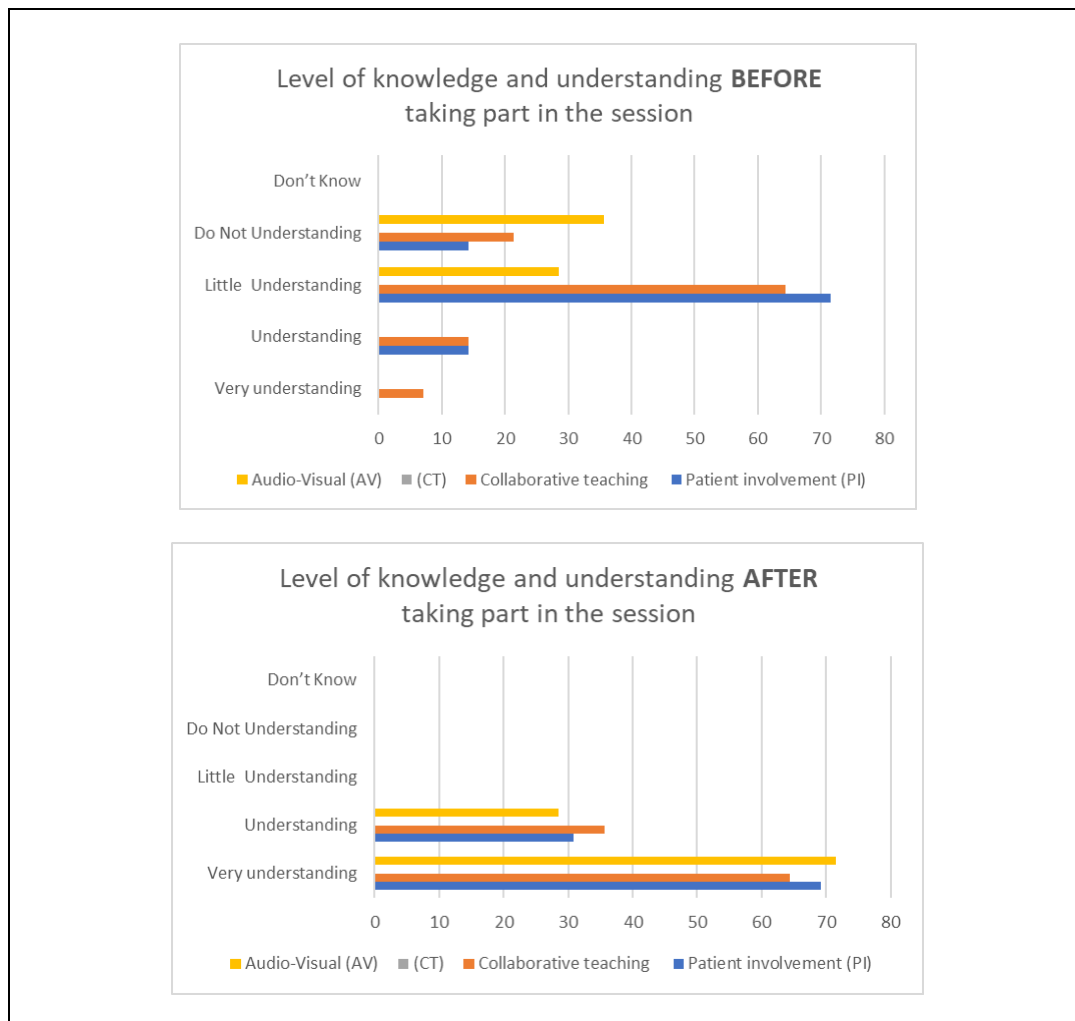


Figure 1. Level of knowledge and understanding before and after taking part in the session

Figure 1 showed the level of knowledge and understanding before and after taking part in the 3 methods of teaching aid. About 71.2% (n= 10) of students reported very understanding in AV, followed by PI (69.2%, n=8), and CT (64.3%, n= 9) after taking part in each method. This study suggested that active learning strategies used in combination with several strategies may increase the knowledge and understanding of certain topics in class lessons. Different approaches can encourage active learning during practice sessions, but combinations of these approaches are most likely to be successful in assisting students in meeting their academic objectives (Brenda, L.G. et. al. 2011).

CONTRIBUTION AND USEFULNESS

The PICTAV is designed for occupational therapy students to create a fun and engaging environment for learning as preparation before going to industrial training in the final year, semesters 5 and 6. Students can get experience dealing with patients, learn new techniques from an experienced occupational therapist and easily review topics and recall from the infographic and videos.

CONCLUSION

Patients' involvement session provides students with a real situation in the field work and makes them understand everything better. Demonstrations by experts raised student confidence and interest. Meanwhile, recorded practice sessions or lecture notes help to recall. These active learning strategies are some innovative ideas in post-normal times that can be used for other laboratory courses in occupational therapy programs to improve students' understanding.

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REFERENCES

- Amber B-W., Simon G. & Elizabeth S.A. (2022). A theoretical systematic review of patient involvement in health and social care education. *Advances in Health Sciences Education*. 28, 279-304.
- Bennett S., Rodger S., Fitzgerald C., Gibson L., Sylvia R., & Gibson E. (2017). Simulation in Occupational Therapy Curricula: A literature review. *Aust. Occupational Therapy Journal*. 64. 314-327.
- Brenda L.G., Michael, J.P, Beth-H R.T, Samantha K., Sarah MB., Kristi K., Tyan T. & Tina H.D. (2011). An active learning strategies primer for achieving ability-based educational outcomes. *American Journal of Pharmaceutical Education*. 75, (9). Article 186.
- Gentelli, Liesel. (2015). Using industry professionals in undergraduate teaching: Effects on student learning. *Journal of University Teaching & Learning Practice*. 12(4).
- Koski K.J., Simon R.L., & Dooley N.R. (2013). Valuable occupational therapy fieldwork educator behaviors. *Work*. 44. 307-315.



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