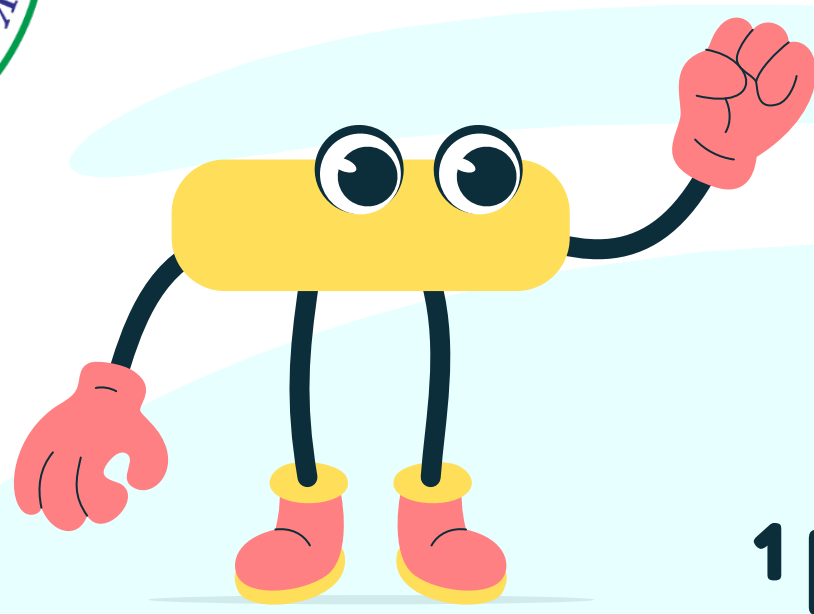




Innovative, Blended Teaching for Mobility Aid Learning

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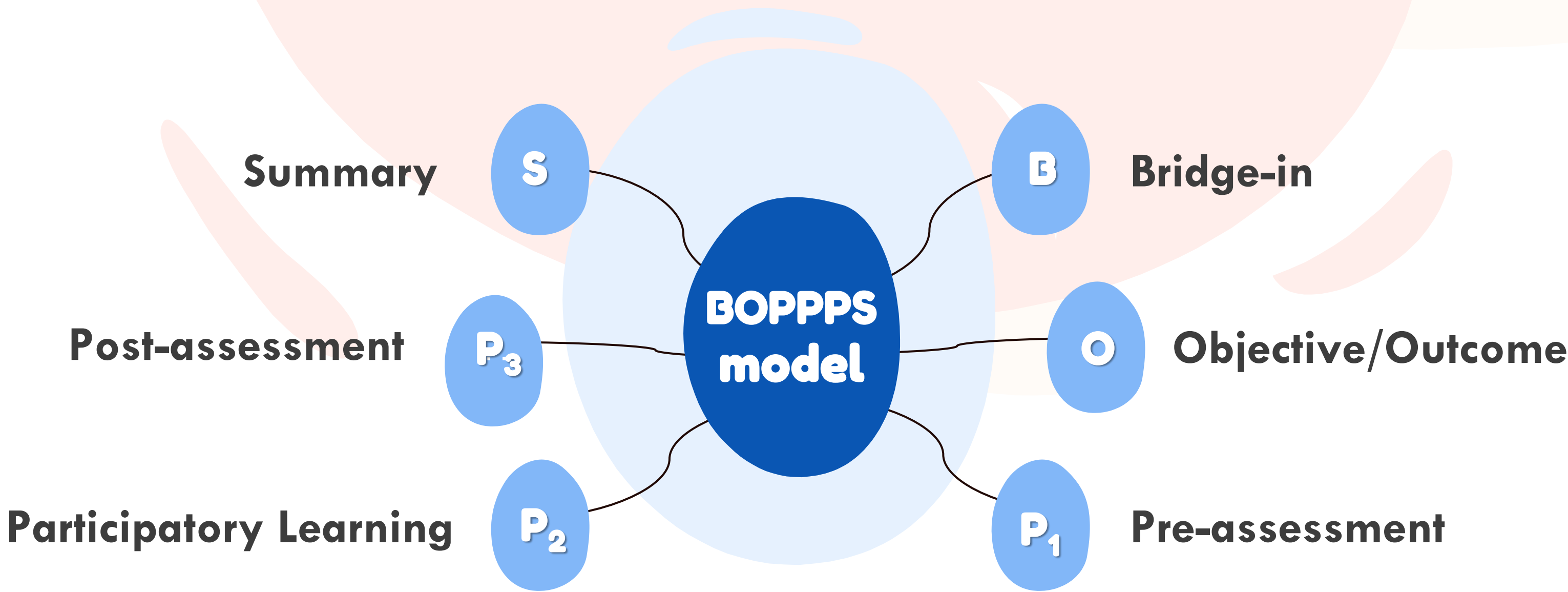
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Background

- Background In 2021, the incidence rate of falls among inpatients at the case hospital was 0.062% (higher than the threshold of < 0.06% and the peer value of 0.05%).
- **Blended teaching** refers to the combination of various teaching methods in course training. This lesson plan uses the BOPPPS teaching model as the main framework, supplemented by experiential teaching, multimedia audio-visual materials, game-based learning, and real-time feedback.
- A review of existing data revealed the following:
 - 1) Nearly 80% of nurses report having experience with assistive device operation, but **only 33.7% have received related course training** during their careers;
 - 2) Existing teaching materials related to assistive devices are relatively scattered. Most of the information needs to be obtained online, and there is a **lack of well-organized content** that succinctly introduces assistive devices.
 - 3) Observations show that most nurses have limited understanding of the names, purposes, and operation methods of assistive devices.

Method

From Feb. to Jun. 2022, a blended teaching method was introduced to the mobility aid training course for nurses. The curriculum was primarily structured around the “bridge-in, outcomes, pre-assessment, participatory learning, post-assessment, and summary” (BOPPPS) teaching module and supplemented by experiential learning, multimedia audiovisuals, game-based teaching, and instant feedback. The objective was to enhance learners’ cognition of mobility aids, confidence in equipment operation, and practical operational skills.



BOPPPS is a teaching model that combines effectiveness, efficiency, and efficacy. The lesson plan uses the BOPPPS teaching model to systematically organize and plan the instructional content, thereby enhancing learner outcomes.



Result

Nine nurses participated in the course, achieving an attendance rate of 100%. The nurses’ learning satisfaction increased by 15.6% ($p < .05$) (**figure 1**); confidence in operating mobility aids increased by 13.4% ($p < .05$) (**figure 2**); cognitive test scores increased from 58.89 to 74.44 ($p < .05$) (**figure 3**); and mobility aid operation accuracy increased from 80% to 96.7% ($p < .05$) (**figure 4**).

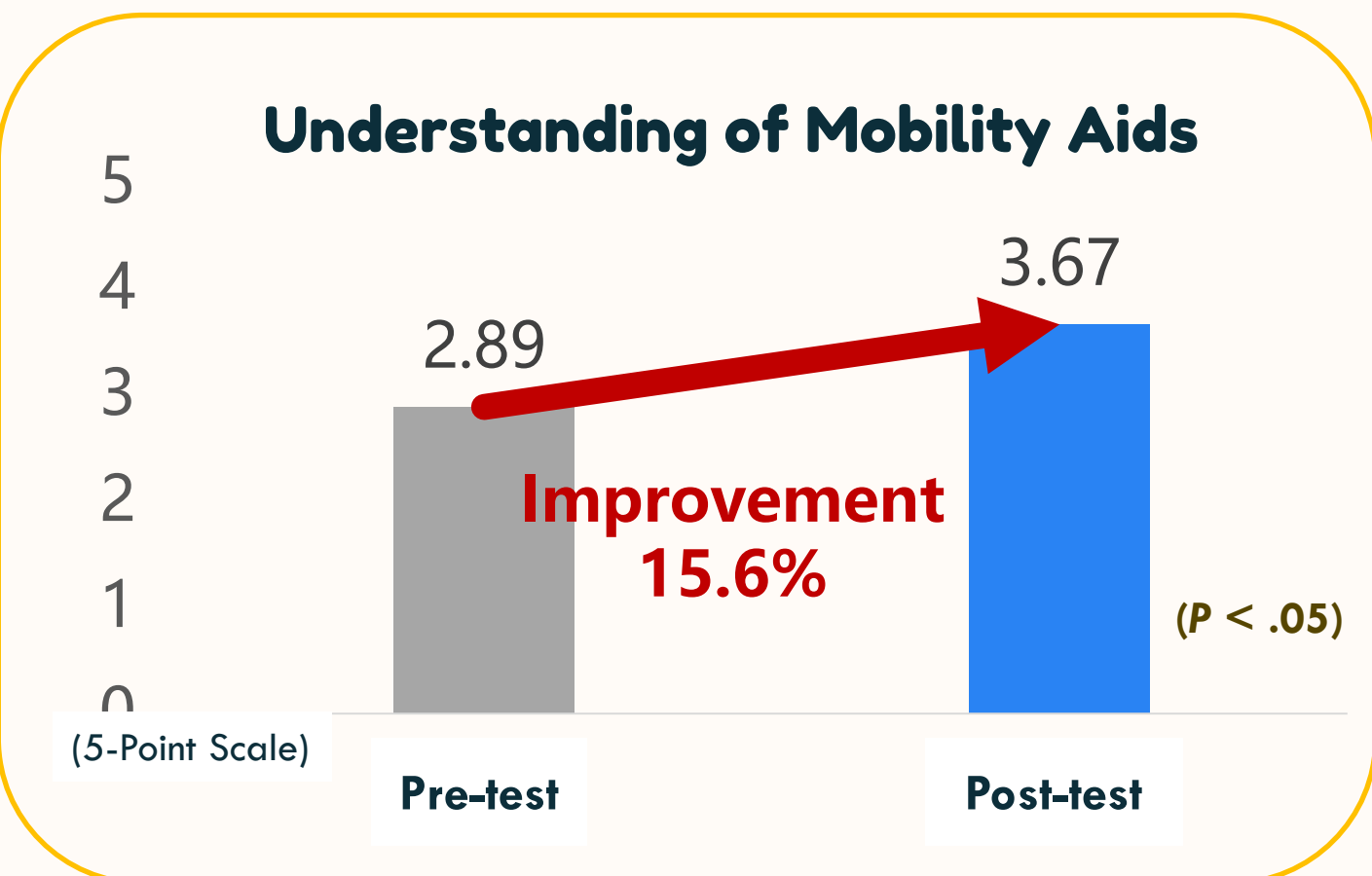


figure 1

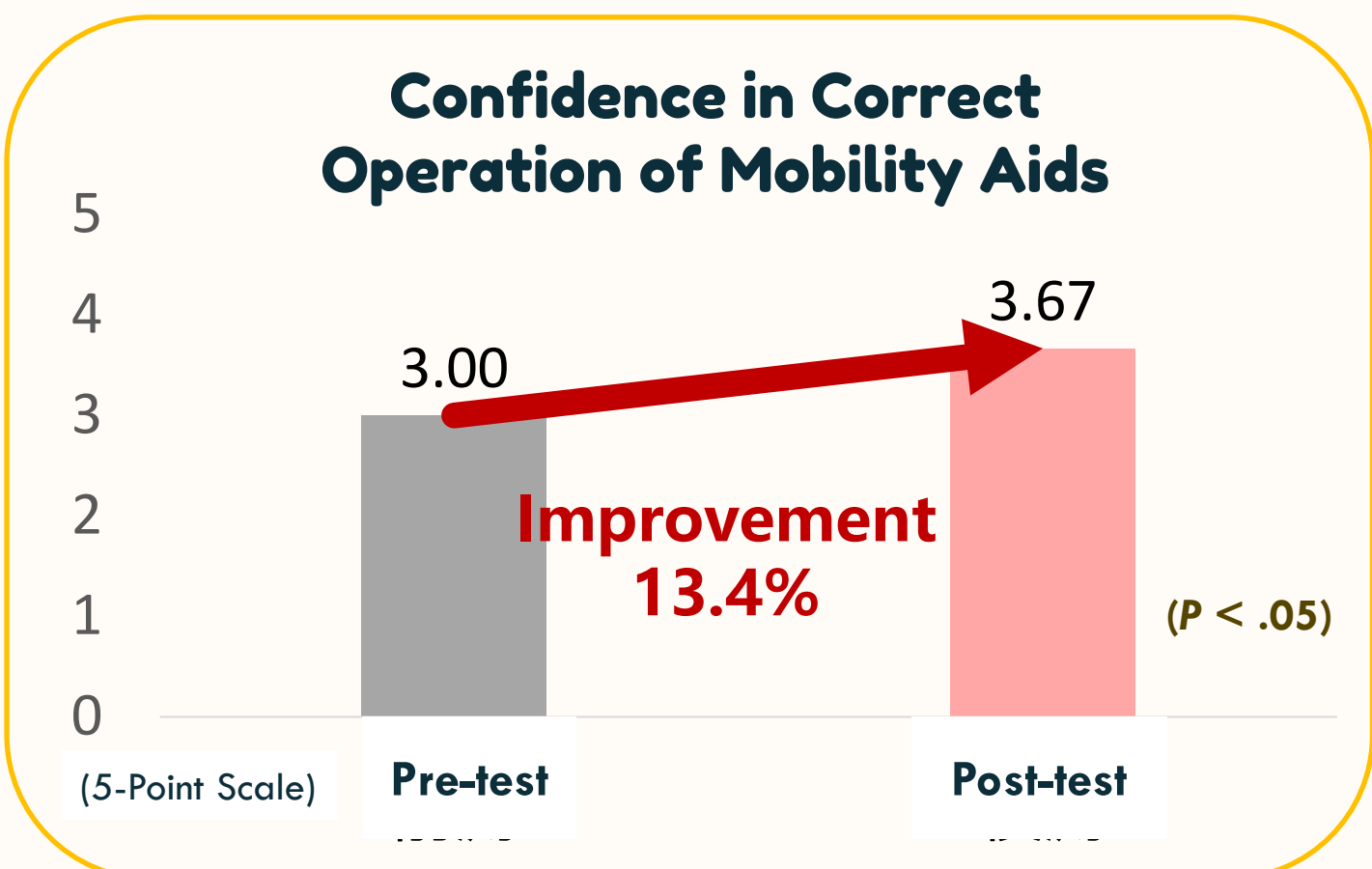


figure 2

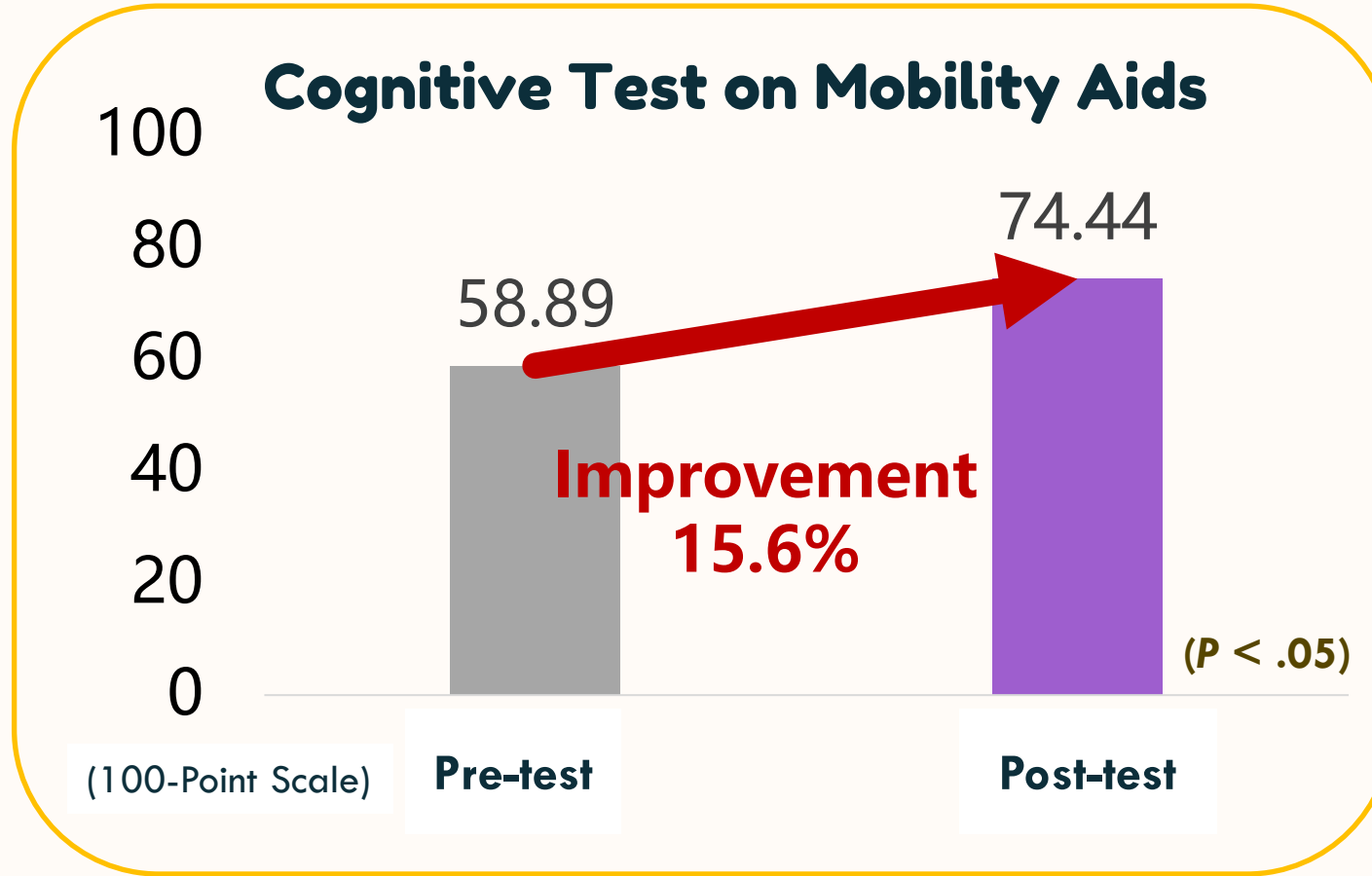


figure 3

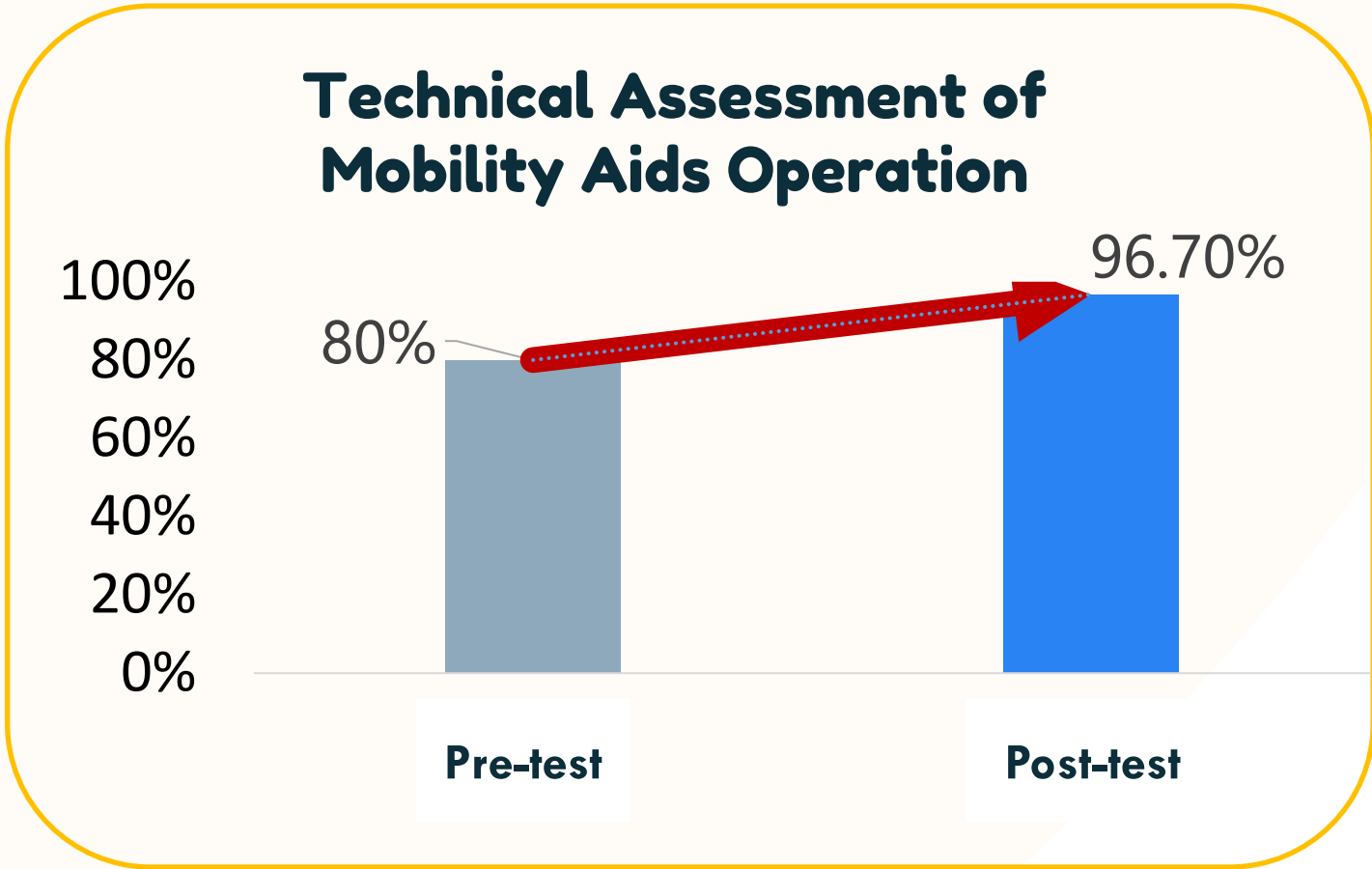


figure 4

Discussion

Although the internet can enhance learning results, some knowledge cannot be mastered solely through online resources. BOPPPS, which combines diverse teaching strategies, can improve learners’ learning effectiveness within limited time. Learning should be integrated with daily work so that learning does not stop in the classroom.

Advantages and Implementation Challenges

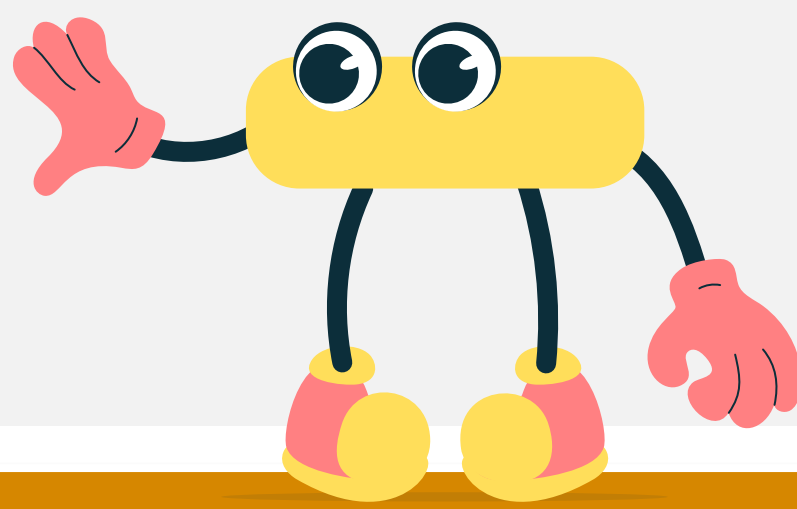


Advantages

- **Utilizing Easily Accessible Teaching Tools and Embracing the Concept of Unlimited Learning:** The goal is to ensure that learning extends beyond the classroom by using readily available teaching tools and integrating the idea of limitless learning.
- **The Teaching Plan as a Future Teaching Material Template:** This teaching plan is intended to serve as a template for future nursing training on assistive devices, thereby expanding its utility.

Diffucult

- **Limiting Class Size for Quality Assurance:** Due to the inclusion of practical operations by learners in the teaching plan, the number of participants will be restricted to maintain the quality of instruction. It is more appropriate to conduct the teaching activities on a unit-by-unit basis (such as by hospital ward).



Suggestion

Future Expansion of the Teaching Plan: Due to the ease of obtaining the necessary teaching tools and equipment, this teaching plan can be further promoted to other units in the future. The goal is to cultivate "assistive device experts" (teaching instructors), thereby fostering an environment for the development of "assistive device experts."

