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# Enhancing Learning Motivation Among Medical Radiology Interns through a Task-Oriented Quality Control Circle (QCC) Approach

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## Abstract

In 2021, radiology interns exhibited a notable lack of motivation during their internship. Therefore, a learning motivation scale was designed specifically for interns. In 2021, the average score of interns on the scale was a low 4.5/10. Thus, To enhance the learning motivation of interns, we devised a comprehensive set of strategies: implementing a reward system, facilitating peer coaching, introducing project-based learning, fostering cocreation, and promoting trait identification. Additionally, we held a meet-up for interns, established a teaching platform on Line, designed educational games, developed online courses, and adopted a flipped teaching approach. We empowered students to take the lead in course subjects, whereas clinical teachers provided immediate feedback and encouraged students to achieve their internship goals. The GPA of the learning motivation scale was increased from 4.5 to 9.2 in 2022, a 113.5% improvement. The students also provided positive feedback. By employing the principles of task-oriented improvement, we did away with outdated pedagogies in favor of innovative teaching methods to increase the learning motivation of interns.

**Keywords:** flipped teaching, game thinking, learning motivation

# 運用課題達成型品管圈提升醫事放射職類實習學生的學習動機

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## 摘要

於2021年放射實習學生在實習歷程中反映枯燥乏味，因此製作學習動機量表，發現學生的學習動機量表分數僅4.5分，進而影響學習成效。

為了提升實習學生的學習動機，我們根據文獻從「獎勵制度、同儕激勵、設計遊戲、共創課程、找到亮點」這五個構面去擬定策略：於實習歷程中舉辦集點活動、創建@Line教學平台、設計嚴肅遊戲、製作線上教學課程、導入翻轉教學，由學生主導課題，臨床教師則從旁給予回饋並鼓勵學生持續努力，以達到學習目標。

於2022年學習動機量表中，量表分數由4.5分提升至9.2分，目標達成率為113.5%，學生也都給予正向回饋。利用課題達成型之改善手法，可以不拘泥以往的作法，產出新的教學方式，確實提升實習學生的學習動機。

**關鍵詞：**翻轉教學、遊戲思維、學習動機