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## 不同範例展示及實作經驗 對國中生科技創造力的影響

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### 摘要

本研究旨在探討不同創意層級的範例展示及實作經驗對國中生科技創造力的影響。研究方法採用二因子實驗設計之準實驗研究，研究對象為 231 位臺北縣國中生活科技課程的學生。主要研究工具為產品創意量表，內容包括整體評分、主題設定、色彩變化、造型變化、材料種類、外加機能、組合方法共七項。研究結果顯示，實作經驗對學生作品的造型設計與外加機能設計，有顯著的創意效果；高級與中級創意成品範例對學生作品的整體評分、主題設定、色彩變化、造型變化及外加機能，都有正面的創意效果；但是在材料種類與組合方法方面，不同創意層級的範例展示及實作經驗會有交互影響。

關鍵字：生活科技課程、科技創造力、實作經驗、範例

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# Effects of Exemplars and Hands-on Experiences on Technological Creativity of Junior High School Students

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## Abstract

The purpose of this study was to discuss effects of exemplars and hands-on experiences on technological creativity of junior high school students. A quasi-experimental and two-factor research design was adapted to teaching experiment in Living-Technology curriculum. There were 231 junior high school students in Taipei county participating in this study. A product creativity scale, which included items of holistic view, subject matter, color design, styling design, material diversity, function design, and structure combination, was used to collect data. Results of this study indicated that significant creativity effects on styling design and function design caused by factors of hands-on experiences. Moreover, high creative and medium creative exemplars showed positive effects on holistic view, subject matter, color design, styling design, and function design. Nevertheless, there were interactive effects between hands-on experiences and creative exemplars on material diversity and structure combination.

**Keywords:** living-technology curriculum, technological creativity, hands-on experience, exemplar