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## 影響國小教師資訊融入教學創新行為相關 因素之量表發展與常模建立

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### 摘要

本研究植基於Amabile、Csikszentmihalyi、Davis、Goodhue與Thompson以及Dishaw與Strong等人之研究，嘗試編製三份適合國內國小教師資訊融入教學創新行為相關因素之量表及驗證其模式。這三份量表分別是「資訊融入教學創新氣氛（IC-III）量表」、「資訊融入教學專業素養（PL-III）量表」及「資訊融入教學創新動機（IM-III）量表」。預試以164位高雄市現職國小教師為樣本，進行試題項目分析、探索性因素分析、內部一致信度及相關係數等統計分析。正式研究以823位高雄市現職國小教師為樣本，進行三個理論模式之驗證性因素分析並建立高雄市常模。研究結果發現，所發展的影響國小教師資訊融入教學創新行為相關因素之三份量表其內部一致信度均可接受。三份量表分別與其分量表間的相關係數呈現中至高度相關。以探索性因素分析分別萃取三份量表之向度並建立其建構效度。以驗證性因素分析檢驗其概念結構，國小教師資訊融入教學創新氣氛、專業素養及創新動機之一階及二階驗證性因素分析模式皆有相當良好的適配情形，顯示三份量表的複核效度是可接受的。

**關鍵詞：** 資訊融入教學創新行為、資訊融入教學創新氣氛、資訊融入教學專業素養、  
資訊融入教學創新動機

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# **The Development of Scales for Determining Factor that Influence Elementary School Teachers' Innovative Behavior of Information Infused Instruction and the Construction of Theirs Scoring Norm**

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## **Abstract**

Based on Amabile, Csikszentmihalyi, Davis, Goodhue and Thompson, and Dishaw and Strong's studies, three scales for determining factors that influence elementary school teachers' innovative behavior of information infused instruction were developed. The three scales were: Scale of the innovative climate of information infused instruction (IC-III), Scale of the pedagogical literacy of information infused instruction (PL-III), and Scale of the innovative motivation of information infused instruction (IM-III). This study employed a quantitative confirmatory approach to develop the above scales. In other words, 164 participants were used to test the reliability and validity of the above scales during the pretest stage. The data was analyzed by these statistic approaches including item analysis, exploratory factor analysis, internal-consistent reliability, and correlation analysis to choose appropriate items for the scales during the pretest stage. Additionally,

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823 participants were used to evaluate the theoretical models of the above scales as well as to construct their scoring norms during the test stage. The data was analyzed by confirmatory factor analysis. The main instruments used were the IC-III, PL-III, and IM-III. The findings suggest that the developed scales have acceptable internal-consistent reliability, and the dimensions in each scales have a medium to high level of correlation. Moreover, by using exploratory factor analysis to extract their dimensions and to establish their construct validity of the three scales, respectively. By using first and second order confirmatory factor analysis to examine the three models, we found over half model fit indices indicated that the three models fitted the observed data well. This shows the three scales have clear factorial structures and acceptable cross-validity.

**Keywords:** the innovative behavior of information infused instruction, the innovative climate of information infused instruction, the pedagogical literacy of information infused instruction, the innovative motivation of information infused instruction.