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國中自然與生活科技領域教師教導學習不利學生的困難與支持系統
建構之研究---國中自然與生活科技領域教師發展全方位設計評量之
研究

Improving Science and Technology Teachers' Abilities in
Developing Universally Designed Assessment

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中文摘要

科學教育是全民的科學教育，而現今科學教育的潮流強調多元化的科學教育。面對多元化的學生，教師需要透過公正性的評量以了解學生的學習成果，這對學生參與在他們自己的學習亦具有高度的價值。全方位設計評量是基於公平和可及性的原則，而使廣泛的學習者均能參與使用的一種教育評量。本研究的目的即在於協助與支持教師發展全方位設計評量，以使學生能展現其學習成果。研究計畫全程三年，第一年旨在透過調查了解國中自然與生活科技教師與學生對發展全方位設計評量之需求與看法。第二年為依據調查結果編製國中自然與生活科技教師實施全方位設計評量之資源手冊以協助教師進行試題編製。第三年為應用第二年所編製手冊進行協助教師發展全方位設計評量之成效研究。期望透過本研究能增進教師在班級中設計評量多元化學生之能力，進而使學生透過評量而使其能力得以展現。

中文關鍵字：全方位設計；評量；自然與生活科技

英文摘要

Science education is for all citizens and its focus has shifted to how to satisfy the needs of diverse learners nowadays. Due to the diversity of learners, teachers must use equitable assessments in order to know how well a student learns. It would also help students truly engage in learning. Universally designed assessment (UDA) is an approach to educational measurement, which is based on the principles of equality and accessibility and enables all learners to be involved. The purpose of study is to assist and support teachers to develop UDA so that students could show their true learning progress. This is a 3-year project. In the first year, it will focus on investigating the perceptions and needs of science and technology teachers from junior high schools regarding developing UDA. In the second year, it will focus on developing a handbook to help teachers create test items qualified for UDA. In the final year, it will focus on evaluating the effectiveness of the UDA handbook on improving teachers' abilities in developing UDA. With the improvement of teachers' abilities in developing UDA, the learning potential of students might be revealed.

英文關鍵字：universal design； assessment； science and technology