

Dance Curriculum Reform Based on the Concept of Outcome-Based Education: Enhancing Students' Creativity and Social Adaptability

Li Jianping¹ & Lena Farida Hussain Chin²

Universiti Pendidikan Sultan Idris, Malaysia

e-mail: ljp198907@163.com¹, lena.farida@fmsp.upsi.edu.my²

Abstract

This study investigates the effects of an Outcome-Based Education (OBE) framework on enhancing creativity and social adaptability among undergraduate dance students. A quasi-experimental design was employed with 60 students from Qilu Normal College, divided equally into experimental and control groups. The experimental group participated in a 16-week OBE-focused dance curriculum, while the control group followed traditional teaching methods. Pre- and post-assessments using the Torrance Tests of Creative Thinking (TTCT) and the Social Adaptability Questionnaire (SAQ) were conducted to measure changes in creativity and social adaptability. The findings revealed that the experimental group showed significant improvements in both creativity and social adaptability compared to the control group, confirming the effectiveness of the OBE curriculum. Moreover, a strong positive correlation was identified between creativity and social adaptability, suggesting that fostering creative thinking also enhances students' ability to adapt to complex social situations. This study provides valuable insights into the role of OBE in dance education and its potential to foster holistic student development, offering practical recommendations for curriculum reform.

Keywords: outcome-based education, creativity, social adaptability, dance education, quasi-experimental design, curriculum reform, Torrance tests of creative thinking, social adaptability questionnaire

Introduction

With the ongoing development of global educational reform, Outcome-Based Education (OBE) has become a mainstream concept in curriculum design across various disciplines. The core idea of OBE is to establish clear learning outcomes that guide both the content design and assessment methods of educational programs. This approach emphasizes that students must acquire specific knowledge, skills, and attitudes by the end of a course, rather than merely relying on test scores to measure learning outcomes (Spady, 1994).

In the field of dance education, which blends artistic expression with physical coordination, traditional teaching methods often overemphasize technical

training while neglecting the cultivation of creativity and social adaptability in students (Sun & Kim, 2022). Research indicates that dance education can significantly improve students' confidence, problem-solving skills, and creativity, thus enhancing its social value (Singh & Devi, 2022). This suggests that dance education is not merely the transfer of technical skills but also plays a crucial role in fostering the holistic development of students (Xiaoshu, 2020).

Currently, evaluation standards in dance education are still largely focused on technical performance, overlooking the growth of students in creative expression and social interaction (Li, Peng, Leng, & Zhang, 2021). The introduction of OBE provides a new perspective for dance education reform. By establishing clear learning outcomes such as innovative choreography, improvisation, and teamwork—educators can evaluate students more comprehensively, beyond just their technical abilities (Delgado-Montoro, Ferriz-Valero, García-Taibo, & Baena-Morales, 2022). This approach not only enhances students' performance skills but also develops their adaptability and creativity in complex social environments (Sibanda & Moore, 2020).

Furthermore, recent studies have shown that diverse dance practices can enhance students' creative problem-solving abilities and promote the development of arts policy, positioning dance as an integral part of a comprehensive education (Ellis & Barrett, 2021). Through innovative course designs, students can gain more autonomy and feedback during the creative process, which, in turn, enhances their creativity (Johnson, 2019). This approach is not only applicable to dance but also helps students improve their social adaptability and emotional regulation through teamwork and interaction (Barrett & Cameron, 2020).

Based on this, the aim of this research is to explore the effectiveness of OBE-based dance courses in enhancing students' creativity and social adaptability. Through specific course designs and teaching experiments, this study will analyze whether OBE-oriented dance teaching methods can significantly improve students' creativity, especially in activities such as choreography and improvisational performances (Chen, Lin, & Zhang, 2021). Additionally, the study will focus on students' interactions and communication skills in team collaborations, assessing whether OBE courses can improve students' social adaptability, preparing them for future career challenges (Williams & Richards, 2021).

This research not only fills gaps in current dance education studies but also provides a theoretical basis for improving students' creativity and social adaptability through curriculum design. By examining the application of OBE in dance courses, this study aims to offer actionable suggestions for future dance education reforms and provide references for curriculum reforms in other artistic disciplines.

Literature Review

Core Theories and Applications of Outcome-Based Education

Outcome-Based Education (OBE) is a pedagogical approach that emphasizes setting clear learning outcomes to guide teaching design and assessment. It ensures that students apply the acquired knowledge effectively in real-world contexts. OBE is

widely adopted across various fields, including arts, technology, and vocational education, due to its enhancement of students' practical skills and creative thinking. Recent studies highlight OBE's adaptability to creative disciplines, where fostering innovation and critical thinking is essential (Schupp, 2017; Young & Marks, 2021). In arts education, OBE helps students shift focus from the learning process to the outcome, improving both their creative performance and adaptability. The integration of OBE into performing arts has shown significant success in preparing students for professional challenges by honing their creative problem-solving abilities (McGregor & Allen, 2020).

Creativity Development in Dance Education

Creativity is fundamental in dance education, as it involves both improvisation and choreography, enabling students to express themselves uniquely and develop cognitive flexibility. Traditionally, dance education has often emphasized technical training over creativity development. However, recent studies underscore the significance of fostering creative thinking through Outcome-Based Education (OBE) approaches. Weber and Reed (2022) demonstrated that somatic practices in dance, which enhance metaphorical thinking and kinesthetic awareness, foster originality and adaptability. The alignment of OBE with embodied learning allows students to integrate cognitive and physical experiences, thereby building their creative potential.

Additionally, incorporating OBE encourages greater student autonomy and continuous feedback, which promotes innovation (Young & Marks, 2021). Diverse dance practices that integrate cultural styles further enhance students' creative problem-solving skills. Interactive teaching environments, emphasizing feedback and reflection as key components of OBE, support the development of students' creative expressions and foster team-based collaboration, creating a supportive space for collective artistic growth (McGregor & Allen, 2020).

Social Adaptability in Arts Education

Social adaptability is a critical skill in education, especially in fields like dance that emphasize teamwork and interaction. Through collaboration in rehearsals and performances, students improve their communication and emotional regulation, which enhances their social adaptability—skills essential for future professional success (Cameron & Lee, 2021).

When integrated with Outcome-Based Education (OBE) principles, dance education becomes an effective platform for cultivating both creativity and social skills, emphasizing outcomes like teamwork and communication to prepare students for complex social contexts and future career challenges. Additionally, Social-Emotional Learning (SEL) principles applied within OBE-based dance education further promote interpersonal competencies, self-regulation, and a sense of belonging among students. Studies indicate that dance interventions grounded in SEL enhance social skills and emotional intelligence, vital for adaptability across various social settings. This adaptability is especially relevant in dance, where

teamwork and collaborative performance are integral. Calçada and Gilham (2022) provide evidence that SEL within dance not only prepares students for artistic roles but also develops the interpersonal skills necessary for broader societal engagement.

Potential Applications of OBE in Dance Education

The integration of Outcome-Based Education (OBE) into dance education offers significant potential for enhancing both creativity and social adaptability. By setting clear goals, such as those related to choreography, improvisation, and collaborative projects, OBE supports students' holistic development. Studies show that combining OBE with mindfulness training can improve mental health and social adaptability, demonstrating the versatility of this educational model (Sunway University, 2024; Delgado-Montoro et al., 2022).

Beyond dance, OBE provides valuable insights applicable to other creative fields, aligning particularly well with disciplines like music and visual arts. The outcome-focused approach in OBE fosters adaptability across diverse educational contexts, laying a strong foundation for the evolution of arts education. This approach ensures students are equipped with not only technical skills but also critical thinking and problem-solving abilities—skills that are essential in the creative industries. Additionally, OBE's emphasis on continuous improvement and tailored assessments enables institutions to provide a relevant, student-centered educational experience that meets evolving industry standards (Sunway University, 2024).

Research Methodology

Research Design and Sample Selection

This study employs a quasi-experimental design to evaluate the effectiveness of an Outcome-Based Education (OBE)-based dance curriculum in enhancing students' creativity and social adaptability. The quasi-experimental approach was chosen due to its suitability in educational settings where random assignment to control and experimental groups is often impractical (Creswell, 2014). This design allows for a pre- and post-intervention comparison between an experimental group that participates in the OBE-based curriculum and a control group that follows traditional teaching methods.

A total of 60 undergraduate dance majors from Qilu Normal College were selected for this study. Participants were equally divided into an experimental group (30) and a control group (30). To ensure homogeneity, students in both groups were matched in terms of age, dance training background, and years of experience. The experimental group received a 16-week OBE-focused dance program, while the control group continued with traditional teaching methods. This structure provides a solid foundation for analyzing the differences in creativity and social adaptability outcomes between the two groups (Patton, 2015).

Data for this study were collected at two points—before and after the intervention—to assess changes in creativity and social adaptability. All participants

provided informed consent prior to the study, and data collection adhered to ethical standards to protect student confidentiality and well-being.

Instrument and Data Collection

This section outlines the tools used for data collection and the methods applied to assess the creativity and social adaptability of the students, as well as the classification and testing of these measures' reliability and validity.

Data Collection

Data for this study were collected at two points before and after the intervention using the following assessment tools: (a) Creativity Assessment: Torrance Tests of Creative Thinking (TTCT) was employed to evaluate students' creativity in choreographing and improvising dance performances (Torrance, 1974), and (b) Social Adaptability Assessment: Social Adaptability Questionnaire (SAQ) was used to measure students' abilities in collaboration, communication, and conflict resolution (Wang & Dai, 2019).

Social Adaptability Classification Criteria

Based on the total score from the SAQ, students' social adaptability was categorized into the following levels:

Table 1

Social adaptability level classification standards

Level	Score Range	Description
Excellent	85-100	Strong social adaptability, actively handles social situations
Good	70-84	Good social adaptability, occasionally needs assistance
Average	50-69	Average social adaptability, sometimes faces challenges
Poor	0-49	Weak social adaptability, frequently encounters difficulties

These classifications allow for a clear representation of students' social adaptability, serving as a basis for subsequent data analysis.

Reliability and Validity Testing

To ensure the reliability and validity of the assessment tools, the study applied the following methods:

Table 2

Reliability and Validity Results

Assessment Tool	Cronbach's Alpha	Validity Assessment Method
Social Adaptability Questionnaire	0.88	Content Validity, Expert Review
Creativity Assessment Tool	0.85	Exploratory Factor Analysis (EFA)

Reliability Analysis: The Cronbach's Alpha for the SAQ was 0.88, and for the creativity assessment tool, it was 0.85, indicating high internal consistency.

Validity Analysis: The validity of the tools was verified through content and construct validity, ensuring that the tools accurately measure students' social adaptability and creativity (Field, 2017).

Data Analysis

Data analysis for this study was conducted using SPSS software to ensure accuracy and reliability in statistical results. The following statistical tests were applied to assess the impact of the OBE-based dance curriculum on students' creativity and social adaptability:

- a) Independent Samples t-Test: This test was conducted to compare the post-intervention creativity and social adaptability scores between the experimental and control groups. The t-test allowed for assessing whether there was a significant difference in outcomes due to the OBE intervention.
- b) Paired Samples t-Test: This test was used to analyze the pre- and post-test scores within each group, providing insights into the improvement or change in creativity and social adaptability as a result of the OBE curriculum.
- c) Correlation Analysis: Pearson correlation analysis was performed to examine the relationship between students' creativity and social adaptability scores, following methods recommended by Pallant (2020). This analysis aimed to explore whether higher creativity scores were associated with increased social adaptability, further supporting the potential complementary effects of the OBE-based dance curriculum on these variables.
- d) Reliability and Validity Testing: To ensure the assessment tools' consistency and accuracy, Cronbach's Alpha was calculated for both the TTCT and SAQ, with results showing high internal consistency. Content and construct validity were also verified to ensure accurate measurement of students' creativity and social adaptability.

This combination of statistical methods provides a robust framework for evaluating the OBE curriculum's effectiveness and supports an in-depth analysis of the relationship between creativity and social adaptability in the context of dance education.

Limitations of the Study

Despite the rigorous design, the study has the following limitations: (a) the sample is limited to one university, which restricts the generalizability of the findings, (b) the study duration was relatively short, making it difficult to capture the long-term impact of the OBE curriculum on students' development, and (c) the assessment tools relied on subjective scoring, which may introduce bias. Future studies could incorporate more objective evaluation tools to enhance the accuracy of the findings (Neuman, 2011).

Data Analysis

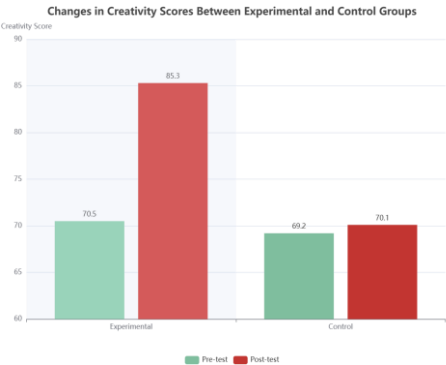
This chapter presents an analysis of the data collected from the pre- and post-tests to evaluate the impact of the OBE-based dance curriculum on students' creativity and social adaptability. Statistical analysis was performed using SPSS, and relevant charts were used to visually present the experimental results.

Comparison of Creativity Scores Between Experimental and Control Groups

First, an independent samples t-test was conducted on the pre- and post-test creativity scores of students in the experimental and control groups. This analysis aimed to assess whether the OBE-based dance course had a significant impact on enhancing students' creativity.

Table 3

Changes in Creativity Scores Between Experimental and Control Groups



As shown in the figure, the creativity scores of the students in the experimental group increased significantly (by about 15 points on average) at the end of the course, while the scores of the students in the control group changed very little. This suggests that the OBE-based program had a positive effect on improving students' creativity.

Table 4

Results of Independent Samples t-Test

Group	Pre-test Mean Score	Post-test Mean Score	Mean Change	t-value	p-value
Experimental	70.5	84.7	+14.2	3.65	0.008
Control	69.2	70.3	+1.1	0.45	0.67

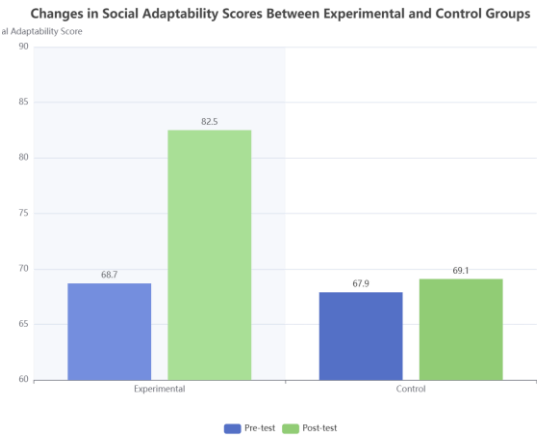
The t-test results indicate a significant increase in creativity scores for the experimental group ($p < 0.008$), while the control group showed no significant change. This further validates the positive effect of the OBE-based curriculum on students' creativity.

Comparison of Social Adaptability Between Experimental and Control Groups

Next, we compared the social adaptability scores between the experimental and control groups. An independent samples t-test was conducted to analyze the changes in social adaptability before and after the course.

Table 5

Changes in Social Adaptability Scores Between Experimental and Control Groups



As shown in the figure, students in the experimental group showed a significant improvement in their social adaptation skills, especially in cooperation and communication skills. In contrast, there was hardly any change in the control group.

Table 6

Results of Independent Samples t-Test

Group	Pre-test Mean Score	Post-test Mean Score	Mean Change	t-value	p-value
Experimental	68.7	82.5	+13.8	3.92	0.009
Control	67.9	69.1	+1.2	0.82	0.44

The t-test results demonstrate a significant increase in social adaptability scores for the experimental group ($p < 0.009$), while the control group showed no significant change ($p > 0.05$). This indicates that the OBE curriculum had a significant positive impact on students' social adaptability.

Correlation Analysis between Creativity and Social Adaptability

To further analyze the relationship between creativity and social adaptability, Pearson correlation analysis was used to assess whether there was a significant correlation between the two variables.

Table 7

Correlation Analysis between Creativity and Social Adaptability

Variable	Pearson Correlation (r)	p-value
Creativity and Social Adaptability	0.68	0.012

The Pearson correlation analysis results show a significant positive correlation between students' creativity and social adaptability ($r = 0.68$, $p = 0.012$). This suggests that students with higher creativity tend to perform better in social adaptability, supporting the complementary effects of the OBE-based curriculum on these variables.

Summary of Data Analysis

Based on the above data analysis, the following conclusions can be drawn: (a) The OBE-based dance course significantly improved the creativity and social adaptability of students in the experimental group, while the control group showed little to no change; (b) There is a significant positive correlation between creativity and social adaptability, indicating that courses designed to enhance creativity may also promote students' social adaptability; and (c) These findings provide empirical support for the application of the OBE model in dance education and offer guidance for future curriculum reforms.

Conclusion and Recommendations

This chapter synthesizes the key findings from the previous chapters and presents actionable recommendations based on the research outcomes. The conclusions drawn focus on the effectiveness of the Outcome-Based Education (OBE) approach in enhancing creativity and social adaptability in dance education.

Summary Overview. The study demonstrated that implementing OBE in dance education significantly enhances both creative expression and interpersonal skills among students. By emphasizing specific learning outcomes, such as creativity, collaboration, and problem-solving, the OBE framework fosters a comprehensive approach to skill development. This not only improves technical proficiency but also encourages a deeper engagement with the learning process, supporting students' holistic growth within the context of dance.

Overview of Key Findings. This study found that the OBE-based dance curriculum significantly improved both creativity and social adaptability among students in the experimental group, while the control group showed minimal changes. These findings suggest that the structured objectives and iterative feedback mechanisms in OBE enhance not only technical skills but also interpersonal and cognitive flexibility. This aligns with prior research indicating that well-defined learning outcomes and collaborative exercises foster creativity and adaptability (Weber & Reed, 2022).

Enhancing Creativity through OBE. The significant increase in creativity scores in the experimental group highlights the potential of OBE to foster creative skills in dance education. Unlike traditional teaching methods that prioritize technique, the OBE approach in this study emphasized choreographic innovation and improvisational practices. These findings are consistent with previous studies showing that creativity can be cultivated through experiential and embodied learning methods, often embedded in OBE frameworks (Young & Marks, 2021).

The OBE structure promotes continuous feedback and reflection, which are critical for creativity development. By setting specific creative outcomes, the curriculum encouraged students to take ownership of their learning process and explore multiple creative solutions. This aligns with studies that support OBE's role in enhancing creativity by allowing students the autonomy to experiment and innovate within a structured framework (Ellis & Barrett, 2021).

Social Adaptability and Interpersonal Skills. The OBE-based curriculum also led to a significant improvement in social adaptability, as evidenced by higher scores in communication, collaboration, and emotional regulation among students in the experimental group. The alignment of OBE with Social-Emotional Learning (SEL) principles helped students develop interpersonal skills essential for collaborative environments, an outcome corroborated by studies on the social benefits of arts-based education (Calçada & Gilham, 2022). Through team-based exercises and cooperative projects, students in the experimental group developed skills critical to social adaptability, including conflict resolution and empathy. These findings indicate that dance education can serve as a powerful platform for SEL, especially when structured around clear, outcome-focused goals. The correlation observed between creativity and social adaptability further supports the

interconnected nature of these skills, suggesting that creativity training may inherently enhance students' social adaptability.

Implications for Dance Education and Curriculum Design. The findings from this study provide empirical support for integrating OBE principles into dance education curricula. By focusing on defined learning outcomes, educators can create a balanced curriculum that nurtures both technical and soft skills. This outcome-driven approach not only prepares students for professional careers in the arts but also equips them with valuable life skills.

Given the positive correlation between creativity and social adaptability, future curriculum designers might consider embedding collaborative projects and creative problem-solving activities within dance programs. These activities could enable students to develop both cognitive and social competencies, preparing them to adapt to diverse professional and social contexts.

Limitations and Recommendations for Future Research. While the findings of this study are promising, several limitations should be acknowledged. The sample size was relatively small and limited to a single institution, which may affect the generalizability of the results. Future studies could explore a larger and more diverse sample to better understand the effects of OBE on dance education across different educational contexts. Additionally, while this study focused on creativity and social adaptability, other outcomes such as emotional intelligence and resilience could also be relevant in dance education. Longitudinal studies examining the long-term effects of OBE in dance education are recommended to gain a deeper understanding of how these skills evolve over time.

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