The Practical Exploration and Effectiveness Study of Internet-Based Live Training in Public Relations Education

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Abstract. This study builds an "Internet + Practical Training Live-streaming" teaching model using mobile internet technology, with the "Crisis Event Press Conference" module in Public Relations as a case study. Through action research, it explores how live-streaming enhances classroom interactivity, situational authenticity, and teaching effectiveness. The study proposes reforms in teaching philosophy, content integration, interactive methods, and evaluation. Findings show improved student engagement and ideological-political internalization, offering a tech-integrated paradigm for Public Relations education within the New Liberal Arts framework.

Keywords: Live Training Teaching; Teaching Effectiveness; Public Relations; Crisis Communication; Simulated Press Conference

1 Introduction

Digital technologies have opened new possibilities for educational reform. While live-streaming has proven effective in fields like medical education, its use in humanities disciplines such as Public Relations remains limited. Based on the theory of teaching presence[1], this study introduces an "Internet + Live-streaming + Ideological and Political Education" model, exploring how to: (1) create realistic training environments, (2) integrate ideological content into professional teaching, and (3) enhance student competencies and values.

Through situational live-streaming and flipped classrooms, the model increases interaction, enriches content, and builds skills like national image awareness and crisis management. Using mixed methods, results show this approach connects multiple disciplines, promotes strategic thinking, and strengthens alignment with core socialist values, offering empirical support for Public Relations education reform.

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2 Research Method

Traditional teaching often overemphasizes theory, while Public Relations requires practical skills in complex social contexts. To address this, real cases are integrated into teaching to create immersive, subtle educational effects[6]. Based on the "learning communities" theory[8], which values real-time, interactive knowledge co-construction, this livestream teaching model emphasizes presence, interactivity, and instant feedback[2].

The study applies the "Three-step, four-dimensional" model[4], using a closed-loop process—Preparation, Implementation, Reflection, Evaluation[7]—to build a multi-level dialogue network. This supports real-time teacher-student interaction and offers a comprehensive approach to situational livestream teaching.

2.1 Model Implementation Process

This study proposes a "Three-Step, Four-Dimension" livestream teaching model that integrates pre-class, in-class, and post-class instructional phases with four core dimensions—presence[5], interactivity, engagement, and immediacy. Grounded in learning community theory and enhanced by 5G-enabled connectivity[4], the model employs task-driven simulations such as press conference scenarios: student teams conduct crisis communication role-plays[6], apply "5S" PR principles in spokesperson practices, and cultivate risk awareness, strategic thinking, and professional competencies through knowledge application. Innovatively embedding ideological education into vocational simulations, the framework adopts a "practice-oriented + value-internalization" approach to integrate socio-political themes into skill training[3]. This fosters students' professional ethics, social responsibility, and holistic perspectives on human-society-nature coordination, achieving synergistic integration of technical proficiency development and ideological value cultivation.

3 Qualitative Research Analysis

This study adopts an informal interview approach, collecting behavioral data through multi-source observation. Representative subjects are selected for interviews, and triangulation is employed to cross-verify the data, enhancing the typicality of the interviewees and ensuring the validity and depth of the research. Subsequently, three levels of coding are applied to the informal interview data to generate theory from the qualitative data.

3.1 Research Subjects and Data Collection

The study involved 128 Public Relations students across two classes (68 and 60 students, respectively), all with foundational training in sociology, social psychology, and management. A novel multi-source observation method was used to assess learning engagement, categorized into five levels ranging from disengagement to active, innovative participation. Behavioral data were triangulated to ensure reliability and validity.

3.2 Assessment of Learning Engagement

A behavior-based quantitative model was established to evaluate learning engagement, breaking down learning involvement into five dimensions—ranging from basic attention allocation to higher-level innovative interaction. By observing the engagement behaviors of participants, the study generated data to support the selection of interviewees for subsequent qualitative analysis.

3.2.1 Data Collection Process.

Five observers independently assessed each student five times. To ensure reliability, the three most complete records (≥90% completeness) per student were averaged to quantify engagement. A check-in and positional coding system (e.g., Code A1: Zhang San) was used to anonymously match behavioral data to students, accounting for the spatial dynamics of the simulated press conference setting.

3.2.2 Course Evaluation Strategy.

A dual-track evaluation strategy was used. First, alongside course satisfaction surveys, 18 students (10% sample with varied engagement levels based on observer-recorded "Learning Engagement Scale") were selected for in-depth interviews. Transcripts were coded and organized into mind maps for analysis. Second, brainstorming sessions with all observers employed dialogical thinking to synthesize observational insights. All observers were briefed beforehand to ensure procedural consistency and research accuracy.

3.3 Interview Process

Interviews explored students' simulation experiences, learning gains, and suggestions for the livestream practicum through group and one-on-one sessions. Using a flexible interview guide, 42 recordings were collected, transcribed, and analyzed via coding and mind mapping.

Open coding yielded 163 and 101 keywords from group and individual interviews, respectively. These were refined through axial coding into nine thematic categories, including teaching, skills, teamwork, and innovation. Selective coding further synthesized the data into four core dimensions: teaching practices, team development, course experience, and improvement strategies.

3.4 Data Analysis

3.4.1 Coding Analysis.

Open Coding: An initial coding phase analyzed 42 interview transcripts to extract meaningful concepts, adopting an open approach to keyword identification. Statistical analysis revealed 163 keywords from group interviews and 101 from observer interviews.

Axial Coding: Results were consolidated and categorized into nine themes (eg:teaching-related, practice-related, skill development, teamwork, perceived gains) while preserving interviewees' original terminology.

Selective Coding: Theoretical integration identified four core categories—teaching practice activities, team capability development, course experience and perceptions, and enhancement strategies—by synthesizing relationships across prior coding stages.

3.4.2 Word Frequency Analysis.

Nvivo12 was used to analyze 42 interview transcripts, generating a word cloud . The most frequent words included: team, experience, learning, competence, practice, teaching, gains, and innovation. This suggests that the Internet live-streaming model enhances students' innovation awareness, professional literacy, and interest in the live-streaming industry, while improving classroom efficiency. The practicum method lays the foundation for cultivating interdisciplinary talent.

3.5 Integrated Analysis of Pedagogical Impacts

According to the qualitative data, both students and observers provided rich feedback on various aspects of the course and activities. Their responses covered multiple dimensions, including teaching, practice, skill development, teamwork, perceived gains, innovation, performance, and suggestions for improvement.

Building on this multifaceted input,the study reveals dual outcomes of the livestream teaching model. Positively, skill development (30 mentions) and teamwork efficiency (20 mentions) emerged as dominant themes, with immersive activities fostering competency enhancement in crisis response, organizational coordination, and communication through knowledge-practice integration. Collaborative role-play aligned with "knowing through action" principles, strengthening collective problem-solving. Conversely, structural challenges were identified: (1) expression-participation gaps, marked by mechanical communication and "cognitive disengagement", undermining legitimate peripheral participation and knowledge application; (2) simulation-design discrepancies, where rigid roles, scripted tasks, and inadequate planning reduced authenticity, stifling creativity and real-world relevance. These issues highlight tensions between innovative pedagogical aims (eg:constructivist-aligned multimodal engagement) and implementation barriers, necessitating iterative refinements to balance experiential learning efficacy with motivational scaffolding and design realism in complex PR training contexts.

3.6 Qualitative Research Conclusion

Qualitative analysis reveals strengths in skill development, practical experience, teamwork, and innovation, but also issues with student performance and activity organization. Improvement suggestions focus on individual skill development, optimizing processes, enhancing scene design, and upgrading equipment. Future courses can optimize

content and format to boost engagement and outcomes, with ongoing attention to improvements for continuous quality enhancement.

4 Quantitative Analysis

In the course evaluation, we used a comprehensive approach combining pre-test and post-test data, analyzed with SPSS. A Paired Samples T-Test was employed to compare the performance differences before and after the course, with 128 students taking both exams. The test aimed to assess statistically significant differences between the two samples (see Table 1 for results).

Table 1. Paired Samples T-Test Results of Pretest and Posttest Scores

variate	cases	M±SD	t	p
pretest score	128	67.77±12.229	-7.657	<.001
posttest score	128	74.10±10.451		

According to Table 1, the mean score of the first test was 67.77 (SD = 12.229), while the second test had a mean of 74.10 (SD = 10.451), indicating an improvement in performance. The second test had slightly less dispersion.

The hypotheses for the paired samples t-test were:

Null hypothesis (H_0): $\mu d = 0$ (no significant difference).

Alternative hypothesis (H_1): $\mu d \neq 0$ (significant difference).

The t-value was -7.657, and the p-value was less than .001, leading to the rejection of the null hypothesis. This confirms a significant difference, with second test scores being higher, supporting the effectiveness of the live-streaming teaching approach in enhancing teaching quality.

5 Conclusion

This study innovatively incorporates simulated news conferences via new media into public relations education, effectively optimizing traditional instructional models. Findings reveal significant improvements in students' competencies in crisis management and information dissemination, alongside the reinforcement of career aspirations and social responsibility. The study not only addresses a gap in empirical research on new media applications in public relations education but also provides a theoretical foundation and practical guidance for future curriculum development and pedagogical innovation.

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