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The Cymc Multimedia Progression Model: A Video-supported Framework for Youth Performance Learning

Peiwen Su, California Youth Music Competition (CYMC), USA

ABSTRACT

This study presents the CYMC Multimedia Progression Model (MPM), a technology-enhanced framework developed across the California Youth Music Competition's regional and international tiers. Because CYMC administers all levels of competition, it implements unified, high-standard multimedia recording that supports both reflective learning and advancement. Drawing on more than 200 professionally captured performance videos from young musicians, the study examines how standardized multimedia documentation functions as a digital portfolio for international selection, enabling students to progress from local performances to CYMC's global stages. Findings indicate that this multimedia-supported cycle enhances self-efficacy, expressive behavior, and goal-directed motivation. The upward pathway—where each regional performance carries the potential for international exposure—creates a strong motivational loop and strengthens learners' artistic identity. The model offers a scalable technology-driven approach for developing confidence, resilience, and engagement in youth performance education.

Keywords

multimedia-supported learning, performance pedagogy, digital portfolio, international progression, youth music education.

Hierarchical Worker Evaluation Based on Requester's Subjective Criteria in Open-Ended Crowd sourcing Tasks

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ABSTRACT

Crowd sourcing assumes a transient relationship between task requesters and workers, which makes it hard for workers to improve their skills. In addition, with the emergence of AI, crowd work is shifting from simple tasks to more complex and open-ended ones, highlighting the importance of training workers to handle such tasks. Although various methods have been proposed to train and evaluate workers, a method to evaluate them in open-ended tasks among workers has not yet been established. In this study, we propose applying a hierarchical inter-worker evaluation structure based on workers' skill levels to the evaluation of open-ended tasks, and examine how closely it aligns with the requesters' subjective evaluation criteria. The experimental results showed that workers' evaluations were highly aligned with the requesters' subjective evaluation criteria in terms of relative worker rankings. However, the alignment was weaker for absolute scores, due to workers' tendency toward generous scoring. These findings are expected to be utilized in future research to enhance worker engagement and retention rates.

Keywords

Crowdsourcing, Worker training, Worker evaluation, Amazon Mechanical Turk

Navigating the Digital Divide: Cognitive Load and Emotional Well-Being in Adolescents aged (10-17) with Dyslexia

Kirstie Muchugia, Kisii University, Kenya

ABSTRACT

As digital environments become the primary domain for adolescent socialization and education, the implications of user interface (UI) design on neurodiverse populations remain critically under-explored. This review article investigates the cognitive and emotional impact of digital

ecosystems on adolescents aged 10–17 diagnosed with dyslexia a developmental window crucial for the formation of self-esteem and social identity. We will analyze the cognitive perception of digital spaces, arguing that standard design patterns such as infinite scrolling, high-density text, and non-linear navigation exacerbate cognitive load. Evidence suggests that these features overwhelm the working memory deficits associated with dyslexia, leading to rapid cognitive fatigue compared to neurotypical peers. Furthermore we will examine the emotional consequences of these barriers. The review synthesizes literature linking digital reading struggles to heightened anxiety, "lurking" behaviors, and increased susceptibility to cyberbullying in textbased environments. However, the analysis also identifies a paradox: while text-heavy platforms generate stress, audio-visual and gamified environments often serve as "safe harbors" that empower dyslexic youth. The article concludes that current digital mental health frameworks overlook the role of interface design. We argue that to protect the mental well-being of adolescents with dyslexia, the industry must move beyond standard accessibility compliance toward active, neuro-inclusive design.

Keywords
Dyslexia, Adolescents, Digital Mental Health, Cognitive Load, User Interface(UI), Neurodiversity

Professional Competencies In School And Career Guidance Counseling: A Theoretical And Empirical Perspective

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ABSTRACT
This article examines the multidimensional nature of professional competence in school and career guidance counseling. Grounded in qualitative and interpretive research, it explores how counselors enact and interrelate communicative, relational, informational, reflexive, and ethical competencies in practice. Drawing on a corpus of anonymized counseling sessions, the study integrates theories of situated action, reflective practice, and dialogical ethics to construct a comprehensive understanding of professionalization in guidance work. Findings indicate that competence functions not as a fixed attribute or measurable skill but as an ongoing, context-dependent process of reasoning, reflection, and ethical judgment. The discussion highlights the implications of this conceptualization for counselor training, continuing professional development, and policy frameworks in the field of educational and career guidance.

Keywords
Professional competence; guidance counseling; reflective practice; professionalization; dialogical ethics; qualitative research.

Adaptive Natural Language Processing-Based Test Automation Framework: Enabling Self-Healing And Context-Aware Test Cases

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ABSTRACT
This study presents the CYMC Multimedia Progression Model (MPM), a technology-enhanced framework developed across the California Youth Music Competition's regional and international tiers. Because CYMC administers all levels of competition, it implements unified, high-standard multimedia recording that supports both reflective learning and advancement. Drawing on more than 200 professionally captured performance videos from young musicians, the study examines how standardized multimedia documentation functions as a digital portfolio for international selection, enabling students to progress from local performances to CYMC's global stages. Findings indicate that this multimedia-supported cycle enhances self-efficacy, expressive behavior, and goal-directed motivation. The upward pathway—where each regional performance carries the potential for international exposure—creates a strong motivational loop and

strengthens learners' artistic identity. The model offers a scalable technology-driven approach for developing confidence, resilience, and engagement in youth performance education.

Flood Prediction Using Machine Learning: A Review

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ABSTRACT
Floods are destructive and frequent natural disasters. Because of this, machine learning models have been developed in an attempt to predict flooding. Furthermore, this project aims to review a variety of methods such as Long Short-Term Memory (LSTM), LightGBM, Multilayer Perceptron, Support Vector Machine, and Random Forests in their ability to predict floods using a multivariate dataset of historical flood data from Bangladesh (1949-2014) and a time-series dataset for the Minnesota River (2019-2025). The performance metrics of interest for this project were accuracy, precision, recall, F1-Score, Mean Square Error (MSE) and its root (RMSE), Nash-Sutcliffe Efficiency (NSE), and Kling-Gupta Efficiency (KGE). In addition, confusion matrices and ROC curves were developed in order to judge model performance. From this project, the LightGBM model worked best for the Bangladesh data while the LSTM worked best for the time-series data. In addition, the most important features for the LightGBM model were rainfall, recording location, and year.

Three-Dimensional Empowerment": Exploring The Path For Counselors To Strengthen College Students' Cultural Confidence

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ABSTRACT
Cultural confidence is the spiritual bond of national rejuvenation and the core essence of character education in universities. Cultivating college students' cultural confidence is of paramount importance in the current era. As grassroots forces in ideological and political education, university counselors play an irreplaceable role in addressing the various challenges in fostering cultural confidence and in transforming macro-level theoretical concepts in-to micro-level educational practices. This paper, based on the practical work of counselors, systematically constructs a "Three-Dimensional Empowerment System" of "narrative transformation — belief immersion — space cultivation" to offer a practical education model. Additionally, it discusses a long-term support mechanism from the perspectives of counselors' professional development and institutional guarantees, exploring the process of cultural confidence cultivation from path exploration to ecological system construction. The goal is to provide theoretical support and practical examples for the professional development of counselors in cultural education, helping to cultivate a new generation with a strong cultural foundation and firm value stance.