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The Views of School Management on the Use of Educational Management Information Systems (EMIS) for Decision Making in Secondary Schools in Wolaita, South Ethiopia

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Abstract: This qualitative study investigates the perspectives of school management, specifically principals and Heads of Departments (HoDs), on the use of Educational Management Information Systems (EMIS) to support decision-making in selected secondary schools in Wolaita, South Ethiopia. Using an interpretivist paradigm and case study design, data were gathered through semi-structured interviews, focus groups, and document analysis. The findings reveal significant barriers to effective EMIS utilization, including inadequate infrastructure, limited internet access, duplicative information systems, and insufficient skills among school managers. Many schools underutilize EMIS, relying instead on manual paper-based processes, leading to ineffective decision making. This study highlights gaps in EMIS knowledge, system trust, and usage, emphasizing the need for capacity building, infrastructure improvements, and managerial commitment. Practical recommendations are offered to enhance EMIS adoption for improved school management and educational outcomes.

Keywords: Educational Management Information System, EMIS, decision making, school management, secondary schools, Ethiopia

Introduction

Educational Management Information Systems (EMIS) play a crucial role in modern school management by integrating data collection, storage, processing, and dissemination to inform strategic and operational decisions. EMIS provides school principals and Heads of Departments (HoDs) with timely, comprehensive educational data vital for planning, monitoring, and evaluation of school performance (Paul, Kabanda & Andala, 2020). This is particularly relevant in developing contexts, including Ethiopia, where schools historically relied on manual records or basic spreadsheets (Matthias, Jahn & Laakso, 2019).

Despite government and donor investments to implement EMIS, challenges persist, including infrastructural limitations, low internet connectivity, lack of trained personnel, and resistance to data-driven decision making (Sintayehu & Menber, 2019; Saad & Daud, 2020). Within secondary schools in Wolaita, South Ethiopia, the extent of EMIS utilization by school management for decision making remains underresearched.

This study aims to explore the views and experiences of principals and HoDs on EMIS use for school administration decision making and identify factors that facilitate or impede effective usage, thereby providing insights to improve EMIS implementation in the region.

Literature Review

EMIS is defined as a systematic process connecting all aspects of educational data management to support professional school administration (Bőjite, 2019). Successful EMIS implementation has been reported to enhance capacity building, resource allocation, and decision quality in various contexts (Saad & Daud, 2020). However, challenges such as poor infrastructure, inadequate training, data duplication, and limited stakeholder involvement diminish its impact (Syahrul et al., 2019).

In Ethiopia, secondary schools' EMIS adoption is constrained by infrastructural deficits and managerial skills gaps, affecting data reliability and utilization for decision making (Sintayehu & Menber, 2019). Effective usage depends on managerial awareness, perceived usefulness, and organizational support (Colvin & Sugai, 2017; Martins et al., 2019). This study contributes to this body of knowledge by foregrounding school management perspectives in the Wolaita zone. **Methodology**

Research Paradigm and Design The study adopted an interpretivist paradigm and employed a qualitative case study approach to deepen understanding of EMIS use in real-world school settings (Vaismoradi, Turunen & Bondas, 2013).

Sample and Setting

Purposive sampling selected four secondary schools in Wolaita: two schools (A, B) actively using EMIS and two (C, D) not using EMIS for decision making. Participants included eight principals/deputy principals and sixteen HoDs (four per school). Semi-structured individual interviews were conducted with principals/deputy principals, and focus groups were held with HoDs.

Data Collection

Data were collected through in-depth interviews, focus group discussions, and document analysis of EMIS training and meeting records. Triangulation of methods enhanced the credibility of findings (Abdalla et al., 2018).

Data Analysis

Content analysis and thematic analysis were applied to interview transcripts, focus group data, and documents (Moser & Korstjens, 2018; Saldaña, 2021). Coding was done iteratively to identify key themes concerning EMIS utilization, knowledge, and decision-making practices.

Findings

Utilization of EMIS in Decision Making

Participants acknowledged attempts to use EMIS data, but manual paper-based information sources remained predominant due to system inefficiencies and limited awareness. Several principals and HoDs reported absence of established guidelines on EMIS use in decision-making processes. Poor trust in EMIS data quality and technical issues hindered reliance on the system.

EMIS Knowledge and Awareness

Most school managers demonstrated limited knowledge of EMIS functionalities and decision-support potential. Non-users of EMIS had minimal exposure, while active users had only partial understanding, often grounded in attendance at few management meetings discussing EMIS data.

EMIS Usefulness and Challenges

Some participants appreciated EMIS as a potential tool for forecasting and trend analysis but noted slow system performance and incomplete data integration. Frequent barriers included inadequate infrastructure, slow Internet connectivity, lack of training, and fear of data inaccuracies affecting performance evaluation.

Impact on School Management

The underuse of EMIS emerged as a significant limitation to effective school planning, resource management, and performance monitoring. Data obtained from interviews and documents indicate a disconnect between EMIS service expectations and actual practice at school level.

Discussion

The study confirms existing literature highlighting infrastructural deficits, skill shortages, and low managerial support as key impediments to EMIS utilization in secondary schools (Luong et al., 2021; Awgichew & Seyoum, 2017). The reluctance or inability to engage with EMIS data undermines data-driven decision making, with consequences for school performance and stakeholder satisfaction (Oliver, 2014). Increasing EMIS literacy among school leaders and establishing clear operational guidelines are critical, alongside upgrading technological infrastructure (Martins et al., 2019; Salome, 2020). Managerial engagement and ongoing capacity building can enhance trust, promote behavioral change, and support sustained EMIS integration in school governance.

Conclusions

The study revealed that despite the availability of EMIS, its full potential remains unexploited due to limited knowledge, infrastructure gaps, and organizational challenges in Wolaita secondary schools. EMIS is recognized as a valuable decision-support tool; however, low usage and trust impair its effectiveness in guiding school management decisions.

Recommendations

To improve EMIS adoption and decision-making quality in Wolaita secondary schools:

- Education authorities at zonal and district levels should conduct targeted awareness campaigns through workshops and seminars to enhance understanding among school managers.
- Continuous professional development and basic computer trainings must be provided to principals and HoDs. Resource allocation should prioritize upgrading hardware, network infrastructure, and software maintenance at school level. Development of clear guidelines and frameworks for the systematic use of EMIS in school decision making is imperative. These measures aim to foster effective data use that supports school improvements and educational quality.

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