

# “THE BEST” IS THE ENEMY OF “SMART PRACTICE” IN EDUCATIONAL ADMINISTRATION IN THE 21<sup>ST</sup> CENTURY

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**Abstract:** This article does not categorise “The Best” as a negative practice in school administration but rather it hinders the innovation and inculcation of smart practices hence making it an enemy of smart practices in educational administration in the 21<sup>st</sup> century AI Tech era that involves smart practices. This study is focused on: “the best is the enemy of smart practice in educational administration in the 21<sup>st</sup> century” for schools’ improvement. The study understudy qualitative and quantitative literatures on the best practices, school smart practices, how “the best” hinders school smart practices, and how school smart practices promote school improvement by school administrators for a comprehensive research output because it is the best that has led us to the AI Tech innovations of the 21<sup>st</sup> century that is a key component of school smart practices. Research questions were raised in the course of this review to serve as a guide in the review. They are: first, what is “the best” (traditional perfect method of administration) and what are “smart” school practices in educational administration? Secondly, what are smart school practice’s role in aiding administrative duties? Thirdly, how is “the best” an enemy to smart practices technology in educational administration? Findings of the review would enable educational managers and educational administrators to inculcate smart practices in administering schools efficiently and effectively.

**Keywords:** “The Best”, Smart Schools, Smart practices, 21<sup>st</sup> Century, Educational Administration, Smart Administration.

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## 1. INTRODUCTION

“The best” here is a personalised term to refer to best practices that are done manually in the right way and manner to achieve educational goals and educational outcome in the schools by school administrators irrespective of how and when it takes to achieve the goals at the time before the 21<sup>st</sup> century. The study of “the best” practices is not new in institutional administration (Lapido, 2019; Edho, 2025; Edho, Akpotu, & Asiyai, 2025), but in the 21<sup>st</sup> century that we are in, administration has long past “the best” practices to the smart school practices which is technologically inclined. Being in the AI Tech era, smart practices involve the use of Artificial Intelligence and technology to carry out tasks to achieve timely results in education. “The best” is also referred to as rigid practices or traditional practices or even, “evidenced based” practices at a given time. It is a reflection of “perfection” at a given time even into the computer era of the 20<sup>th</sup> century. That some schools have the technological infrastructures, does not go to say that they are smart schools.

According to Gaius-Okoko and Peretomode (2026), modern educational ecosystems have fully integrated smart practice technology (its hardware and software) into school cultural fabric as artefacts. These digital tools are essential for enhancing administration, fostering a positive school environment and enhancing instructional quality, all of which ultimately contribute to better student outcomes and general school progress and improvement.

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Educational administration refers to the structured coordination of both human and material resources, ensuring they are used wisely alongside the application of established educational policies, plans, rules, and programmes to achieve defined goals, vision, mission, and objectives. The responsibilities of administrators, who serve as heads of public secondary schools, extend beyond areas such as student management and staff administration to include supervision of instruction, curriculum development, general administrative duties, fostering school–community relationships, managing school facilities, and overseeing financial and business operations (Peretomode, 2019). In ensuring smart technology is applied comprehensively and effectively, the role of school administrators is demanded as the driver of the paradigm shift to smart technology in school administration (Sarimin, 2025).

However, these duties cannot be effectively performed in isolation; they require active collaboration with teachers as major partners in promoting the growth and enhancement of secondary education, particularly through the integration of smart practices integration in the administration of the school (Gaius–Okoko & Peretomode, 2026).

The 21st-century educational landscape is undergoing a paradigm shift driven by technological innovation, global interconnectivity, and evolving learner needs. Traditional perfect administrative practices are no longer sufficient to equip administrators with the competencies required in a digital society (Mustafa, 2025). Thus, smart practices are smart technological methods and techniques, with artificial intelligence (AI) solutions, and ICT (Information Communication Technology) inclined using smart devices and not just technologically inclined with just computers to manage and control schools' human resources and non-human resources to achieve educational goals by smart administrators. Smart practice in educational administration gives rise to smart administration by smart administrators.

Factors that hinder the acceptance and inculcation of smart practices in educational administration include but not limited to lack of training and exposure to smart Technology; time constraints and workload; cost of resources; PTR (principal-teachers relationship); the assumed best practice; etcetera. The assumed “best practice” is the focus of this study.

There are challenges in the use of the best practice in the administration of schools which has led to the paradigm shift to smart administrative practices using smart technology. These challenges hinder school administrators from administering schools smartly which has led to this discourse; the best is the enemy of smart practice in educational administration in the 21st century for school improvement. This discourse lays the foundation of this research objectives;

- i) To understand what the best practices are; and how they are an enemy to smart school practices in educational administration?
- ii) To highlight the benefits of smart practices?
- iii) To proffer how to resolve the situation?
- iv) To bring to the attention of education managers that evolving more smart schools should be one of their objectives and ensuring security of all infrastructures.

In view of the foregoing objectives, a conceptual framework is developed as shown in Figure 1. The administrators need the managers to make right policies to govern the need, plan, procurement and even distribution of smart facilities and infrastructures to schools. The administrators are to ensure proper utilisation and maintenance of all smart devices and apparatus for administrative delivering with proper training in smart practices solutions. The administrator is also to ensure that teachers are well grounded in smart practices and its utilisation. The principal is also to ensure that all stakeholders including parents are carried along in this change. Therefore, proper communication according to Adams et al. (2022) and Gaius – Okoko, & Peretomode, (2026), is non-negotiable.

A simple analogy is thus: various forms of computers existed in the 21<sup>st</sup> century including the big desktop which was the best at the time. Gradually, flat screens desktop began to emerge. And then, in the 21<sup>st</sup> century, touch screen smart devices with stylus for personal or classroom use began to emerge. This touch screen devices and board evolve from the older generation of computers making it better and smarter but this does not mean that desktop is bad because at the time it was the best and it is still being used but better and smarter systems have emerged with better features. The older computers refer to “the best” while the smarter devices refer to “the smart” practice. Due to the usage of these old computers, most people have resilience for the new Gen sleek touch screen and foldable smart devices. With this analogy context, holding

on to “best practices” would affect the usage of technologically smarter, flexible, innovative and timely data-driven decision making in educational administration to improve schools.

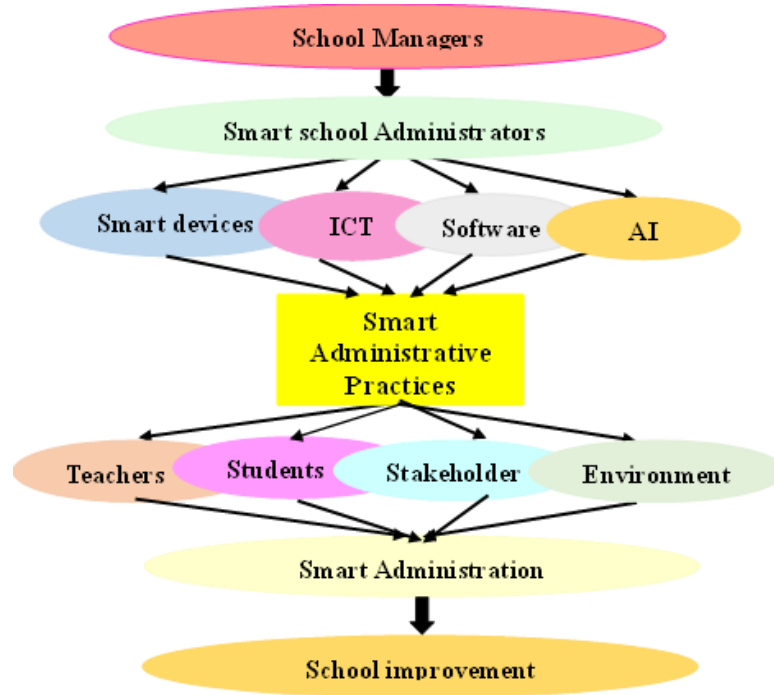


Figure 1: Smart administrative practices and its components

## 2. THE REVIEW

**RQ1: What is “the best” (traditional perfect method of administration) and what are smart school practices in educational administration?**

**“The best”:**

A “best practice” is a method or technique that has been generally accepted as superior to alternatives because it tends to produce superior results. Best practices are used to achieve quality as an alternative to mandatory standards. Best practices can be based on self-assessment (Wikipedia, 2026), Best practices, according to Jackson (2022), are methods or techniques that educational administrators use to optimise programs, policies, or operations in the school. They are traditional administrative methods applied by school administrators. It is the wide range of individual activities, policies, and programmatic approaches to achieving positive changes in student attitudes or academic behaviours or positive results (Arendale, 2024). As such Best practice is the process administrators can utilise to systematically help teachers improve student achievement (Wildman, 2006).

Therefore, it can be said that best practices in educational administration emphasises more on traditional bureaucratic form of administration with hardcopies and teacher centred teaching-learning process with or without computer hardware and believed to be universally, acceptable, tested, valid and effective which drives for absolute perfection in the process of administration at once a time.

**What are the examples or types of the best or perfect or traditional administrative practices?**

The best can be seen in the following ways, according to Wildman, 2006; Gaius-Okoko & Peretomode, 2026; Wikipedia, 2026; Constantinides, 2026):

- i) *Bureaucratic Administrative Practices:* traditional bureaucratic administration uses strict hierarchy, rigid procedures, and centralised authority such as rigid approval processes, excessive paperwork, slow decision-making process, etcetera to execute administrative roles.

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- ii) *Basic requirements or over-standardised administrative practices*: most schools rely on standard administrative process that assume one method works for every school (one cap fits them all), ignoring local school needs, discouraging innovation, and limiting contextual decision-making
- iii) *Traditional instructional supervision practices*: older supervision models focus on inspection and fault-finding rather than collaborative improvement, such as authoritarian classroom inspection, emphasis on compliance instead of innovation, etcetera.
- iv) *Paper-based record-keeping practices*: Traditional record-keeping relies heavily on manual documentation and physical files which slows information retrieval, risk of data loss, inefficiency in decision-making, etcetera.
- v) *Top-down decision-making practices*: Traditional school administration often relies on centralised decision-making by the principal or ministry authorities which limits teachers' participation, thus, reducing collaboration and collegiality, thereby slowing innovation in the school.
- vi) *Resistance to positive change*: Some administrators prefer traditional systems because they believe them to be the "best" or most reliable practices. They refuse to accept that change is inevitable; it one of the constants in life.
- vii) *Perfection-driven decision making*: the search for the "perfect solution" or "best model" is a typical, "the best" (*perfect*) practice, which can delay reform and innovation and may lead to postponement of implementing new policies in schools by the administrators, frequently overlooking the influence of specific local geographic conditions of some schools.

### ***What are smart school practices in educational administration?***

In the 21<sup>st</sup> century education landscape, smart education is characterised by the seamless integration of advanced technologies with modern pedagogical strategies. According to Badshah et al. (2023), the smart element denotes a system's capacity for intelligent smart data driven decision-making, transparency and adaptivity. Educational administrators can streamline administrative tasks and enable educators to monitor student engagement and progress through real-time data.

Furthermore, Demir (2021), emphasises that smart education is not merely about the presence of hardware, but the coherent application of Information and Communication Technologies (ICT) to achieve specific educational goals. This framework represents a significant paradigm shift, moving away from traditional instructional models toward sophisticated, digitally-driven practices tailored for the modern 21<sup>st</sup> century era.

Essentially, smart education transforms the management of learning environments by utilising intelligent tools to foster more interactive and responsive educational experiences (Badshah et al., 2023; Demir, 2021).

According to Jackson (2022), smart schools are defined as interactive ecosystems designed to maximise the utility of classroom resources and elevate the learning experience. These schools serve as the essential framework for the seamless integration of Information and Communication Technology (ICT), aiming to bolster students' digital proficiency. In this model, the onus falls on administrative leadership to modernise physical classrooms and implement forward-thinking curricula. These schools provide a flexible learning environment where subjects like science, reading, and mathematics are taught via the internet, effectively reducing the need for the constant physical replacement of textbooks and software by leveraging ICT platforms.

Parallel to the classroom experience is the evolution of smart administration, a field of study that has matured since 2010. Badshah et al. (2023) describe this as the implementation of sensor-driven environments that can interpret physical data to facilitate automated decision-making. This intelligent approach to administration encompasses several automated practices, including:

- i. *Automated Logistics*: Streamlining attendance and security protocols.
- ii. *Data Management*: Utilising smart portfolios and automated reporting.
- iii. *Strategic Oversight*: Enhancing school planning through real-time data.

Together, these technological advancements transition the school from a traditional setting into a highly efficient, digitally-integrated learning environment.

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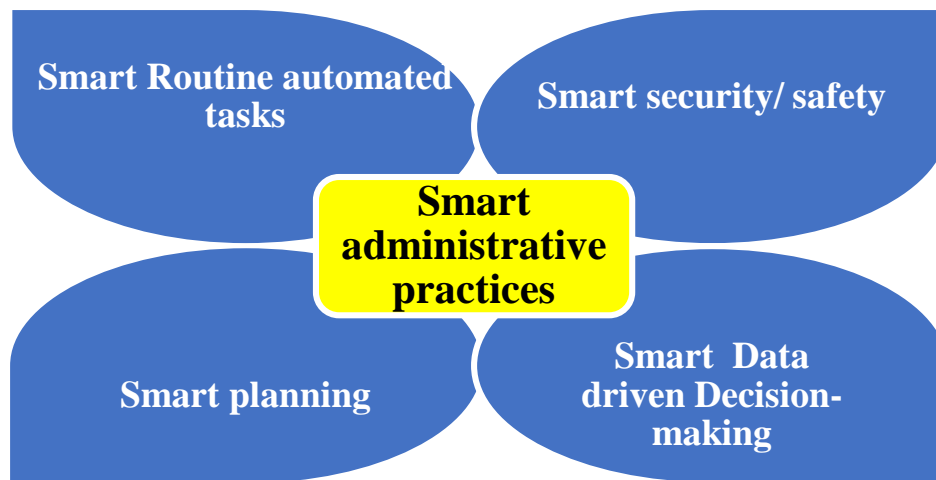
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Smart practices in educational administration refer to administrators leveraging on innovative, technologically-supported solutions such as data analytics, school management systems (SMS), automation, and data-driven strategies used by school administrators to streamline administrative operations and improve administrative efficiency. It also fosters teaching quality, completers’ outcomes and enhances decision-making in the smart digital era. Smart educational administration practices of the 21st century concentrates on flexibility, innovation, technology integration, collaboration and data-driven decision-making in the administrative process of the school by educational administrators. Smart administrators administer and manage smart schools with smart practices to achieve educational goals, vision and mission for school improvement.

Smart administrative practices involve the strategic deployment of technology by school administrators to champion equity, inclusion, and digital citizenship (Dasruth et al. (2024). This multifaceted approach requires administrators to move beyond simple administration and instead act as catalysts for school transformation. Smart administrators are characterised by:

- iv. *Strategic Visioning*: Collaborating with stakeholders to design and evaluate long-term plans for digital integration.
- v. *Cultural Leadership*: Cultivating an environment where both students and staff feel empowered to utilise technology as a tool for educational enrichment.
- vi. *Systemic Sustainability*: Developing the necessary infrastructure and teams to ensure that technological adoption is not just a trend, but a sustained support system for learning.
- vii. *Professional Growth*: Actively modelling a commitment to ongoing professional development, encouraging continuous learning for themselves and their staff.

Essentially, smart administration is defined by the intersection of visionary leadership and the practical application of technology to modernise the educational experience.



**Figure 2: Smart school administrative practices**

**RQ2: What are smart school practice’s roles in aiding administrative duties?**

***Role of smart practices in aiding educational administrative duties***

Smart practices in educational administration aid administrators to automate administrative processes; improve decision-making using data; strengthen communication and collaboration; manage school resources effectively; and monitor teaching and learning processes; etcetera. Several modern authors (Badshah et al., 2023; Jackson, 2022; Gaius-Okoko & Peretomode, 2026; Koshiry, and Tony, 2025; Haleem, et al., 2022; OECD, 2023; Imoh, et al., 2025), have identified the roles of smart technologies to include:

1. *Aid in Smart attendance*. Attendance irregularities badly affect educational institutions’ performance. However, now biometric, Radio Frequency Identification (RFID) card and face detection technologies are used to automatically manage the attendance. Each learner receives integrated cards with RFID technology. When learners enter the classroom, their attendance is automatically marked. This marks the learner and teacher’s attendance as they enter the class. The smart

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system notifies the teacher and principal how many learners are present in the class. Smart cards also make sure of the teachers' presence and timing in the class. Technology is invisible and works silently. Smart attendance reports the parents on their arrival or departure from school, keeping them aware of their child. This also upgrades the learner log when he/she enters or leaves the library, cafe or labs, etc.

2. *Smart Evaluation*: Monitoring teachers' and learners' progress in institutions is critical. An important part of operating a school is keeping track of how well the teachers are doing and evaluating how effective they are in their work. With the proper evaluation of teachers and institutions, the performance can be improved to a significant extent as well. The smart system can transparently manage all these issues. Furthermore, administrative tasks have increased the burden on teachers. This burden may be minimised by smart systems, so teachers may concentrate on teaching only.
3. *Smart portfolio*: Learners' assessment, attendance, and character records are stored in the database. On new complaints, parents are notified through applications and messages. Teachers or parents may check throughout the summary of learners. This helps parents and teachers to diagnose the issues with any learner. The administrator of the institution monitors the institution in real-time. They can check any teachers' lesson plans, homework, courses covered and results, etc. The homework and lesson plan may also be directly viewed by parents to introduce the flipped classroom environment. Video as a sensor may be used for classroom close observation
4. *Smart reports*: The administration takes decisions on the reports forwarded to their offices. With manual reports, there are major chances of report manipulation, which leads to wrong decisions and actions. The introduction of the smart system minimizes corruption and illegal report manipulation.
5. *Smart security and safety*: Thousands of students and staff study and work in educational institutions. With limited security equipment, they are easy targets for terrorists. The intelligent system plays a major role in security by installing cameras and other sensors. The rise of AI further improves the performance of this equipment.
6. *Smart holistic approach*: smart practices allow administrative leaders the flexibility to provide a holistic approach to supporting classroom teachers and allocating sufficient resources.
7. *Integrating modern technology and innovation into the administrative process*: Smart practices in educational administration, play a vital role in promoting the sustainability of education by integrating modern technology and innovation into the administrative process. These initiatives contribute to improving efficiency, reducing waste, and ensuring equal opportunities for all.
8. *Helps Rural Schools to experience Quality Education*: Smart practice enhances rural or disadvantaged schools to experience quality education from distance platforms.
9. *Smart practice decreases the utilisation of paper and hard copies in administration*: conserving natural resources and lowering energy utilisation related to traditional best practice
10. *Virtual learning environments enable continuous skill development*
11. *Reducing carbon footprint*: through virtual communications and training by removing transport-related emissions and energy consumption, and ensuring environmental friendliness.
12. *Facilitating smart tests*: with AI which provides instant feedback, tracking progress, and adjusting learning procedures.
13. *Quickens Analysis of large data*: to help predict educational shifts and adaptation of curricula for long-term quality and durability.
14. *Ensuring 24/7 Availability*: Chatbots and virtual assistants provide round-the-clock support for students and parents, instantly answering Frequently Asked Questions (FAQs) and replacing static suggestion boxes with dynamic, always-on help.
15. *Smart digitising and Enhancing Archives*: it revolutionises how school archives are managed, improving the recording, storage, retrieval, and searching of historical data.
16. *Smart curriculum management*: The process of restructuring, realigning, and redesigning an interactive curriculum assist students in obtaining a higher level of academic achievement. Digitising books will enable the digitisation of the syllabus

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and make animation videos created for teachers and learners in AR and VR. This can be embedded with the teachers' application to manage the animation videos with their lesson plans, etc.

17. *Smart pedagogy and supervision*: is a set of skills used for effective teaching in the classroom. It is not only limited to teaching but also covers the psychological skills to read and understand learners. For example, smart engagement, flipped classrooms, personalised learning, smart lesson planning, and smart activities. Administrators can supervise teacher's classroom management in the school without being there physically through virtual supervision which provides flexibility while maintaining quality assurance.
18. *Smart practice provides easy access to data and information*: easy retention of information, increased storage of information, and improved presentation of information.
19. *Smart predictive analysis*: to managing enrolments, credentials and preventing dropout in the school

### **Components of smart administration**

Smart administrative leaders view smart schools as an essential component for smart practices. The components according to Gaius-Okoko & Peretomode, (2026); Jackson (2022); Badshah, et al (2023); Koshiry, and Tony, (2025), are;

- i. *Wi-Fi environment*: digitally enabled educational environment with structures that provide fast, secure and reliable wireless connectivity to support school administration.
- ii. *Smart software and IT solutions*: integrated digital systems that automate, streamline, and enhance administrative processes in education through tools such as data management platforms, cloud computing, etcetera.
- iii. *ICT platforms*: Digital technologies that use hardware, software, or the internet to transmit data
- iv. *Fifth generation (5G) of high-speed network connectivity*: that is ultra-fast and low latency connectivity to support real-time safety, security and data processing
- v. *Micro-Controller Unit (MCU)*: This works as a hub for smart sensors.
- vi. *Smart classrooms*
- vii. *Virtual labs*
- viii. *Smart interactive panels*
- ix. *Smart devices such as tablets and smartphones*
- x. *Virtual Reality (VR) and Augmented Reality (AR) devices and technologies*
- xi. *Educational robots* such as LEGO Mindstorms and Ozobot
- xii. *Smart cameras and live streaming devices*
- xiii. *People*: the learners, teachers, IT/ ICT/ AI Tech skilled personnels and the administrators.

### **Smart tools/ solutions by administrators**

Smart tools for smart practices in educational administration are digital technologies and intelligent systems that help school administrators plan, organise, coordinate, supervise, and evaluate school activities more efficiently and effectively. These tools aid data-driven decision-making, communication, automation of administrative tasks, and improvement of teaching and learning. According to Badshah, et al (2023); Gaius-Okoko & Peretomode, 2026; Forrester (2019); OECD (2023); they thus;

1. *Facility Management Systems*: to manage the use and maintenance of school buildings and other school facilities such as sport facilities, cafeterias, rest rooms, etc.
2. *Learning Management System (LMS)*. LMS is an online application used by smart administrators to monitor teaching activities, instructional activities, evaluate student performance, support online and blended learning, manage lesson notes, etc for classes, assignments, quizzes, assessments, and etcetera. Few examples of LMS platforms are;

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- i) *Moodle*: aids in tracking learners progress and efficient coordination of teaching and assessment activities.
- ii) *Google classroom*: enhances administrative oversight of teaching and learning
- iii) *Canvas*: allows teachers to create flexible educational content, including online lectures and activities. This platform enhances the collective learning experience and achieving outstanding educational outcomes.
- iv) *Virtual classroom*. In virtual classrooms, learners remotely attend online classes on the Internet. With the emergence of 5G (having very minimum delay), virtual classrooms are becoming very popular.
- v) *Customer Relationship Management Systems (CRMS)*: serve as public relation tool to communicate with parents, students and possibly other parties;
- vi) *Collaboration and Communication smart tools*: 5G has made collaboration and smart communication very easy and smart. Like virtual classrooms, they can use various applications to collaborate and communicate with teachers, students, educational managers and other stakeholders. Examples are: Zoom (enhances real-time virtual communication such as meetings, webinars, etcetera); Google Workspace (streamline administrative task by providing integrated tools for emails, document sharing and collaborative work); Skype (facilitates voice and video communication for meetings); Microsoft 365 (provides cloud based applications for communications, documentations and data management); WhatsApp (for easy information sharing and instant messaging); and AI Chatbots (provide instant responses to common parent and student inquiries).
- v) *Artificial Intelligence*: AI as a smart tool in educational administration smart practice is the integration of digital artificial intelligence technologies to execute core administrative responsibilities. It involves using AI to systematically organise and utilise school resources (both human and non-human) and implement educational policies to achieve institutional goals, vision, and mission. ChatGPT, Grammarly, Turnitin, MagicSchool AI, SchoolAI, Human Resource Management Systems (HRMS), Financial Management Software, AI Chatbots, etcetera are some examples. AI tools support administrative data interpretation, decision-making and automate routine tasks.
- vi) *Virtual Reality (VR)*. VR provides a three-dimensional view and can be applied in entertainment and education. VR is now widely used for virtual meetings, training, collaboration, and lectures. VR is making learning easier, faster, and more engaging.
- vii) *Augmented Reality (AR)*: AR can be defined as a system that fulfils three basic functionalities: a combination of real and virtual worlds, real-time interaction, and accurate 3D capture of virtual and real objects. AR may be utilized to enhance the learning process in both online and online teaching techniques by allowing the linking of imagination with the real world through virtual means.
- viii) *Administrative Functions Systems*: to manage payments, contracts, budgeting, human resource management, etc.
- ix) *School Management Information Systems (SMIS)*: These systems help administrators manage school data and operations in one platform. They assist administrators to manage student records, track attendance, book loans from the school library, monitor academic performance and grading, manage staff information, generate administrative reports, timetable scheduling, admissions, teachers lesson planning, performance evaluation, etc. Typical examples are Power school (centralises students data attendance, grading and reporting for efficient decision making and school management); Fedena (enhances automated record keeping, communication and analysis, thus improving schools); etcetera.
- x) *Cloud Storage and Resource Management Tools*: These tools allow administrators to securely store and share school data and documents. Examples include: Google Drive, Microsoft OneDrive, Dropbox, and etcetera. These tools aid administrators to store digital records; share administrative documents; maintain institutional archives; etcetera
- xi) *Smart digital Assessment Tools*: These tools help smart administrators monitor teaching effectiveness and student achievement in smart schools. Examples are Quizizz, Google Forms, Socrative, and etcetera. They allow administrators to Analyse student performance; evaluate teaching quality; track learning outcomes; Create interactive quizzes; Polls; etcetera.

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xii) *Smart Classroom Technologies*: These tools improve teaching supervision and instructional delivery. Smart administrators can use these tools to monitor classroom innovation; encourage interactive teaching; support digital learning environments; etcetera. SMART Notebook; Notepad; Kahoot; etcetera are major tools.

### **Problems encountered by administrators in inculcating smart practices:**

For every new technique and methodology in any organisation, there are challenges that are encountered in the implementation. The education sector is not left out, like wise the administrative sector. Some of these challenges encountered by educational administrative leaders are not limited to these challenges in the inculcation and implementation of smart practices in educational administration. Despite the countless benefits, the smart practices face many factors and challenges ( From Sarimin, et al 2025; 2026; UNESCO, 2026; Jackson , 2022; Badshah, et al., 2023; Koshiry, and Tony, 2025; Dasruth et al., 2024; Awang, et al., 2025). These challenges include:

1. *Lack of Administrator's Capacity and Skills*: A primary barrier is the lack of readiness among administrators. Many lack the necessary skills, knowledge, or organizational capacity to effectively integrate AI into school management processes. This is compounded by a general shortage of technical personnel and, in some cases, scepticism or mistrust of technological innovations among staff, which can slow adoption.
2. *Updating Online Content*: Content utilised by administrators must be regularly updated to keep pace with new developments, ensuring their relevance and validity.
3. *Staff resistance*: Every new technology implementation has resistance from people, especially from staff. Monitoring is unfriendly for human beings and teachers do not like such a system where they are monitored on a real-time basis. Therefore, the major challenge towards smart practice is the staff. Special incentives and motivation are needed to overcome the resistance. One of the reasons for teachers' challenges is passive communication between teachers' and administrators. Effective communication will not only minimize the teachers' resistance but also make them happy for handling their issues efficiently.
4. *Professional development in smart practices*: Researchers report stated that administrative leaders consistently use iPads, word processing, and data searches, but only 25% of administrative leaders use ICT platforms for critical thinking, interactive activities, and collaborative learning by implementing smart practices in smart schools.
5. *Data Privacy, Security, and Exploitation*: smart tools and systems require access to sensitive student data (e.g., academic records, biometrics), creating substantial risks. These include data poisoning, bias, cyber-attacks, and data breaches. Furthermore, there is a risk of function creep, where data collected for education is repurposed for non-educational uses (e.g., marketing) without proper consent. The continuous monitoring inherent in some systems can also foster a sense of surveillance, potentially undermining trust and free expression.
6. *Compatibility and Interoperability*: Devices compatibility and interoperability (the capacity to combine and use data from disparate digital tools with ease, coherence, and efficiency) rise in every integration, especially at the school level to handle such technical issues. This is one of the most powerful challenges, which resists the implementation of smart administration. The education sector is a big market. Everyone is connected (one way or other) to the education system.
7. *Ethical, Legal, and Governance Gaps*: The use of AI raises critical ethical questions around fairness, transparency, and accountability. If not carefully managed, biased training data can perpetuate stereotypes and lead to unfair outcomes. While frameworks for responsible AI have been proposed, a significant gap remains between these high-level principles and their comprehensive implementation in policy and practice.
8. *Digital divide*: the difference between students who have access to digital devices and internet connection in schools and those who do not have, poses a challenge to administrator's smart administration.
9. *The general challenges*: commonly encountered with smart devices are; network, battery, system, or communication failures.
10. *Weak Internet Connectivity*: Some areas are still deprived of internet connection. This system cannot be introduced where there is no internet connectivity or slow internet access. Moreover, smart systems work with real-time input, therefore, in case of a slow internet connection, this may not be installed.

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11. *Lack of funds challenges*: In most developing countries, lack of funds is the biggest problem. Schools usually do not even have funds to build classrooms for learners or buy furniture. In such areas, where schools are allocated, a very low budget will face obstacles towards smart practices. Especially, the smart system needs massive funds for installation.
12. *Social Interaction*: Overreliance on digital tools can reduce face-to-face interaction among students and teachers, affecting collaboration and engagement.
13. *Cultural issues*: In some cultures, girls are not liked to be captured in photos or videos. In such situations, people may resist installing cameras or sensors in schools. Furthermore, some parents do not allow their children to use smart devices. Flipped classroom ideas may not work in such situations making it difficult for administrators.
14. *Rigidity*: Strict adherence to *best practices* and long-time way of carrying out administrative roles in the school.
15. *Others* include; Time Constraints and Workload to train; Cost of data for internet connectivity; assumed best practice; concerns about originality and integrity; lack of skills; and lack of smart digital devices.

### ***Implementing smart practices in educational administration***

Zhu et al. (2016) describe a framework that describes three essential elements in smart education: *smart environments*, *smart pedagogy*, and *smart learner*. A fourth dimension is added by this researcher and that is *smart administration*. The fourth dimension enables the formal three dimensions of Zhu et al. (2016) for smart schools to be effective.

Smart practice in educational administration therefore requires the four major elements of smart education and an additional dimension of smart manager(s) and other stakeholders.

### ***Integrating smart practice in Educational Administration: A Strategic Framework for School Administrators.***

Recommendations from recent literature (Gaius-Okoko & Peretomode, (2026); UNESCO, 2026; Awang, et al., (2025); OECD (2023); Imoh, et al., (2025); Stwin Sparx (2025); are used to provide a structured approach for educational administrators;

### ***Part 1: Foundational Principles for AI Integration***

To ensure successful, responsible, effective, and equitable implementation of smart practices by administrative administrators should rely on several key strategic pillars:

#### ***1. Cultivating Administrative Expertise:***

Educational administrators must develop a robust understanding of smart technologies and their applications in teaching, learning, and administration. This involves moving beyond basic technical literacy to include strategic planning, ethical awareness, and the ability to lead digital transformations in both classrooms and offices.

#### ***2. Prioritising Data Integrity and Security:***

Schools must uphold rigorous data protection standards by performing frequent security audits, adhering strictly to legal regulations and ensuring strict compliance with all relevant laws, and state-specific regulations. Employ strong encryption and data anonymisation techniques to safeguard student identities/ privacy.

#### ***3. Promoting Equity and Mitigating Algorithmic Bias:***

It is essential to invest in transparent, proven technologies. Regular evaluations are necessary to detect and fix racial, gender, or cultural biases, as flawed adaptive platforms can inadvertently marginalise students with diverse learning styles or cultural backgrounds, creating systemic disadvantages.

#### ***4. Ensuring Universal Inclusivity:***

School policies and tech deployments must actively support gender equality and provide equitable opportunities for every student and staff member.

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**5. Eliminating Inefficient Systems:**

Administrators should proactively identify and decommission unreliable diagnostic or detection tools that produce inaccurate data or unfair results.

**6. Nurturing a Collaborative Culture:**

Progress is rooted in a democratic and supportive relationship between administrators and teachers, fostering a culture of shared goals.

**7. Investing in Human and Physical Capital:**

Sustained success requires dedicated funding for modern infrastructure and continuous professional development to ensure teachers possess the necessary digital skills.

**Part 2: A Step-by-Step Guide to Implementing smart practice in schools**

Following a clear, step-by-step implementation strategy can make adoption easier and help schools gain the most values (Gaius-Okoko & Peretomode, 2026):

**1. Identify and Assess the School's Needs**

Start by reviewing existing administrative workflows. Identify tasks that are time-consuming, repetitive, prone to errors, or essential to daily operations such as scheduling, data management, and reporting.

**2. Explore and Choose Suitable Tools:**

Using the insights from the needs assessment, research and select smart solutions tailored to address those challenges. Make sure the selected tools are compatible with and can integrate smoothly into current school management systems.

**3. Allocate Resources and Strengthen Capacity:**

Create a detailed budget that includes initial acquisition, installation, maintenance, and future upgrades. Establish ethical guidelines and invest in staff training, including hiring or developing technical support where necessary.

**4. Promote Awareness and Encourage Buy-In:**

Involve all stakeholders (administrators, teachers, staff, and students) through training sessions and awareness programs to ensure understanding, acceptance, and effective use of the new systems.

**5. Launch with a Pilot Project:**

Begin the integration process by introducing one smart practice project at a time. Select a project from your initial assessment (Step 1) to pilot. This phased approach allows for easier adaptation and minimises disruption.

**6. Collect Feedback and Make Improvements:**

Seek input from staff using the smart technologies to understand how the tools are affecting their daily tasks. Use their feedback to fine-tune processes and resolve any unexpected issues.

**7. Track, Review, and Continuously Improve:**

Set up a consistent process for monitoring and evaluating the performance of the smart systems. Rely on feedback, data insights, and performance indicators to measure success. Be ready to modify system settings, provide additional training, or replace tools when necessary. Keep up with new developments and updates to continuously enhance administrative practices.

In summary, integrating smart practices is a continuous cycle involving planning, organising, funding, implementation, observation, feedback collection, and ongoing adjustments. Ultimately, effective implementation depends on collaboration. Administrators should actively engage all stakeholders (teachers, IT personnel, parents, and students) throughout the process, recognising that shared input leads to better output.

**International Journal of Novel Research in Interdisciplinary Studies**Vol. 13, Issue 2, pp: (9-23), Month: March – April 2026, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)**RQ3: How is “the best” an enemy to smart practices technology in educational administration?**

The best becomes an enemy to smart practices in the following ways, believing that being the enemy here signify that it hinders the growth and utilisation of smart practices by administrators in school administration( Wikipedia, 2026; Constantinides, 2026; Adams, et al, 2023; Mincu, 2022; Sarimin, et al 2025; Miller, and Lee, 2014):

1. The allure and seduction of best-practice mentality or thinking poisons genuine dialogue about both what we know and the limitations of what we know, thereby creating rigid administrative thinking.
2. Labelling a process or activity as “best practice” discourages innovative dialogue, innovation, and contextual adaptation of smart practice by administrators because it creates rigid standards that may quickly become outdated.
3. Education frameworks have fixed “best practice” models that rely on iterative administrative procedures rather than on continuous improvement and educational innovations that support smart administrative practice models
4. “Best practices in leadership style such as conservative leadership styles hinder administrative smart practices in educational administration which requires collective innovation and educational change.
5. Schools operate in complex and dynamic environments, therefore using rigid and stringent administrative procedures would not be effective but the inculcation of smart administrative procedures and techniques to address issues that arise out of the school’s complexity or environment and culture would. Over-reliance on best practice discourages situational judgment. Rigid adherence to "best practices" can ignore unique school contexts, causing misalignment with local needs.
6. The best often becomes a major hindrance due to implementation barriers like resource shortages.
7. Institutional barriers, including outdated policies and bureaucratic hurdles, slow digital integration essential for smart administration.
8. Schools face agenda overload, where multiple initiatives compete, leading to premature abandonment of best practices before they yield results (typically 2-5 years), thereby discouraging administrators to adopt smart practice, believing it would be abandoned.
9. Best practices tend to ignore local realities such as socio-economic differences, cultural diversity and resource availability
10. Best practices are based on past evidence, which may become obsolete due to technological change, policy shifts and emerging educational challenges which discourages smart practice in administration that is future-oriented, using real-time data, predictive analytics, continuous feedback systems, etcetera.
11. Best practices assume universality of one-approach-fits-all situations but education systems are complex and non-linear thereby requiring situational approach and multiple solutions depending on context as in smart practice.

**3. CONCLUSION**

Smart practices improve school administration by promoting efficient administration, data-driven decision making, digital leadership, teacher development, stakeholders’ collaboration, and school accountability. The integration of digital technologies and innovative leadership strategies enables administrators to transform schools into adaptive, technology-enabled learning centres. This in turn improve schools by enhancing teaching quality, increasing student engagement, promoting personalised learning, strengthening collaboration, and improving school management efficiency, thereby creating a flexible, interactive and future-oriented teaching-learning environments for the 21st-century education.

From the findings, the most effective approach is a hybrid approach: best practices as a foundation and then applying smart practices to adapt, refine, and improve on the best practice in educational administration.

It is of great importance and to note that the best has laid the foundation for smart practice, nevertheless, we are in the AI Tech digital era that enables smart practice for a more flexible, easy automated routine tasks and efficient administration in this 21<sup>st</sup> century. Adhering rigidly and strictly to the so-called best fosters a great enmity block for smarter practices in the educational system to strive. Smart administration is not replacing human resources but augmenting to improve service delivery to improve schools. According to OECD (2023), “*They consist of a mix of human competences, hardware and connectivity, and two types of software: digital tools for system and institutional management, and digital resources for teaching, learning and assessing in the classroom*”.

#### 4. RECOMMENDATION

To ensure the effective and equitable inculcation of smart practices in educational administration, the following structured recommendations have been proposed to educational administrators, educational managers and teachers based on the reviews carried in this study:

##### 1. For Educational Managers (Policy Makers):

Managers of education (the policy makers of education) should provide and implement a level framework for the utilisation of smart practices in the schools and appropriate smart practice applications/ solutions/ tools that respect and reflect the cultural backgrounds, learning styles, and needs of all students (gender equality) to foster equity and inclusion in the schools.

Training of administrators in smart administrative practices and teachers in smart practices in centralised locations or local government areas to focus on smaller population, should be carried out as top priority.

Provision of smart Infrastructure and Resources should be in the plan as the framework is being drawn. However, education is a big business and everyone is connected to it directly or indirectly. The system production on a large scale can be costly. Therefore, smart technologies should be adequately funded by the governments at all levels

Governments at the different level could begin implementation from technically advanced schools to less technically advanced schools while much fund is provided for the latter implementation of smart technologies fast tracked.

##### 2. For Educational Administrators (School Leaders):

Visionary Leadership in Educational Digitalisation should be adopted by the administrators. This would encourage adaptability easily.

Positive principal-teacher relationship (PTR) should be practiced by the administrators as they cannot introduce smart resources and practice in the school without the collaboration and willingness of the teachers. The administrator should include proper correspondence or feedback system in the smart administrative system to enable upgrade, and School administrators should endeavour to use fog servers in the situation of slow or weak internet connectivity. The data may be initially stored on fog computing and can be uploaded to the cloud at a slow speed.

##### 3. Teachers and staff:

Professional development should be taken seriously by teachers to enable the flexible adoption of smart practice. Teachers should be willing to accept the paradigm shift to smart practice in administration and be willing to adopt these smart practices in the education system.

#### 5. CONTRIBUTION TO KNOWLEDGE

The study has contributed to knowledge in the following ways;

This study has contributed to the bank of knowledge on smart practice in educational administration and in the education system at large.

It has also contributed to the knowledge that smart practice evolves from best practice but continuous adherence to “best practices” hinder the full adoption of smart practice in the education system and in educational administration most especially.

This study has also contributed to the bank of knowledge on how best practice is an enemy to smart practice.

#### REFERENCES

- [1] Adams, C. M., Adigun, O. B. and Fiegenger, A. M. (2023). From Crisis to Adaptation: The Function of Transformative Leadership Conversation. (2023). Journal of School Administration Research and Development, ISSN: 2470-8496 Print/ ISSN: 2470-850X Online. [ojed.org/jsard](http://ojed.org/jsard). 8(2), pp. 117-122. <https://doi.org/10.32674/jsard.v8i2.4482>
- [2] Arendale, D. R., (2024). Best education practices. [www.arendale.org/best-education-practices](http://www.arendale.org/best-education-practices).
- [3] Awang, N. E., Hamzah, M. I., and Zulkifli, H., (2025). Barriers to Implementing Innovative Pedagogy: A Systematic Review of Challenges and Strategic Solutions. International Journal of Learning, Teaching and Educational Research Vol. 24, No. 3, pp. 679-698. <https://doi.org/10.26803/ijlter.24.3.32>. <http://ijlter.org/index.php/ijlter>

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 Vol. 13, Issue 2, pp: (9-23), Month: March – April 2026, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [4] Badshah, A. and Ghani, A.; Daud, A., Jalal, A., Bilal, M., Crowcroft, J., (2023). Towards Smart Education through the Internet of Things: A Review. *ACM Comput. Surv.*, Vol. 00, No. 00, Article 00. (2023), 30 pages. arXiv:2304.12851v1 [cs.CY] 25 Apr 2023
- [5] Byron B. Jackson, B. B., (2022). Administrative Leaders' Experiences with Information Communication Technology Platforms and Best Practices in Smart Schools. Walden Dissertations and Doctoral Studies Collection. <https://scholarworks.waldenu.edu/dissertations>. Walden University ScholarWorks
- [6] Dasruth, J., Naicker, S. R., and Smith, C. (2024). Teachers' perceptions of principals' digital leadership practices in a school district in a developing country. ISSN 2590-2911. *Social Sciences & Humanities Open* 10 (2024) 101192. <https://doi.org/10.1016/j.ssaho.2024.101192>. (<https://www.sciencedirect.com/science/article/pii/S2590291124003899>).
- [7] Demir, K. A., (2021). Smart education framework. *Smart Learn. Environ.* 8, 29. Page 2 of 36. <https://doi.org/10.1186/s40561-021-00170-x>
- [8] Edho, O. G. (2025). Registry personnel best practices and effective university administration in South – South, Nigeria. (Unpublished doctoral dissertation), Delta State University, Abraka.
- [9] Edho, O. G., Akpotu, N. E., and Asiyai, R. I. (2025). Registry best practices and administrative effectiveness : empirical evidence and comparative insights from Nigerian Universities. *International Journal of Novel Research in Education and Learning*, 12(5), 1 – 9 (04-September-2025)
- [10] Forrester, V. V., (2019). School management information systems: challenges to educational decision making in the big data era. *International Journal on Integrating Technology in Education (IJITE)* Vol.8, No.1, March 2019. DOI :10.5121/ijite.2019.8101.
- [11] Gaius – Okoko, U. J. and Peretomode, V. F. (2026). Improving Delta State public secondary schools: focus on school culture and teachers' job commitment. *International Journal of Academic Multidisciplinary Research (IJAMR)*. ISSN: 2643-9670, Vol. 10 Issue 1 January - 2026, Pages: 45-57. [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- [12] Gaius – Okoko, U. J. & Peretomode, V. F. (2026). Principal-Teachers Relationship: A Catalyst for School Improvement in Delta State Public Secondary Schools, Nigeria. *Scholarly Journal of Social Sciences Research*, 5(1), 1-14. DOI: <https://doi.org/10.46654/sjssr51-1785>, ISSN: 2955-0785, [www.ijaar.org/sjssr](http://www.ijaar.org/sjssr).
- [13] Gaius – Okoko, U. J. & Peretomode, V. F. (2026). Digitalization: artificial intelligence as a continuous leveraging tool for school-wide improvement in educational administration. *International Journal of Management and Commerce Innovations* ISSN 2348-7585 (Online). Vol. 13, Issue 2, pp: (663-671), DOI: <https://doi.org/10.5281/zenodo.18899311>. Research Publish Journals
- [14] Haleem, A., Javaid, M., Qadri, M. A., & Suman, R., (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- [15] Imoh, S. G., Edet, A. A., Essang, E. N., Inyang, Akpan, S., Aniefiok, P. V. and Chukwudi, U. M. (2025). Smart School Management: Integrating AI into Instructional Leadership for Academic Excellence. *Iconic Research and Engineering Journals*, 8(11), 47 - 59
- [16] Koshiry, A. E. and Tony, M. A. A., (2025). Enabling smart education: An overview of innovations and challenges in modern learning. *International Journal of Innovative Research and Scientific Studies*, 8(2) 2025, pages: 3184-3200. ISSN: 2617-6548
- [17] Ladipo, M. (2019). The challenge of the registry in meeting global best practices in university administration. Being a presentation at the ANUPA Training Workshop, held 8<sup>th</sup> – 11<sup>th</sup> July 2019, at the national Merit House, Abuja
- [18] Lee, J. S., and Miller, L. J. (2014). Policy Barriers to School Improvement: What's Real and What's Imagined? Center on Reinventing Public Education. CRPE.org
- [19] Mincu, M., (2022). Why is school leadership key to transforming education? Structural and cultural assumptions for quality education in diverse contexts. *Prospects* 52, 231–242 (2022). doi: 10.1007/s11125-022-09625-6

**International Journal of Novel Research in Interdisciplinary Studies**Vol. 13, Issue 2, pp: (9-23), Month: March – April 2026, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [20] Mustafa, M., (2025). Building a Digital Learning Culture; Strategic Educational Leadership in Smart School Ecosystems. *Journal of Research in Educational Management*. Vol. 4, No. 1 (2025), pp. 12-21. ISSN: 2964-5026 (p) 2964-4828 (e). doi: 10.71392/jrem.v4i1.88
- [21] OECD (2021). *OECD Digital education outlook 2021: Pushing the frontiers with AI, blockchain, and robots*. OECD Publishing. <https://doi.org/10.1787/589b283f-en>
- [22] OECD (2023). *OECD Digital education outlook 2023: Towards an effective digital education ecosystem*. OECD Publishing, Paris. <https://doi.org/10.1787/c74f03de-en>.
- [23] Peretomode, V. F. (2019). *Education law and school administration: concepts, principles and cases*. BWright integrated publishers limited, Ibadan, Nigeria. ISBN: 978 978 53135 0 5.
- [24] Sarimin, T., Mahamod, Z., Senawi, A., and Sharmilaaahdevi A/P Nagaretnam (2025). The Role and Challenges of School Leaders in Enhancing the Application of Digital Technology. DOI: <https://dx.doi.org/10.47772/IJRISS.2025.908000351>
- [25] Stwin Sparx (2025). *how to implement school management system: A step-by-step guide*. Stwin Sparx pvt ltd. <https://stwinsparx.com/how-to-implement-school-management-system/>
- [26] UNESCO (2026). *Artificial intelligence and emerging technologies: Artificial intelligence in education*. Retrieved 16/03/2026 from <https://www.unesco.org/en/digital-education/artificial-intelligence>
- [27] Wikipedia (2026). [https://en.wikipedia.org/wiki/Best\\_practice](https://en.wikipedia.org/wiki/Best_practice) – retrieved 13/03/2026.
- [28] Wildman, L., (2006). *Best Practice: Instructional Leadership Through Teacher Evaluation*. In Dembowski, F. L., and Lemasters, L. K., (Eds.), *UNBRIDLED SPIRIT: Best Practices in Educational Administration*. DEStech Publications, Inc., Lancaster, Pennsylvania. PRO ACTIVE PUBLICATIONS
- [29] Zhu, Z., Yu, M., and Riezebos, P. (2016). A research framework of smart education. DOI 10.1186/s40561-016-0026-2. *Smart Learning Environments*