

## Experiences of Agriculture Teachers in Assisting Learners Using the Eswatini Learning Passport

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### Abstract

The growing emphasis on digital learning in Eswatini's education system underscores the need to understand how teachers facilitate learners' engagement with emerging educational technologies. The Eswatini Learning Passport (ELP), developed through a partnership between the Ministry of Education and Training, UNICEF, and Microsoft, was introduced to enhance equitable access to quality learning materials across schools. However, its successful use depends largely on teachers' ability to guide learners effectively. This study explored the experiences of agriculture teachers in assisting learners to use the Eswatini Learning Passport. Specifically, it was guided by the following research questions: (i) How do agriculture teachers guide learners in using the Eswatini Learning Passport? (ii) What challenges do agriculture teachers face when assisting learners to use the platform? and (iii) What strategies can be implemented to enhance effective use of the ELP? A phenomenological research design was employed to capture teachers' lived experiences and practical reflections. Data were collected from five (5) teachers of agriculture selected through purposive sampling from schools across the four regions of Eswatini. Semi-structured interviews were conducted, and the data were analyzed thematically through line-by-line textual analysis to identify emerging themes. Trustworthiness was ensured through credibility, transferability, dependability, and confirmability, while ethical considerations such as informed consent, confidentiality, privacy, and avoidance of harm were strictly observed. The findings revealed that while teachers recognize the educational value of the ELP, its use is constrained by limited access to devices, poor internet connectivity, inadequate digital skills, and lack of institutional support. Teachers mainly provided verbal and informal guidance, often limited by infrastructural and motivational barriers among learners. The study concludes that the ELP holds great potential for enhancing digital learning, but its impact depends on systematic teacher training, improved infrastructure, and school-level leadership support. It recommends targeted capacity building, awareness campaigns, and the integration of ELP into national policy frameworks to strengthen digital inclusion and teaching effectiveness in Eswatini.

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### Introduction

Education systems worldwide are increasingly integrating digital learning platforms to complement traditional modes of instruction and improve access to quality education. In this evolving context, teachers are no longer merely transmitters of knowledge but facilitators who



guide learners in navigating digital resources and constructing knowledge autonomously (Laurillard, 2013). The concept of teacher assistance in digital learning environments therefore, embodies the pedagogical guidance, scaffolding, and motivation that teachers provide to help learners effectively use technology for learning. At the same time, effective digital learning in low-resource contexts depends on more than the availability of technology. It requires investment in infrastructure, teacher competence, supportive leadership, and equity of access (Van Dijk, 2020).

Within this digital transformation agenda, the Eswatini Learning Passport (ELP) has emerged as a key innovation designed to bridge learning gaps and expand educational opportunities. The ELP is an online and offline digital platform developed by UNICEF, Microsoft, and the Ministry of Education and Training, providing curriculum-aligned learning materials, interactive content, and assessments accessible via smartphones, tablets, or computers. It was designed to support continuity of learning during and beyond the COVID-19 pandemic by enabling both teachers and learners to access resources anytime and anywhere (UNICEF, 2023). In essence, ELP integrates technology, pedagogy, and content into a unified digital space that enhances learner engagement while offering teachers a structured tool for lesson preparation and support.

Contextually, Eswatini's education system has embraced the ELP as part of its broader strategy to realize Sustainable Development Goal 4 (SDG 4) on inclusive and equitable quality education (Kingdom of Eswatini, 2022). The platform has been introduced across several secondary schools, including those offering agriculture, to supplement classroom instruction and promote self-directed learning. However, while the initiative promises to democratize access to education, its effective implementation depends largely on teachers' ability and readiness to assist learners in using it. Early observations indicate disparities in teachers' digital competence, access to devices, connectivity, and administrative support, which affect how effectively they can guide students (Hennessy et al., 2022).

Against this backdrop, the present study explores the experiences of agriculture teachers in assisting learners use the Eswatini Learning Passport. It examines how teachers guide learners, the challenges they face in the process, and the strategies they employ or propose to enhance the platform's usability. The study contributes to a growing body of literature on digital learning in sub-Saharan Africa by highlighting how contextual factors such as school culture, infrastructure, and teacher preparedness shape the success of technology-driven learning reforms. Ultimately, the study provides insights into how Eswatini's digital learning initiatives can be strengthened to support both educators and learners in the evolving landscape of 21st-century education.

### **Research Questions**

1. How do agriculture teachers guide learners during use of Eswatini Learning Passport?
2. What challenges do agriculture teachers face when assisting learners during use of Eswatini Learning Passport?
3. What strategies can be implemented to enhance the effective use of the Eswatini Learning Passport in schools?

### **Methodology**

This study employed a phenomenological research design to explore the lived experiences of agriculture teachers in assisting learners with the Eswatini Learning Passport (ELP). The

approach allowed for a deep understanding of how teachers perceive, interpret, and enact their roles in guiding learners to use the digital platform. The research focused on teachers' reflections, practices, and challenges encountered in integrating the ELP into their teaching. Data were collected through in-depth semi-structured interviews, which provided a flexible yet focused avenue for gathering detailed insights. Five agriculture teachers from different schools across Eswatini participated in the study. They were purposively selected based on their direct involvement in helping learners use the ELP, ensuring that participants possessed rich and relevant experiences. These participants were traced through the agriculture inspectors. The interviews were conducted face-to-face by the researchers at the participants' schools in settings that were comfortable and private. The interview guide was developed from the study's research questions, emphasizing three core areas: teachers' guidance to learners, challenges encountered, and strategies for improving the use of the ELP. Each session lasted between 30 and 45 minutes and was recorded with the participants' consent to preserve accuracy.

To ensure the quality and trustworthiness of the research, several strategies were applied. Credibility was enhanced by engaging directly with participants, using their actual words to support the findings, and validating interpretations through feedback. Transferability was promoted by providing rich descriptions of the research context and participants to enable others to determine the applicability of the findings in similar settings. Dependability was maintained through consistent documentation of all procedures, ensuring that the process was logical and traceable. Confirmability was strengthened by maintaining records of interviews, notes, and reflections to demonstrate that the results were based on the participants' accounts rather than researcher bias. Ethical considerations were observed throughout the research process. Participants were informed about the purpose of the study, their rights, and the voluntary nature of participation. Each participant provided informed consent before the interviews began. Confidentiality and privacy were safeguarded by using pseudonyms and omitting identifying details. Data were securely stored and only accessible to the researchers. Respect for participants' autonomy was upheld by allowing them to withdraw or decline to answer any question without consequence. Every effort was made to avoid harm, ensuring that the interviews were conducted in a respectful and non-intrusive manner.

The data were analyzed qualitatively using thematic analysis. Interview transcripts were carefully reviewed line by line to identify recurring ideas and significant statements that captured the essence of teachers' experiences. Patterns and themes were then organized to reflect the major findings of the study. The analysis was both descriptive and interpretive, allowing the voices of the participants to guide the development of key themes while maintaining the integrity of their original expressions.

### **Findings and Discussions of the Study**

The presentation of the findings for the study were guided by the research questions of the study.

#### ***Guidance provided by agriculture teachers to Learners during use of Eswatini Learning Passport***

The data revealed that teachers' guidance to learners in navigating and utilizing the Eswatini Learning Passport (ELP) is influenced by access barriers, teachers' own confidence with technology, and school culture. While some teachers made deliberate efforts to integrate the ELP in classroom discussions and lesson preparation, others offered minimal or no guidance, largely due to infrastructural constraints and lack of institutional sensitization.

### Indirect and Verbal Guidance during Lessons

Some teachers reported that their guidance occurs mostly during classroom interactions, where they verbally encourage students to access the ELP content on their own. For example, one teacher stated: *“Most of the time when teaching I tell them that you will find a question which says this in Learning Passport... it is not easy as they do not carry phones to school.”* This demonstrates that teachers attempt to integrate ELP references within their face-to-face teaching, even though students may not immediately apply this guidance due to lack of devices. The teacher uses ELP as a supplementary resource, pointing learners toward relevant questions and topics that align with the syllabus. This form of guidance is largely instructional and motivational, serving to raise awareness about the platform rather than ensuring direct learner engagement. It highlights teachers’ willingness to bridge digital learning with traditional teaching despite practical limitations. According to Laurillard (2013), teachers often act as mediators who translate digital resources into pedagogical experiences, even in low-tech environments. Verbal guidance allows educators to bridge traditional instruction with emerging digital tools. Similarly, Redecker (2017) emphasizes that digital competence among teachers includes their ability to promote awareness and scaffold learners’ engagement with online platforms despite contextual barriers.

### Encouragement and Peer Assistance

In some cases, teachers go beyond verbal instruction to encourage learners to create their own accounts and explore the platform independently. One participant explained: *“I do encourage learners to use it and even suggested that they create their own passwords. Those who try it get helped.”* Here, the teacher assumes a facilitative role, empowering learners to take responsibility for their own access. This suggests that some educators recognize their role as guides and motivators, helping learners cultivate digital autonomy. However, the same teacher acknowledged that only a few students followed through as some of them do not bother themselves indicating that motivation and consistent follow-up are needed for sustainable learner engagement. This approach reveals a shift toward learner-centred digital pedagogy, but it remains limited by learners’ self-motivation and access barriers. This approach demonstrates a move toward learner autonomy, where teachers act as facilitators rather than content deliverers. Davis (2018) argues that fostering digital autonomy among students is a hallmark of effective online learning environments, as it builds motivation and self-regulation. However, such initiatives require sustained teacher follow-up and institutional support to achieve long-term learner engagement (Hodges et al., 2020).

### Absence of Guidance due to Access and Awareness Gaps

The use of the passbook is limited by the access to gadget such as smartphones. One teacher admitted not having introduced the ELP to learners at all: *“I never tried to introduce it to them because most of the students I teach do not have access to smartphones.”* This absence of guidance underscores the digital divide within schools. Teachers are often aware of the ELP’s value but refrain from integrating it due to equity concerns, fearing to disadvantage learners who lack access. Thus, pedagogical guidance is contingent upon technological feasibility. This absence of guidance underscores the digital divide - a persistent issue in Sub-Saharan Africa where ICT adoption is hindered by unequal access to resources. Van Dijk (2020) highlights that digital inequality affects not only access but also usage opportunities and motivation. Tichavhangana and Mupfiga (2022) similarly note that rural schools in developing contexts often lack the infrastructure necessary for equitable digital participation.

### Practical Demonstrations and Visualization

The teachers are also useful in providing practical demonstrations and visualization. One participant described using the ELP to display multimedia content directly in class:

*“I used my phone to show them pictures that were not available in the books. If the learners see things that you are talking about in the phone and see that it exists, this boosts their confidence.”* This illustrates active demonstration-based guidance, where the teacher bridges abstract learning with visual evidence from the ELP. It aligns with experiential learning principles, helping learners *see* rather than merely *hear* concepts. This practice not only enhances engagement but also validates the teacher’s mediating role between digital content and learner comprehension. However, such guidance is limited by device size and availability. One participant stated that; *“My phone is very small so learners have to come to the front in groups.”* This reflects experiential and visual learning, where teachers use digital media to enhance conceptual understanding. Kolb (2015) emphasizes that learning becomes meaningful when learners engage through concrete experiences and reflective observation. Similarly, Mishra and Koehler’s (2006) TPACK framework posits that teachers who integrate technology effectively bridge content and pedagogy, enabling deeper learner engagement.

#### *Need for Administrative and Institutional Support for Learner Guidance*

Across all the interviews, teachers noted that school management and administrators were unaware of the ELP, leaving them unsupported in guiding learners effectively. As one teacher from one of the schools stated: *“School administrators are not aware of the platform... they cannot support something that they do not even know.”* Similarly, another teacher from another school reiterated that the lack of awareness and structured introduction hindered both teacher guidance and learner usage. Guidance efforts are thus individualized rather than systemic. Without formal school-level training or policy direction, the teachers’ guidance remains inconsistent and dependent on personal initiative. Institutional leadership is essential for sustaining digital learning initiatives. Fullan and Quinn (2016) argue that successful technology adoption depends on leadership-driven systems change, where school heads champion innovation and provide enabling conditions. Similarly, UNESCO (2020) highlights that digital transformation in education must be institutionalized through coordinated policy, capacity building, and infrastructure support.

#### ***Challenges agriculture Teachers Face when Assisting Learners during use of Eswatini Learning Passport***

The teachers’ narratives revealed that their efforts to assist learners in using the Eswatini Learning Passport (ELP) were hindered by multiple, interrelated challenges. These challenges stemmed from technological, infrastructural, institutional, and learner-related constraints that limited both access and effective utilization. While most teachers recognized the platform’s educational value, they faced obstacles that made learner support inconsistent and frustrating.

#### *Limited Access to Devices and Internet Connectivity*

Across all schools, teachers identified lack of smartphones, computers, and reliable internet access as the most critical barrier to assisting learners. Many students either did not own smart devices or could not afford data bundles to log in. A participant from one of the schools lamented that: *“Many of the students complain that they do not have data bundles. Some complain that they do not have smartphones. Even though some have the phones, they do not take it seriously.”* Similarly, a teacher from another school registered that: *“Network is a major problem because during the day you find that it is not working... All the teachers in the school use their own devices, there are no school devices like iPad for helping the teachers.”* Without access to stable internet and devices, teachers are unable to conduct demonstrations, follow up on learners’ progress, or guide them practically through the platform. This creates digital

inequity, where access becomes a privilege rather than a standard educational resource. This mirrors findings by Trucano (2021), who observed that low-resource schools in Africa face significant barriers to digital learning due to device shortages and poor connectivity. Hennessy et al. (2022) also found that sustainable e-learning requires infrastructural investments in electricity, bandwidth, and devices to bridge the rural-urban gap.

#### Low Learner Motivation and Engagement

Several teachers expressed frustration that learners show low interest and participation in using the ELP, even when guidance is provided. One participant explained that: *“Percentage of students using the platform is very low... Even though some have phones, they do not take it seriously.”* Another participant shared that: *“Even though there are those that do not use it at all. There is a difference between those who use it and those who do not.”* This pattern suggests that teacher guidance alone is insufficient to sustain learner engagement in the absence of motivational strategies and structured school-level encouragement. Teachers face the dual burden of promoting both awareness and attitude change toward digital learning. This aligns with Deci and Ryan’s (2000) self-determination theory, which posits that intrinsic motivation depends on autonomy, competence, and relatedness. Inadequate digital access and support diminish learners’ sense of control, thereby reducing motivation. Bozkurt and Sharma (2020) also emphasize that meaningful engagement in online platforms requires continuous teacher encouragement and a sense of belonging.

#### Teachers’ Own Digital Skills and Confidence Gaps

A few teachers openly admitted that their limited ICT competence affected their ability to guide learners confidently. A teacher from one of the schools acknowledged: *“If you do not have the skills of computer literacy you easily give up... It is hard to log in as it requires you to have a password that always changes.”* Similarly, another teacher reported login frustrations. *“It is not friendly especially logging in and signing up... sometimes I log in next time I fail to log in.”* Teachers’ digital literacy disparities create inconsistency in learner assistance. Those with stronger ICT backgrounds tend to explore and assist learners better, while others avoid guiding students altogether due to fear of failure or embarrassment. Tondeur et al. (2018) affirm that teachers’ technology self-efficacy directly influences their classroom ICT integration. Similarly, Instefjord and Munthe (2017) found that confidence gaps among teachers reduce their likelihood of innovating with technology in instruction.

#### Lack of Institutional and Administrative Support

Teachers consistently emphasized that school management and leadership are largely unaware of the ELP, leaving teachers unsupported in their attempts to assist learners. As one teacher from one of the schools explained that: *“The school administration does not know about the platform. We have not even discussed it as a school in meetings.”* Another teacher shared that: *“The school administrators are not aware of the platform... they cannot support something that they even do not know.”* This lack of institutional awareness and policy integration isolates teachers in their digital education efforts. Without management advocacy, ELP use remains a voluntary, individual effort rather than a coordinated school initiative. Consequently, teachers lack formal support mechanisms for learner guidance and troubleshooting. Leithwood and Jantzi (2021) assert that distributed leadership and administrative vision are vital for sustaining digital transformation. OECD (2021) also underscores that whole-school approaches, rather than individual initiatives to ensure long-term integration of digital learning tools.

### Platform Design and Navigation Limitations

Teachers also noted that the ELP's rigid design creates challenges during learner guidance. Learners often struggle to proceed through content because they must complete certain activities before moving on. One participant observed that *"You have to answer questions before you move to the next lesson... it misleads the learners and confuses teachers."* Similarly, another teacher noted that: *"If you leave it without finishing, it will not allow you to start where you ended... You have to start all over again."* These structural barriers increase learners' frustration and make it harder for teachers to provide flexible, adaptive guidance. The platform's sequential nature undermines spontaneous learning and independent navigation - essential features for differentiated learning. Nielsen (2012) argues that usability and flexibility are fundamental principles of good user interface design. In education contexts, Al-Fraihat et al. (2020) found that navigation simplicity and user autonomy are key determinants of satisfaction and sustained use in digital learning systems.

### Time Constraints and Workload Pressures

Teachers also cited limited time to assist learners individually. Between lesson preparation, marking, and administrative duties, dedicating time to coach students on the ELP becomes unrealistic. *"As most of the time you have access to students during learning time... percentage of students using the platform is very low"* said one teacher. Since ELP use often happens outside formal class hours, teachers lack structured periods to supervise learners' digital engagement. This creates a time-use dilemma, where teachers must balance traditional classroom teaching with the demands of integrating digital learning tools. According to Ertmer and Ottenbreit-Leftwich (2010), integrating new technologies often increases workload in the short term, as teachers must redesign lessons and support learners simultaneously. Trust (2017) adds that unless teachers receive time allowances or reduced administrative load, sustained digital engagement remains difficult.

### Lack of Training and Continuous Professional Development

Teachers expressed a strong need for training workshops to strengthen their competence in supporting learners effectively. At one school, one participant stressed that: *"If the teacher is not trained, there is no way that he could help the learners to engage with the Learning Passport."* Teachers' awareness of their own professional limitations reflects a positive attitude toward improvement. They acknowledge that systematic training, mentoring, and peer-sharing are necessary to improve guidance and support to learners. Darling-Hammond et al. (2017) emphasize that professional development is most effective when it is ongoing, collaborative, and linked to practice. Similarly, Kafyulilo et al. (2016) highlight that teachers in African contexts require structured ICT professional learning communities to sustain innovation and confidence.

### ***Strategies for Enhancing the Use of the Eswatini Learning Passport***

Agriculture teachers expressed a shared belief that while the Eswatini Learning Passport (ELP) has significant educational potential, its effectiveness can only be realized through improvements in access, design, training, and institutional support. The findings revealed that teachers have thought deeply about how to make the platform more usable and meaningful for both teachers and learners.

### Strengthening Teacher and Administrator Training

All participants emphasized the importance of capacity-building workshops to equip teachers and school leaders with the skills and confidence to integrate the ELP into teaching and learning. Teachers argued that without structured training, many educators remain unaware or

hesitant to use the platform. One participant explained that: *“Workshops must be provided so that teachers are trained and taught on how to operate the platform and its importance and relevance.”* Another teacher stressed that: *“Teachers must be taught how to use the Learning Passport and how it helps learners. In clusters, teachers must be trained on the Learning Passport.”* Teachers recognize that digital competence and awareness are foundational to the success of ELP implementation. Regular workshops, mentorship programmes, and integration of ELP orientation into teacher induction processes are essential. Training must also target school administrators, since leadership understanding influences institutional support. Redecker (2017) argues that digital competence frameworks for educators should include leadership engagement and peer mentoring. Tondeur et al. (2018) also affirm that training programs combining pedagogy and technology lead to more confident digital practitioners.

#### Improving Infrastructure, Connectivity, and Device Availability

Participants consistently highlighted the need for technological support including access to devices, Wi-Fi, and reliable electricity to make the ELP more functional. *“The schools must ensure that Wi-Fi is available, and projectors to project the objectives”* said one teacher. Another teacher added that *“It would be better if the school or government provided teachers with smartphones, laptops, or iPads for lesson delivery.”* Improving the digital infrastructure in schools is central to enhancing ELP use. Teachers view access to devices and connectivity not as a luxury but as an educational necessity. This theme highlights the need for policy-level investment by the Ministry of Education and partner organizations (e.g., UNICEF, RSTP). UNESCO (2020) stresses that equitable access to ICT infrastructure is a precondition for inclusive digital education. Hennessy et al. (2022) likewise found that adequate technical support is a prerequisite for integrating e-learning effectively in developing countries.

#### Increasing Awareness and Institutional Integration

Teachers expressed concern that many schools and administrators are unaware of the ELP, resulting in minimal institutional promotion or accountability. They recommended official sensitization campaigns and integration of ELP use into school programs and national education policies. *“It needs to be introduced to the school administrators, so that they are aware of the platform... Now they cannot support something that they even do not know”* explained one teacher. Similarly, one teacher noted that: *“School management must be taught about the importance of the Learning Passport, so that they encourage teachers and learners to use it... Ministry of Education and Training must raise awareness amongst learners.”* Institutional integration is key for sustainability. Awareness should extend beyond teachers to include principals, inspectors, ICT officers, and parents. Once formally recognized as part of the curriculum support ecosystem, the ELP can gain legitimacy and consistency across schools. Fullan and Quinn (2016) emphasize that leadership alignment and clear institutional vision are essential for sustaining digital initiatives. Similarly, OECD (2021) recommends embedding digital tools within curriculum frameworks to promote systemic adoption.

#### Enhancing the Platform Design for Flexibility and User-Friendliness

Teachers recommended several improvements to the platform’s design, navigation, and interactivity to make it more engaging and user-friendly. Common suggestions included enabling offline access, skipping questions, adding multimedia resources, and allowing topic flexibility. One participant suggested that: *“You should be able to move back and forth, moving from one topic to another without restrictions.”* Another suggested that: *“In the topics, the question section must be separated from the main information... If a learner wants to test themselves, they can open the question section separately.”* Teachers desire a more flexible, learner-driven platform that supports self-paced learning and research-style navigation. User

interface redesign, including download options, visual aids, and offline access, would significantly increase engagement and usability in low-connectivity contexts. Nielsen (2012) asserts that interface flexibility improves learning flow, while Al-Fraihat et al. (2020) demonstrate that perceived ease of use predicts long-term engagement in educational platforms.

#### Incorporating Multimedia and Interactive Content

Participants strongly recommended the inclusion of visual, audio, and video materials to make the ELP more engaging, especially for agricultural education, where learners benefit from practical and visual demonstrations. *“More pictures, videos, and audios must be included as learners learn by seeing... downloadable files must be added.”* emphasized on teacher. Another teacher, explained how showing visuals increased learner understanding:

*“If the learners see things that you are talking about in the phone... this boosts their confidence and makes them understand better.”* Teachers view multimedia integration as a bridge between theoretical and practical learning. Incorporating visual and audio materials (e.g., demonstrations, farm processes, and animations) can make digital learning more inclusive and appealing, especially for learners with different learning styles. Mayer’s (2014) cognitive theory of multimedia learning shows that combining verbal and visual cues enhances comprehension. Kolb (2015) also highlights that interactive multimedia deepens experiential learning and retention.

#### Promoting Offline Accessibility and Downloadable Content

Many teachers, particularly from rural schools, stressed that offline access is critical to ensure equitable use of the ELP. One participant shared that: *“I tried to look for ways in which I can download the content... some applications have an option to view the files offline, but here when you do not have the network there is no way you get help.”* Another one said that: *“It may be demotivating that you have to answer the questions by force... I don’t know if it is possible to make the information downloadable in such a way that you can print it out.”* Offline functionality is a high-priority enhancement that would allow learners and teachers to access previously viewed or downloaded materials without an internet connection. This aligns with Eswatini’s rural education needs and supports continuity in resource-limited environments. Trucano (2021) argues that hybrid and offline options ensure inclusion for low-connectivity contexts. Similarly, UNESCO (2020) recommends developing offline-compatible learning platforms to guarantee equitable digital participation.

#### **Conclusions**

This study revealed that while agriculture teachers in Eswatini recognize the educational value of the Eswatini Learning Passport (ELP) in enhancing lesson delivery, learner autonomy, and curriculum access, its use remains inconsistent and constrained by contextual realities. Teachers’ engagement with the platform is shaped by limited digital skills, inadequate infrastructure, and the absence of institutional support. Most guidance provided to learners was verbal or incidental, reflecting teachers’ willingness to bridge traditional instruction with emerging digital tools despite practical limitations. Therefore, the findings highlight that the successful integration of digital learning in schools is not simply a matter of providing technology, but of cultivating teachers’ digital confidence, strengthening administrative support, and aligning school culture with innovation. Teachers’ experiences demonstrate that when professional capacity and infrastructure are lacking, even well-intentioned initiatives risk reinforcing rather than reducing educational inequalities.

More broadly, the study underscores that technology integration in education is a systemic, not individual, process. The challenges and strategies described by teachers revealed that digital

transformation requires coherent leadership, sustained training, and context-sensitive design. The usability issues of the ELP, such as rigid navigation and dependence on internet connectivity, suggest that technological solutions must be human-centered and adaptable to resource-limited environments. What we can learn from these findings is that digital learning initiatives like the ELP can only achieve their intended impact when supported by a holistic ecosystem, one that empowers teachers, equips learners equitably, and embeds innovation into institutional structures. The ELP therefore serves as both a promising innovation and a diagnostic lens through which the readiness of Eswatini's education system for digital transformation can be understood and strengthened.

### Recommendations

Based on the findings and conclusions, the following recommendations were deduced:

1. The Ministry of Education and Training should formally adopt the ELP as part of Eswatini's digital learning policy framework. Policy integration would ensure that its use is not optional or fragmented but systematically embedded within curriculum delivery, inspection, and assessment processes.
2. The Ministry of Education and Training should provide structured training workshops organized at national and cluster levels to build teachers' and administrators' capacity in digital pedagogy, online learner facilitation, and ELP navigation. Regular refresher courses and mentorship programs would enhance teachers' digital confidence and sustain long-term engagement.
3. Schools in Eswatini require reliable internet connectivity, electricity, and access to digital devices such as tablets, projectors, and laptops. The Ministry, in collaboration with partners like UNICEF and RSTP, should consider subsidizing data costs and expanding Wi-Fi coverage, particularly in rural schools, to ensure equitable access for both teachers and learners.
4. The developers of EPL should improve the platform's user interface by introducing offline access, flexible navigation (allowing topic skipping and backtracking), and integration of multimedia content such as videos, diagrams, and audio explanations. These adjustments would improve usability and align with learner-centred design principles.
5. School administrators and inspectors in Eswatini should be sensitized about the importance of the ELP to ensure leadership buy-in and accountability. Awareness campaigns targeting teachers, learners, and parents can help build a shared culture of digital learning and collective responsibility for ELP use.
6. Agriculture teachers should incorporate ELP-based activities into assignments, projects, and classroom discussions to encourage consistent use. Additionally, strategies such as peer mentorship, recognition programs, and after-school digital clubs can motivate learners and foster collaboration in technology-supported learning.

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