

Virtual Learning Apps: Best Instructional Leadership Practices in the Digital Age Efforts to Improve Student Learning Outcomes

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ABSTRACT

The article aimed to understand virtual learning applications, the best education practices in the all-digital era. The author believes that one element that leads to successful learning in the digital era is using some virtual learning applications. The researchers have explored many scientific publications looking for evidence of recent studies on how to benefit virtual learning from national and international publication literature databases. So that we can use the data to answer the problem of this study, first we try to explore the data by examining it to get an in-depth understanding of the clock such as data evaluation, data coding, in-depth interpretation, and good abstraction in answering the core problems of the study. After in-depth study and discussion, the data show that we are finally convinced that several applications that excel in virtual learning have been recommended by several education and technology experts due to their effectiveness and innovative power to provide best practices to improve student learning or learning outcomes. They added that typical learning in the digital era is the ability to choose and use several digital applications that have advantages in transforming learning in the 21st-century era. We are sure that the result and new evidence of this project would be used as input to develop similar studies in the future.

Keywords: *Virtual Learning, Best Instructional Leadership, Students Learning Outcome*

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INTRODUCTION

One of the essential elements in teaching is using several technological applications to support best practice teaching implementation efforts to improve student learning outcomes at the end of their learning period (Maghool et al., 2018). The problem is that not all teachers can understand, analyze, and apply several technologies that have been used in the world of education to increase the productivity

of the tasks of teachers in schools (Wrahatnolo, 2018). This is very reasonable because in an era when the majority of teachers today who are working they are not a product of the latest technology as they have to master today so that they are the best in their task of educating students in order to get the best learning output (Senge et al., 2012). So for that, the authors can be researchers and policymakers, of course, want the output of education in schools to continue to increase along with the flood of various learning support that can be obtained both online and offline. Experts say if teachers and school leaders understand and apply several learning applications, they have made the application the spirit of their teaching to support students' learning so that the results they achieve are optimal.

It is a reality outside the country that has previously received enlightenment on how to solve every problem they face (Pinker, 2018). Returning to the issue of Indonesia, looking at the existing data, the results of the teacher's test show that the capacity to use several multimedia or virtual learning applications is allegedly still deficient, even below the average ability limit of teachers at the international level. This is not news that should be filmed (Fisher and Frey, 2010; Sudarmo et al., 2021). However, this news has become a whip and a slap for educators to better prepare themselves to face all the challenges of work, namely helping students increase learning in terms of knowledge and psychomotor skills (Obrez et al., 2011). Today in the era of all automation, of course, teachers do not have to be fired so that they can identify, analyze, and be able to use several applications that have been proven through previous studies to be able to improve student selection results because effectiveness and logic have indeed been very innovative to provide high productivity maximum (Smaldino and McElreath, 2016).

Study evidence proves that instructional leaders who successfully carry out educational tasks are likely to have instructive organizational preparation when engaged in educational prospects (Horng and Loeb, 2010). They understand that learning must be given fundamental concerns, not just calm down. While various things revolve around improving student learning and learning outcomes (Scrivener, 2005). The worry is high if, in accompanying students, they cannot do much so that the preparation of teaching equipment is mature (Girard et al., 2013). Including mastery of digital applications in each session. Instructive, they have to understand what is going on in class. Without this concern, they cannot see the added value from solving problems experienced by education and upbringing. Such is the weight of the task of educational leadership.

On a few days, teachers and students will see them walking in dark alleys, unable to do more for student work (Xiang, 2018). Instructional leadership must also observe what other instructors are doing. Instructive pioneers need to learn personally with students, making improved teaching and teaching strategies with the help of technology as a technique to understand the instructor's thinking (Gregory and Chapman, 2012). To prepare the basics of how to help students with various digital applications to make them fit the curriculum. Whitaker et al., (1997) recognizes many critical capacities for beneficial encouragement in helping students become technologically literate (Rowntree, 2015). Pioneers of effective instructive must be willing to provide resources that never stop improvisation. Knowing the characteristics and weaknesses of instructional leadership assets alone is not enough; they should, in the same way, see students' desire to be considered and appreciated for doing well and professionally.

From experience, educators search for simple little bits of praise and affirm that we help them as resource providers. Influential instructive trailblazers should be informational resources. Teachers rely upon their bosses as information resources on the most recent things and feasible valuable practices fixed on instructive programs, solid informational systems, and evaluation issues. For example, educators drop by the office step by step to search for the best method for showing up at a not understanding child's thoughts. Effective educational trailblazers should be incredible communicators. They need to pass on crucial feelings concerning learning, similar to the conviction that youths can learn. Effective instructive trailblazers need to make an evident presence. This focused on learning targets, showing learning practices, and arranging tasks and activities in the direction. The more significant part of the day is burned by focusing on these objectives as an executive. For example, we progressed to the little assembling direction in examining and math by giving the resources, explaining how it works, and filling in as a model for those instructors who fought with the thought.

Moreover, the instructive trailblazer needs to have state of the art data on three preparing areas: instructive arrangement, direction, and assessment (DuFour, 2002). Instructive arrangement. Bosses should be acquainted with the changing beginnings of instructive arrangement, informational strategies for thinking and feelings, curricular sources and battle, and instructive arrangement appraisal and improvement. Bosses should know about different teaching models, the theoretical clarifications behind taking on a particular appearance model, and the hypotheses stowed away the development-based learning environment (Johnson, 2002). Executives should know about student assessment guidelines, examination systems with an emphasis on elective assessment strategies, and evaluation that intends to foster student learning. Private these three data areas is a significant understanding of how individuals learn. It may not be an embellishment to recommend that a boss is not ready if the individual does not have a significant cognizance of human learning.

The use of learning media such as virtual media applications is a significant factor in improving student learning outcomes because it can increase student motivation to learn. This is none other than because the virtual learning media is very supportive in developing one's knowledge, especially for students in the learning process. According to (Huang et al., 2015), one of the causes of the problem of the low learning outcomes of children is the inability of teachers to involve virtual learning applications in the classroom. The results of this study indicate that several factors influence low learning outcomes. These internal factors include students not being interested in mathematics, weak basic numeracy skills, a common understanding of concepts, and not understanding symbols.

Virtual applications are media learning that can improve learning outcomes, especially now that students are significant and live in a world of applications. With learning media, the quality of learning increases because teachers are active in providing material to students, but students can also be active in the classroom and involved in the learning process so that students more readily accept the material presented by the teacher. Another reason is that learning media is essential for teachers and students because learning media has an important role in increasing the learning interest of elementary school students, especially in low grades, because low-grade students are not yet able to think abstractly, so the material taught by the teacher needs to be visualized in a more accurate/concrete form.

The medium business is learning, and ongoing investigation in mental science has made an overflow of data about human learning. Chiefs should know and grasp

these theories to fill in as a resource in redesigning instructive sufficiency. For example, suppose a couple of students cannot examine and create at an appropriate level. In that case, the head as instructive trailblazer should track down ways of decreasing the issue by supporting instructors' applicable procedures, circulating resources and materials, visiting homerooms frequently, giving contributions on instructive strategies and techniques, and using data to focus in thought on (Bean and Lillenstein, 2012).

Based on the explanation of the problems above where we have many virtual learning applications at this time and the data proves that there are still many education drivers in the country who may not understand, let alone apply various learning application models in their academic units so that efforts to increase student learning outcomes to the maximum can increase. The data shows that in other parts of the world, in other educational contexts, they have actually been able to get out of a period of slipping learning, but they can now maximize the various virtual applications that exist to improve their academic learning achievement. Therefore, it is not wrong for this study to highlight how instructional leadership is supported by various virtual or virtual learning applications, considering that today's education is carried out in an era of using technology applications. That is, among other things, the primary purpose of this study we carry out.

METHOD

We reiterate that this review aims to gain an in-depth understanding of virtual learning applications, which are the best teaching leadership practices in the digital era as part of efforts to improve the quality of student learning (Lewis, 2015). First, we formulate the problem; then, we search the data online with the help of the Google Scholar search engine in well-known national and international publications that are active publishers of online or virtual teaching applications, which are the best practices for teaching leadership in the era of all-digitalization. After further data collection, we studied it to obtain valid data capable of answering the problems and hypotheses of this study, which began with coding the data, we also carried out a critical evaluation under the phenomenological approach, and our data were interpreted to obtain several study evidence that answered the problem. This study limits itself to qualitative data with a time constraint from 2010 to 2021, and we design reporting this data in descriptive qualitative form (Maxwell, 2012). In searching the data, we use Google Scholar, where the keyword is relevant to the context of the discussion. Likewise, our report is designed in descriptive qualitative data paper format by adhering to similar studies. Finally, we have successfully reported our data (Bradshaw and Stratford, 2010).

RESULT AND DISCUSSION

Innovation in teaching and learning with technology

As innovation becomes more affordable and extensively accessible, worldwide instruction can be more comprehensive of understudies from low-pay and, in any case, private networks (Kwet, 2019). Computerized models can adjust worldwide, gaining potential open doors for bunches barred from face-to-face trade programs, which are accessible to just a tiny part of understudies. On the other hand, advanced worldwide trade can be open to government-funded school regions serving low-pay understudies, just as to geographically disconnected districts without successive diverse contact. A carefully associated world requires various types of education. Today, individuals are presented to various correspondence styles and arrangements, including instant

messages, 280-character tweets, casual business messages, and mixed media. Albeit conventional composing guidance stays fundamental, without help from anyone else, it lacks ready understudies to effectively impart in school, the work environment, and day-to-day existence (Boot et al., 2019).

To meet the prerequisites of contemporary proficiency, instructors should resolve new inquiries concerning the web understudy security and the dependability of data (Asad et al., 2021). The web is progressively an essential wellspring of data about contemporary social and policy-centered issues, especially for youthful understudies, yet online sources fluctuate broadly in their validity. Understudies should foster the ability to distinguish precise and solid data on the web. Worldwide advanced trade programs give a fantastic chance to rehearse proper internet-based conduct and foster computerized abilities helpfully in an academic setting. More homerooms than any other time in recent memory have innovation, including web networks and equipment. Be that as it may, scholastically thorough, innovation-coordinated educational programs are absent. The Global Scholars program illustrates rich, applicable substance that utilizes the innovation many schools have set up (Morris et al., 2013). Like most worldwide advanced trades, it requires just a PC or tablet with sufficient web association.

Advanced learning tools

For understudies to make and share unique substance and participate in the significant discussion, it is essential to have an adequately prepared and open internet-based climate (Morris and Kuratko, 2014). While some advanced trade programs utilize more than one stage, most depend fundamentally on offbeat correspondence in e-study halls or live videoconferences. To a great extent, the decision is subject to program length, number of associated areas, and planned learning results. e-Classroom stages work best to associate various areas and support correspondence among understudies in various time regions. They likewise can uphold interactive media, empowering the trade of composing, photographs, recordings, and other advanced activities.

This manages the cost of chances to foster computerized proficiency and relational abilities (Picard, 2011). Video conferences, which give a constant discussion and a unique feeling of quickness, are appropriate for momentary projects or the continuous association of two gatherings. They additionally permit understudies to rehearse oral discussion and show abilities. Approaches can be consolidated. Worldwide Scholars utilizes an e-study hall stage and urges homeroom instructors to organize Skype calls so understudies can encounter the quickness of live correspondence. Program architects choose to make their foundation or lease space on a current stage. An essential thought is the client's experience for one decision. It should be guessed that beneficial stage highlights might change as enlistment develops and programs advance. The ability to gather information involving the advanced stage for observing and assessment ought to be thought of, just as the prompt and long haul expenses of stage improvement and upkeep (Miles, 2015).

Digital learning platform

The e-Classroom promotes discussion. Understudies make and offer unique substance in global scholars' e-study hall conversation sheets, and different understudies react (Huang et al., 2015). The trade underneath outgrew a Global Scholars task about city life in the advanced age. A Warsaw understudy analyzed her

regional government's site to check whether she could further develop it: Understudies post in this sort of conversation string for each global scholar task. Every conversation board can get many posts. "Conversation" in the e-study hall alludes to the complete insight of finishing tasks, posting unique work, finishing a subsequent movement to develop understanding, looking into posts from different urban areas, reacting to worldwide friends, and inquiring for reactions to one's work. The educational plan is organized around this full pattern of commitment, which takes at least two hours out of each week (Schmitt, 2018). Finishing a task without posting in the e-homeroom misses global companions' fundamental contribution stage.

Their posts and tasks fill in as important messages for understudies regarding different urban communities and the worldwide theme they are contemplating (Adamu, 2017). In their homeroom discussions, instructors are urged to audit presents from different urban areas. The e-homeroom correspondence style underscores content, jargon, and language structure while tolerating a portion of the familiarity of online correspondence. Worldwide Scholars empowers educators from all branches of knowledge to focus on the profundity of thoroughly considered excellent language structure; the point is to assemble understudies' trust in communicating their thoughts and suppositions in the conversation sheets and different settings. This approach has straightforwardly molded Global Cities' understudy learning results, incredibly advanced proficiency, and language correspondence (King et al., 2016). For instance, pointers for the language correspondence result recognize formal and casual, and among computerized and nondigital correspondence. Utilizing Multimedia A post in an e-homeroom conversation load up might comprise exclusively of composed suppositions or perceptions about the task.

In any case, understudies likewise have the chance to insert mixed media straightforwardly inside the conversation, going from a solitary photo to a narrative video or 3D plan project. This limit is a fundamental element of the Global Scholars stage and affects commitment and understudy learning results (Ma et al., 2017). Examination of conversation strings shows that the computerized study hall rewards understudy utilization of mixed media. Posts with even a solitary photo and significant outcome in more reactions, more profound contemplations, and longer conversation strings. Instructors report that media correspondence is drawing in that it persuades even difficult to-arrive at understudies. Utilizing computerized instruments with reason, rather than essentially figuring out how they work, is primary to building advanced education (Demchenko et al., 2013).

Hence, for the understudy learning result of computerized education, the pointers go past the typical meaning of equipment and programming abilities to include the utilization of these apparatuses to learn, present and make content. Planning for a considerable length of time In Global Scholars e-homeroms, the goal is so that understudies could hear numerous points of view from fluctuated areas and societies, a center part of an appreciation for the variety and social agreement. Every e-homeroom is built to incorporate portrayal from a few urban communities and nations. Worldwide Cities had two worries in deciding the ideal size of an e-homeroom enough understudies to make significant, supported communication and an engaging number of urban communities to draw in understudy interest (Scull et al., 2020).

Understudy Global Learning Outcomes, Our conceptualization of understudy worldwide learning results and explicit exact markers are sorted inside formative ability regions (Ghazal et al., 2019). Worldwide learning results are intricate and present specific difficulties for assessment. This is particularly the situation for

assessments zeroed in on understudies ages 10 to 13, who are simply starting to foster the theoretical speculation needed for worldwide learning. The understudy worldwide learning results and markers were created in light of the Global Scholars program, just as the writing on worldwide instruction, worldwide capability, formative brain research, and other sociologies.

These observational pointers address a need in worldwide training, especially in the subfield of advanced worldwide trade. We characterize each learning result yet note that some are firmly connected (Green, 2019). We distinguish markers across formative skill regions for the worldwide acquiring results. We place every pointer in only one result region while perceiving that some might cover various result regions. The conversation of estimation approaches for these results thinks about how each has been contemplated in the sociologies and different areas of training. These methodologies have been applied in a restricted manner to worldwide training, and with few exemptions have not yet been applied to worldwide computerized trade. To foster age-suitable assessment devices, we propose expanding on existing exploration by adjusting measurements that have been created in related fields. This structure offers a typical jargon and principles for involving these learning results in an assessment (Lang et al., 2012).

Improving Learning outcomes

A recent better approach to managing displayed classes might order more notice on teachers (Snowman and McCown, 2014). Reflect on the compensation of the brightest student, organize step-by-step drafting classes, and prepare fun assignments that increase interest. The view model that is retried further creates results because it may ask for a notification. Just when the whole process of acquiring some new helpful information is pleasurable, it then imparts encouragement (Borba, 2021). Explore this mobile learning system; reverse learning, microlearning, blended learning, and strength learning. Other ways also include improving teaching methods. Educational and learning methods must be reconstructed to adjust to their level and have a bright, broad-minded future. Students are usually not busy with class because they think it is reused on the web. They do not concentrate because teachers routinely base a lot on the theoretical part of a class. Sometimes they completely ignore that the preparation has the most significant effect (Roehling et al., 2010; Suroso et al., 2021; Sudarmo et al., 2021;w

Study students' learning

There are already many senior teachers who can see the learning potential of their educators because a large body of students enters learning, and they are busy by many lectures and other disturbances which, according to students, are not so (Hattie, 2015). Leadership teachers who have different heights in every meeting with their students always give surprises and quizzes to see the progress and obstacles that students experience. The actual assessment system is carried out not only at the end of the semester but can also be developed more flexibly so that students can be monitored on track or not. Thus, good teaching will know the limits and progress through tests so that the condition of students is confirmed that they are ready to continue studying or repeat (Macfadyen and Dawson, 2010).

As an alternative, the teacher leader must look for opportunities to discuss more with other teachers and students to become closer with open conversations. In finding learning resources that correct deficiencies in this way, the rider teachers have the

opportunity to collaborate well in terms of improving or improving in the future, of course, with students and teachers. Maybe if the shortage still exists, then the teacher can improve in a way so that it is not late, everything can be planned and predicted, the earlier it is better to anticipate that is what distinguishes between ordinary teachers and rider teachers when it comes to strengthening and improving their instruction in order to increase student grades (Frith, 2017).

The exchanged learning model

Interchangeable learning models are another approach that might help by additionally creating student learning outcomes. It works with trading jobs. Students turn into teachers like the other way around. Similarly, it may be wise to relinquish the "evil instructor position" (Edgecombe, 2011). Helping students reliably with exams does not earn them respect for teachers, and they will not audit more enthusiastically in the same way. Whether they are or not, students will feel comfortable with the information, which ultimately has a legitimate optional impact. Make a fuss in class, and get to know the students. The more pleasurable students feel in student embodiments, the more prospects the teacher wants to keep them interested and learning with solid energy. Say "accepted" to innovation (Beck and Kosnik, 2012).

Instead of banning cell phones and tablets in class, why not use them? There are many applications and stages that teachers can use to develop further learning. Udemy, for example, is a web-based platform with seminars on many topics and spaces (Murray et al., 2010). The things teachers can do with a single iPad study are endless. Investigate this post to find some great apps. Also, teachers should have the option to share teacher iPad screens. Many educators struggle with projectors and other innovations (Fairlie et al., 2014). Suggest courses as schoolwork, and welcome the students to discuss what they did the next day. Instructional exercises are also vigorously suggested. Recordings can help explain cycles more efficiently, which means that teachers can spend more energy showing students how to try interactions afterward.

Teaching outside the review corridor

Unexpected teaching is perhaps the most capable technique for further creating student learning. Instead of encouraging students to be in class for 5-8 hours every day, why not take them into diversion territory? If the environment allows, go somewhere where the teacher can talk without hindrance. Research has shown that when students do not feel constrained, they have a better chance of opening up and offering their certified point of view. Open spaces such as parks provide a sensation of opportunity. One approach might change the way students view learning (Wu et al., 2013). There are several different ways of persuading students to concentrate more diligently. The key is to give them the ability to speak openly. Do whatever it takes not to pressure them, and use methods that provide comfort and directness. Come to the situation from their point of view, and find a way to get them to think of the teacher as their friend, not their head will see that over time things will change: their attitudes may change completely, and they may gain the psychological power to give expression in the classroom that the teacher would never have anticipated (Brown and Gilman, 2012).

The results of research on virtual applications in improving student learning outcomes have understood us that by providing the information and knowledge needed to solve learning problems that have been real, student learning outcomes are

deficient. So with this result, the policymakers can be assisted in making policies and decisions that benefit students and education in general. The benefits of virtual applications are beneficial for students and teachers in improving learning outcomes compared to the old way without virtual applications. So that later, there will be changes, both for the benefit of program development and the interests of science. Virtual learning applications significantly affect children; receiving virtual instructions were also more likely to report loss of work, concerns over job stability, child care challenges, the conflict between working and providing child care, and difficulty sleeping. Moreover, we also mentioned how student learning using this technology is the most outstanding result and has been practiced from various countries with relatively young contexts, so this has become an alternative that teaching starts from how to be the best and work to be more which is different from what is format as for other applications, so in this case, this sophisticated equipment is a project that cannot be separated from the application of education. Furthermore, we also want to show how the learning model system is exchanged, meaning the use of various methods and approaches, all of which is to make students learn with very maximum results. So here he said became one of the words or symbols that made all excellent teachers in the school's mind, and also parents have to say that the LKM angle is a very core thing. Then lastly, we also mentioned how to find learning doors from educators; it makes learning something enjoyable, very happy, and very sensational. Because without an approach in terms of goodness, goodness will feel dry and challenging to get the first quality improvement results of student learning.

CONCLUSION

Until here, we will describe the primary purpose of this study again. As we described above, this study aims to gain an in-depth understanding of how teaching innovations can improve the quality of student learning by utilizing some technologies and applications so that learning outcomes can be continuously improved. With evidence and exposure to data from various scientific sources, we believe that the data presented has answered this educational technology study's core problems and hypotheses. To complete the essential components, among others, what we describe is that we see innovation in the learning process with various technologies that have been able to provide changes and accelerate students' learning compared to the era before all computers were introduced in the world of education. Why do we say that innovation in technology-based teaching is very beneficial because this technology can provide a breakthrough and a transformation from traditional learning methods to a very flexible way full of solutions and innovations? Furthermore, we also explain how to organize learning.

This sophisticated technology can answer the teacher's transfer knowledge to implement more creative learning objectives. The next point is that digital learning has promoted advanced and modern learning where students find unique and separate moments, and they become part of global learning because they will use various internet applications. This digital e-learning platform, as reported above, is a platform that has been used globally in many countries and school organizations, so with a variety of learning applications such as classroom learning and conversation, all of them have innovated and transformed how education, in this case, student teaching can be reformed. The next thing we offer is that we see that improving the facilities for using applications and various other things aims to improve student learning outcomes. We believe that whatever the method, no matter the technique used and

how sophisticated the teacher applies to the classroom, all of that aims to improve student learning outcomes, which cannot be negotiated anymore.

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All authors have contributed their work accordingly to their shared authorship roles. Therefore there is no complicated issues in this project

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