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Exploring the influence of demographic factors on use of superstar learning app among college students in Liaoning province under second digital divide

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Abstract - This paper aims to explore the influence of demographic factors on the use of Superstar mobile learning apps among college students. It examines the differences in the frequency of usage of mobile learning apps among college students under second digital divide based on genders, household location registration, and major discipline. Hopefully, this study will provide policymakers in China an opportunity to identify factors that will affect the equal access to mobile learning apps among college students. This study can lead to the reduce of education and social inequality. This study adopts a quantitative method of survey using online questionnaire to collect data from college students of a private university in Liaoning Province. After the data has collected, the SPSS.26 was used to analyse the data using independent sample t-tests based on genders, household location registration, and major discipline to conduct the differentiation analysis. There was no significant difference identified in the frequency of usage of SuperStar Learning app among college students based on genders, household location registration or major discipline. However, science and technology students showed a greater dispersion in the frequency of usage of SuperStar Learning App compared to humanities and social science students. The study suggests that overall most of the college students have achieved moderate level of usage ability in the use of Superstar learning app, however the usage of Superstar learning app varied based on the demographic factors. The findings indicate that demographic factors did not have any influence on the use of Superstar Learning App among the college students. Hence, the university might not need to design the training programs based on demographic factors of the college students. This is encouraging from a digital equity perspective, as it shows that Superstar Learning App is able to be accessed and used by a broad group of students, regardless of their background.

Keywords: demographic variables, second digital divide, superstar mobile learning app, college students

1. Introduction

The progress and development of society have changed the demand and training model for talents. At the same time, changes in the social employment system and labour wage structure have also promoted the development and reform of information-based education (Yi, 2021). The deepening integration of Internet technology with education teaching has made education informatization a key concern for Chinese education policymakers in recent years. With the dynamic development of Internet technology, mobile learning, a novel form of studying, has also emerged.

Learning through the Internet has become a primary trend (De Wit & Altbach, 2021). College students are one of the most active groups of Chinese netizens and also the main population of mobile

learning (Ng & Wong, 2020, April). Mobile learning has brought a revolutionary new way of learning with its flexibility, convenience, interactivity, no time and space limitation, and abundant resources (Arumugam et al, 2020). Due date, using the Internet for mobile learning has become a significant choice for college students.

Although college students as the main population of mobile learning. However, due to the imbalance of political and economic development among regions, there are significant differences in the process of mobile learning among college students. This kind of difference is also known as the digital divide (Badiuzzaman et al., 2021). The emergence of this phenomenon has exacerbated the inequity of education（Mathrani et al., 2022). In the past few decades, various studies have been conducted on the digital divide, and it has been classified into three levels. In fact, the first level of the digital divide refers to the gap in Internet access, also known as the access divide (Ragnedda & Muschert, 2013). And the second level of the digital divide refers to the gap in the level of Internet use, also known as the usage divide. The third level of the digital divide focuses on the outcomes of Internet use under the conditions of having digital technology and the Internet (Fuchs, 2009; Wei et al.,2011; Van Dijk, 2005; Scheerder et al., 2017). Some scholars have also argued that the third level of the digital divide focuses on the benefit of the Internet (Van Deursen & Helsper, 2015).

The current generation of college students, who were born after the millennium, have grown up with computer network technology. They are often labelled as digital natives. It's contrasted with digital immigrants who are older and have poorer digital resources and digital refugees who have virtually no access to the internet (Margaryan et al., 2011). With the popularity of smartphones and broadband networks, the differences between college students when compared to other groups in terms of computers and internet access have become minimal. Thus, the study of the digital divide has shifted from a purely technological access issue to one of inequality in digital use and digitally based skills (Van Deursen, & Van Dijk,2019). As the result of Covid-19, teaching in higher education will be fully online in spring 2020. This shift came out of nowhere with a sudden but appropriate opportunity to observe, analyse and reflect on the digital divide at the higher education level. With the growth of the mobile Internet, new technologies such as smartphones have been incorporated into the digital divide study（Park & Lee, 2015). Due to the rapid transformation, the contrast between the old and new digital divides has become increasingly evident. This means that the old digital divide tends to be bridged, while the new digital divide is more severe.

While equipment and facilities such as computers or broadband can reach the goal in one step, students' intrinsic concentration and persistence are hardly improved simultaneously in the short term. Having ICT does not mean having the ability to use it to meet demand. The study found that undergraduate students still have low access utilization to the latest, more expensive technologies such as augmented reality, virtual reality headsets, and 3D printing (Galanek et al., 2018). At the same time, there are also significant differences in the use of the Internet within the college student population. Not all college students are as enthusiastic about embracing new technologies as they may seem. Even if they are proficient in using the Internet to obtain entertainment or life information, it does not mean that they are willing or able to freely use the Internet in an academic environment (Waycott et al., 2010).

Due to the lack of consistency in the terminology of the third digital divide, scholars have different understandings of the third level of digital divide. In addition, the terminology often lacks theoretical basis (Authors, 2017). Therefore, this study will use demographic variables to explore whether there are differences in the ability of college students to use mobile learning apps. That is, to explore the second digital divide.

It will provide policymakers in China's education sector with the opportunity to identify factors that affect equal access to mobile learning apps for college students and thus supply appropriate policy input. The aim is to reduce inequality in education and, therefore, social inequalities.

The concept of digital divide is believed to originate from the knowledge gap hypothesis (Van Deursen & Van Dijk, 2014). Tichenor et al (1970) proposed the knowledge gap hypothesis. This hypothesis assumes that people of different socioeconomic statuses have unequal abilities to use mass media to gain knowledge and information. People from higher socioeconomic statuses have greater access to information more easily and quickly than those from lower socioeconomic statuses. Hence, the concept of the digital divide refers to the difference between those who can effectively use information technology and those who cannot (Gunkel, 2003). The digital divide has become a topical research topic for organizations and scholars worldwide (Eastin et al., 2015).

During the early years of the digital divide phenomenon, researchers focused on the physical divide, i.e., inequalities and disparities in whether people owned computers and had access to the Internet (Van Dijk, 2006; Eastin et al., 2015). This type of digital divide is known as the first level of the digital

divide. However, as Internet penetration increases and Internet access devices become more widespread, the first level of the digital divide will gradually dissolve as time progresses (DiMaggio & Hargittai, 2001). Nowadays, Internet penetration is growing steadily every year, with at least 77% of the global population gaining access to the Internet (Pandita, 2017). As a result, the focus of the digital divide discussion has shifted to digital skills. Namely, the use divide results from differences in the length of time spent using the Internet, its experience, and the way it is used (Hargittai, 2001).

The usage divide is more difficult to bridge than the physical divide. It divides people into two categories, those who can use new technologies to improve and enhance their lives and those who are the opposite (Ritzhaupt et al., 2013). This implies that the usage divide reflects social inequities in the digital age and may increase such unfairness further (DiMaggio & Hargittai, 2001). The digital divide, for example, has far-reaching implications for e-learning, and mobile learning, among other areas. As a result, those whose use of the divide is at a disadvantage are lagging those whose use appears to be at an advantage regarding online learning, mobile learning, training, etc. This is a challenge to the equity of education (Azubuike et al, 2021). Therefore, as a new challenge, this inequality should be given due attention (Robinson et al., 2015).

As digital natives, most contemporary undergraduates have good network access, and information technology literacy (Ito et al., 2009). However, the issue of the usage divide among undergraduates is worth exploring. It has been suggested that an essential factor influencing usage patterns is demographic variables (Egea et al., 2007; Zillien & Hargittai, 2009; Van Deursen & Van Dijk, 2014). In contrast to the physical divide, the usage divide emphasizes the gaps between users in their ability to use the Internet due to social, self, and other factors. The factors are age, gender, socioeconomic status, race, and geography (Helsper, 2010). Age, education level, and employment status contribute to a significant proportion of these differences (Blank & Groselj, 2014). Thus, undergraduates' use of information technology, such as mobile learning, may also vary depending on demographic variables such as gender, subject specialization, and residence.

Studying the digital divide among undergraduates has the potential to provide lessons for future studies of the digital divide among broader social groups based on the following demographic factors.

Gender is an essential influencing factor in the digital divide. Early research on the digital divide found differences between male and female undergraduates in computer ownership, computer acceptance, intention to use computers, and ability to use computers. (Cooper, 2006; Jackson, Ervin et al, 2001; Mitra, et.al,2000). Male students spend more time on the Internet daily than female students (Jones et al, 2009). Similarly, there are relatively substantial gender differences in the purpose, mode, and content associated with the use of IT (Muscanell & Guadagno, 2012). Male students tend to learn about information technology per se, use computers for programming and design, and play games. However, female students use computers more purposefully and are more interested in how to use IT to solve practical problems and use social media (Yong & Gates, 2014; Kay et al, 2017). Female students use laptops more than male students for information search, academic activities, and email (Kay & Lauricella, 2011). However, male students have higher levels of ICT use than female students (Verhoeven et al, 2010) Therefore, regarding the use of ICT for learning purposes, differences in patterns of ICT use by male and female students can affect their learning effectiveness in the mobile web-based teaching environment.

There were also significant differences among students in different major discipline concerning the time spent using the Internet. Computer Science and Technology students spent more time using the Internet than students in other (social sciences, engineering, agriculture) majors (Ayub et al, 2014). However, there were no significant differences in students' attitudes toward using ICT for learning across majors, and they essentially held positive attitudes (Al-Emran et al, 2016; Al-Mashaqbeh, 2015). In addition, social science and computer science majors scored higher than majors regarding how well they used ICT for learning (Ayub et al, 2014).

The two geographical factors, urban and rural, have equally important effects on the mastery and use of computer knowledge. Students in urban areas access the Internet more frequently than students in rural areas. (Looker & Thiessen, 2003; Haight et al, 2014) Besides, students in urban areas have a more positive attitude toward ICT (Sarfo et al, 2011). With less access to computers and the Internet, young students in non-urban areas can even become technophobic (Lembani et al, 2020). In particular, the digital divide between urban and rural areas widened further during the COVID-19 pandemic (Reddick, Enriquez, Harris & Sharma, 2020). Hargittai (2010) found that students with higher parental education and socioeconomic status used computers more frequently and had higher levels of IT use. However, some studies have also found that differences in Internet frequency and computer skills among students from families of different socioeconomic statuses fade away as they enter college (Van Dijk, 2012). It implies

that the digital divide caused by various factors, such as urban-rural might improve through university education, thus narrowing the digital divide.

To summarize, the relevant studies revealed that although there are many studies on the digital divide, it has received little attention on the digital divide in mobile learning. In particular, there is rarely a study of the uneven development of mobile learning in terms of demographic variables. Therefore, it is necessary to explore the study of the digital divide of mobile learning apps for undergraduates with demographic variables.

2. Method

2.1 Research Hypothesis

Length of use and frequency of usage, as common indicators to measure the digital divide, reflect people's ICT usage skills to some extent (Hohlfeld et al, 2008; Van Dijk, 2017). However, the study found that the less educated spent more time on Internet use than the more educated (Van Deursen & Van Dijk, 2013;Van Dijk & Van Deursen, 2014). Therefore, as a highly educated population, college students mainly manifest their second digital divide in the frequency of information technology use, especially in the application of the Internet in learning. Therefore, this study used the measure of Superstar Learning app usage frequency as the dependent variable.

Previous research has found that the factors affecting the first digital divide are roughly the same as the demographic factors affecting the second digital divide. In general, the study of digital divide must start with individual and social factors. Even in countries with high Internet access rates, the poor and disadvantaged groups still lack basic access to digital resources and the technology to use them. Thus, the independent variables in this study were demographic variables, including gender, major discipline, and geographic factors. Based on past empirical studies and theories about the digital divide, this study proposes the following hypotheses and questions:

(1) Is there any difference in the frequency of usage of Superstar Learning App among college students of different genders?

H_{0a}: There is no significant difference in the frequency of usage of Superstar Learning App among college students of different genders.

H_{1a}: There is significant difference in the frequency of usage of Superstar Learning App among college students of different genders.

(2) Is there a difference in the frequency of usage of Superstar Learning App between college students with non-agricultural household registration and those with agricultural household location registration?

H_{0b}: There is no significant difference in the frequency of usage of Superstar Learning App between college students in non-agricultural household registration and college students in agricultural household registration.

H_{1b}:There is significant difference in the frequency of usage Superstar Learning App between college students in non-agricultural household registration and college students in agricultural household registration.

(3) Is there any difference in the frequency of usage of Superstar Learning App among college students of different major discipline?

H_{0c}: There is no significant difference in the frequency of usage Superstar Learning App among college students of different major discipline.

H_{1c}: There is a significant difference in the frequency of usage Superstar Learning App among college students of different major discipline.

In this quantitative study, descriptive statistical analysis will be carried out to analyse the data. An independent sample t-test was carried out for the dichotomous variables such as gender, household registration, and Major discipline . The research questions were answered through the use of questionnaires.

The data was collected in September 2024 from a private university in Shenyang, Liaoning Province, China. A total of 600 students have completed the questionnaire used in this study. As the students were all born after 2000, they fit the profile of "digital natives." Therefore, simple random sampling was used to select the respondents from undergraduate students randomly. The data was collected using an online questionnaire, with 600 randomly selected students to answer the online survey questionnaires within the same time frame.

The questionnaire consists of two parts. The first part is on demographic variables. The questionnaire collects information on the students' demographic background, including gender, major discipline and household registration (agricultural or non-agricultural). The survey covers two categories of academic majors: humanities and social sciences, and science and engineering.

The second part focuses on the second-level of digital divide, which refers to the use of Superstar learning app. This is measured through two questions. First, students confirm whether they have ever used Superstar learning app. Then, for those who have used Superstar learning app at least once, they rate their frequency of usage use over the past week on a scale of 1-5, where 1 represents low frequency and 5 represents high frequency. This measurement is captured by the question "Please rate your frequency of use of the Superstar learning app over the past week."

3. Results and Discussion

3.1 Results Data analysis and results

In 2024, about 600 questionnaires were distributed and 564 were collected, with a respond rate of 94%. After removing the data that had not indicated the use of Superstar learning app and blank data, 538 valid questionnaires were obtained.

Detailed descriptive statistics of respondents' characteristics were are shown in Table 1. Of these respondents, 50.7% were male and 49.3% were female, showing a roughly even distribution of the sexes. There are 285 rural residents, accounting for 53.0%; There were 253 urban residents, accounting for 47.0%. In terms of the classification of years of study, the second-year college students constitute the largest group, with 272 students, accounting for more than half (50.6%) of the total. The number of fourth-year university students is the smallest, with only 14 students accounting for 2.6% of the total. In addition, the table reveals other interesting distribution trends. For example, in terms of major choice, the number of students majoring in natural sciences (308) is significantly higher than that of humanities and social sciences (230), accounting for 57.2%. The length of study and the duration of each use also provide us with valuable information about study habits. For example, 188 people started learning within 6 months, accounting for 34.9%, while 93 people have been studied for more than 2 years, accounting for 17.3%. In terms of the duration of each session, more than half (55.4%) completed the study in less than 30 minutes, while only 12.8% studied for more than 60 minutes.

Table 1 Descriptive statistics of respondents' characteristics

Distribution (n = 538)			
Category	variable	Frequency	Percent (Total 100%)
Gender	Male	273	50.7
	Female	265	49.3
Location of household registration	Rural household registration	285	53
	Urban household registration	253	47
Major discipline	Humanities and Social Sciences	230	42.8
	Natural Science	308	57.2
Classification of years of study	Freshman	175	32.5
	Sophomore	272	50.6
	junior	77	14.3
	senior	14	2.6
Learning time	Within 6 months	188	34.9
	6-12 months	62	11.5
	Within 2 years	195	36.2
	More than 2 years	93	17.3
Duration per use	Within 30 minutes	298	55.4
	30 minutes-60 minutes	171	31.8
	More than 60 minutes	69	12.8

The Table 2 shows the results of the analysis of the frequency of use comparison between the two groups based on gender. For males, the sample size was 273, with a mean of 3.73, a standard deviation of 1.201, and a mean standard error of 0.073. For females, the sample size was 265, with a mean of 3.80, a standard deviation of 0.988, and a mean standard error of 0.061.

Table 2 Independent Samples t-Test based on Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Frequency of use	1.00	273	3.73	1.201	.073
	2.00	265	3.80	.988	.061

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Frequency of usage	Equal variances assumed	8.116	.005	-.826	536	.409
	Equal variances not-assumed			-.829	522.058	.408

As indicated in table 2, the significance level of Levene's test for the equality of variances in frequency of usage is less than 0.05, hence the equality of variance was not assumed. The t value of -.829 and p value of .408 (> .05) indicates that there is no significant difference in the frequency of usage of Superstar Learning app between college students of different genders in the past few week. Hence, H_{0a} is not rejected.

Table 3 groups based on household location registration. For rural household registration, the sample size was 285, with a mean of 3.73, a standard deviation of 1.163, and a mean standard error of 0.069. For urban household registration, the sample size was 253, with a mean of 3.80, a standard deviation of 1.028, and a mean standard error of 0.065.

Table 3 Independent Samples t-Test based on Household Location Registration

Group Statistics

	Household registration	N	Mean	Std. Deviation	Std. Error Mean
Frequency of use	1.00	285	3.73	1.163	.069
	2.00	253	3.80	1.028	.065

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Frequency of use	Equal variances assumed	2.530	.112	-.762	536	.446
	Equal variances not assumed			-.768	535.989	.443

As indicated in table 3, the significance level of Levene's test for the equality of variances in frequency of usage is greater than 0.05, hence the equality of variance was assumed. The t value of -.762 and the p value of .446 (> .05) indicate that there is no significant difference in the frequency of usage between college students of different household location registrations in the past few weeks. Hence, H0b is not is not rejected.

Table 4 groups based on major discipline. For the group with Humanities and Social Sciences, the sample size was 285, with a mean of 3.73, a standard deviation of 1.163, and a mean standard error of 0.069. For the group with Natural Science, the sample size was 253, with a mean of 3.80, a standard deviation of 1.028, and a mean standard error of 0.065.

Table 4 Independent Samples t-Test based on Major discipline

Group Statistics

	Major	N	Mean	Std. Deviation	Std. Error Mean
Frequency of use	1.00	230	3.67	1.076	.071
	2.00	308	3.84	1.115	.064

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Frequency of use	Equal variances assumed	.008	.928	-1.801	536	.072
	Equal variances not assumed			-1.810	502.518	.071

It can be seen from Table 4 that the significance level of Levene's Test for equality of variances in usage frequency is greater than 0.05, indicating that the t-test results are based on the equal variances assumed. The t value of -1.801 and the p value of .072 (> .05). According to the results of the T-test, there is no significant difference in the frequency of usage of Superstar Learning app in the past week among college students of different majors. H_{0c} is not rejected.

3.2 Discussion

First, in terms of gender, our research results, presented in Table 2, show that there was no significant difference between male and female college students in their frequency of usage Superstar Learning App . Specifically, the average frequency of use among male college students was 3.73 times, while that among female college students was 3.80 times. This result may indicate that the design and functionality of Superstar Learning apps are equally appealing and useful to both genders. From the standard deviation values, the usage frequency distribution of male and female college students is relatively concentrated, suggesting that the app's usage experience is consistent across different genders. From the mean standard errors, the estimates of average frequency of use for both male and female college students have relatively small error ranges, which further supports the consistency in frequency of use across genders.

Using the independent sample t-test, we found that the p-value between the two groups was greater than 0.05, suggesting that the gender difference in frequency of use may be attributed to random error or other unaccounted-for factors, rather than a substantial difference inherent to gender itself. Therefore, we can conclude that college students of different genders use the app with similar frequency. This may indicate that contemporary college students generally have a high acceptance of mobile learning, which is not influenced by gender differences (Hung et al., 2010; Fabian et al.,2018).

Secondly, regarding the differences in household location registration, Table 3 shows that there is no significant difference in the frequency of usage between rural and urban college students for the Superstar Learning app. Specifically, the average usage frequency of rural college students is 3.73 times, while that of urban college students is 3.80 times. This finding could indicate that the digital divide between urban and rural areas is gradually narrowing with the spread of the Internet and smartphones (Wang et al., 2021). College students, whether from rural or urban areas, are able to easily access and use online learning resources. The Superstar Learning app is a mobile learning app that provides equal learning opportunities for all college students, regardless of their household location registration status. In addition, the Superstar Learning app is widely applicable and easy to use, making it accessible for students from different backgrounds. Through an independent sample t-test, we concluded that the P-value was greater than 0.05, further verifying that family registration location was not a significant factor affecting the frequency of use.

Finally, we discussed the influence of different majors on the frequency of college students using the Superstar Learning app. The data results show that in Table 4, there is no significant difference in the frequency of use between humanities and social science students and natural science students. Students majoring in humanities and social sciences had an average usage frequency of 3.67, while those majoring in natural sciences had an average usage frequency of 3.84. Although the average usage frequency of natural science majors was slightly higher than that of humanities and social science majors, after conducting an independent sample T-test, we found that the difference was not statistically significant (p-value greater than 0.05).

After entering universities, college students will enter different fields of study, and the application of network skills by students of different majors will be quite different (Alexander et al., 2011). Students of science and technology have a greater degree of dispersion in the frequency of using superstar applications. This difference may reflect the diversity of usage habits, learning needs, or course requirements among users of different disciplines. Students of science and technology may have great differences in the frequency of using superstar learning due to different experiments, assignments, or course projects. Humanities and social science students may use them more intensively due to the similarities in the nature of courses or learning styles. However, there is no significant difference between students majoring in humanities and social sciences and students majoring in science and technology in the frequency of using superstar learning applications.

For millennial college students in general, as digital natives, there is no significant demographic difference in their skills when it comes to using mobile learning applications. This means that almost all college students have the ability to use mobile learning applications. In the future, the third digital divide can be explored as a new direction of research. In other words, while college students basically have the ability to use mobile learning applications, the effects of using them may differ.

4. Conclusion

Despite China's initial success in bridging the first digital divide—ensuring widespread access to information technology—digital inequality continues to persist in more nuanced ways. As of December 2023, the number of Internet users in China reached 1.092 billion, with an Internet penetration rate of 77.5% (CNNIC, 2024). This suggests that a vast majority of the population is now connected to the Internet. However, merely having access to digital tools and infrastructure does not equate to equal participation or benefit from technology. The existence of a *second digital divide*—one that concerns differences in how people use digital technology rather than whether they have access—has become increasingly relevant in discussions around digital equity (Lythreatis et al., 2022).

This study was conducted to explore whether such a second digital divide exists among college students in their use of mobile learning applications, particularly the Superstar Learning app. Specifically, it examined the impact of demographic factors such as gender, family background, geographic origin (urban vs. rural), and academic major. The findings revealed that although female students reported a slightly higher average frequency of using the mobile learning application compared to male students, the difference was not statistically significant. Similarly, while students in natural science disciplines tended to use the application more frequently than their peers in the humanities and social sciences, this variation was also not significant. Additionally, no substantial difference was found in the usage patterns of urban versus rural students.

However, family background remained a significant factor, reinforcing the notion of the second digital divide. Students from more privileged family backgrounds demonstrated greater engagement with the mobile learning application, highlighting persistent disparities in digital literacy, digital support, or possibly the perceived value of educational technologies. Interestingly, the study found that the information environment provided by universities can serve as a buffer. A supportive university digital environment may reduce the negative impact of less privileged family backgrounds, suggesting that institutional support plays an essential role in narrowing digital usage gaps (Verhoeven et al., 2010).

Nevertheless, this study has several limitations that must be acknowledged. Firstly, the research sample was limited to students enrolled in private colleges and universities in Liaoning Province. As a result, the findings may not be representative of all college students in China, especially those from public institutions or from different regions with varying socio-economic and technological development levels. Secondly, the study focused solely on the Superstar Learning app. While this application is widely used, it may not reflect the broader landscape of mobile learning platforms or digital tools utilized by students. Thirdly, the measurement criteria used in this study centred only on the frequency of app usage. It did not account for other dimensions such as depth of use, user satisfaction, or the number of different mobile learning apps utilized by students.

Future research should consider expanding the sample size and diversity, incorporating students from various types of institutions and regions. Additionally, analysing multiple learning applications and evaluating qualitative aspects of digital engagement—such as learning outcomes, user experiences, and app functionalities—could provide a more comprehensive understanding of the second digital divide in educational contexts. By addressing these limitations, future studies can better inform strategies to promote equitable digital engagement among all students.

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