

Impact of Using Mobile Phone on Students' Academic Performance at Government College of Education Sukkur, Sindh, Pakistan

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Abstract

This study was conducted using mixed method to know the impact of using mobile phone on students' academic performances. The data was collected through interview and questionnaire. The interview was taken by using structured questionnaire for students and teachers, separately using Google Forms. The sample size was comprised of 12 male teachers and 70 male and female student-teachers of Government College of Education Sukkur while the 12 students were from other institutes. The data analyzed qualitatively & quantitatively with the help of SPSS software. The study results have shown that 98% of students were using mobile phone, while only 2% of the students were not using mobile phone. The quantitative data suggested that more than 50% always used the mobile phone for photography/camera, text messaging, for contacting with their classmates and for the social media. More than 50% respondent reported that they have rare/often usage frequency for to contact easily with teachers for study purpose, for voice call, usage of dictionary /thesaurus in class. More than 50% respondent reported that they never/rare usage frequency for games. Teachers reported they used mobile plane for teaching purposes, audio recording, for video calling, for calculator and for the calendar purposes. The qualitative data suggested following main themes from the interview data of 8 teachers: 1) Mobile phone has Positive influence on the students, 2) Use of mobile phone improves the student's performance, 3) Students use mobile phone, alone for academic purpose and enhance their performance, 4) It is better for all generations, specially for students, to improve knowledge. However, 4 teachers reported that mobile phone has the mixed usage positive and negative simultaneously effects on students, like bullying, lost concentration in the classes. It depends on the students how they use this modern endeavor of human history.

Key words: Mobile phone use, impact, academic performance

Introduction

The modern age is the age of technology and communication. According to (Rabiu, Muhammed, Umaru, & Ahmed, 2016) change in globalization has led to changes in our lives. One of how globalization is changing our lives is through massive use of information and communication technology (ICT). The mobile phone is one of the devices that are used for communication. This device is not just for voice communication but also for several other purposes like Short Messaging Service (SMS) (Rabiu et al., 2016). The mobile phone is jthe essential component or source for communication among all the domestic items are communal, but it is the mobile phone which qualifies to become the first private secluded and surprising study on the influence of mobile phone in our country Pakistan. However it has been discovered that the use of mobile phone by students In school problematic, since it has adverse effect on their academic performance what it has practically affected the society ease of access, security, and coordination of trade and community act on hence, has become the part of custom of the world (Rabiu et al., 2016). (Thompson, Ansoglenang, & Awugah, 2018) indicated the study

has proven that rampant use social networking, texting and chatting on mobile phone result in lower grades and poor academic performance of the student (p899). A mobile phone is a moveable handset that can make and receive calls over radio frequency link while the Clint is moving within telephone services use a cellular network. Mobile supports the variety of other services such as text messaging, M.M.S, emails, internet access, short-range application, video games and digital photography (Wikipedia, 2019). Smartphone has some distinguishing features in the developed world. Smartphone has now overtaken the use age of the previous moveable system. However, they account for about 50% of mobile in telephony in the developing countries (Wikipedia, 2019). PC Magazine, (n.d.) writes that feature phone is a cell phone that contains a fixed set function beyond voice calling and texting, he further added the features may offer web browsing email but they generally cannot download the application from the online market place. Our lives cannot be completed without access of a mobile phone. Cell phones have become an integral part of us so much that when somebody loses a cell phone, it is like losing something so significant as (Suryanarayana, 2015) postulate it is very challenging to imagine how our lives would have been without mobile phone since most of our work is done by using a mobile phone. The presence of the mobile phone presents the host of options and challenges for today's students. It can be helpful as an academic tool or harmful educational disruption depending on the attitude and pattern of students or owner (Suryanarayana, 2015). Effect of the mobile phone can be either positive or negative as well as potential or absolutes. Research has shown that the mobile phone has numerous uses. They have used a variety of purposes, such as keeping in touch with family members, for conducting business, even though emergency one needs to help the mobile phone to reach out for help. (Tindell & Bohlander, 2012) suggests that university students frequently use the cell phone during their class time despite rules against doing so. As cell phone technology continues its rapid development, the device appears capable of contributing to students learning and improved academic performance (Bull & McCormick, 2012) and (Tao & Yeh, 2013) the cell phone primarily as a leisure device, and most commonly used cell phones for may disturbed learning within academic setting (Levine, 2007). Thus, the purpose of this study is to determine and explore the impact of using a mobile phone on students' academic performance at Government: College of Education Sukkur.

Literature Review

The integration of mobile phones into students' daily lives has sparked intense debate among researchers regarding its impact on academic performance. While some studies suggest that mobile phone usage has detrimental effects on students' academic success (Chatterjee, 2014; Sundari, 2015), others argue that it can have positive consequences, such as enhancing communication skills and academic achievement (Sarwar & Soomro, 2013). Research has also shown that mobile phone usage can be a double-edged sword, with both beneficial and detrimental effects on students' academic performance. For instance, Kuznekoff and Titsworth (2013) discovered that students who refrained from using their mobile phones during class took more detailed notes and performed better on assessments. Conversely, Schreiner (2018) posited that mobile phones can facilitate connections between students and educational resources, but can also serve as a distraction if not utilized properly. Other studies have investigated the relationship between mobile phone usage and academic performance, yielding mixed results. For example, Akinwale (2015) found that internet-enabled phone usage had no significant impact on students' academic performance, whereas Jacobsen and Forste (2011) discovered a negative correlation between mobile phone usage and academic performance. The impact of mobile phone usage on academic performance is a complex issue, and further research is necessary to fully comprehend its effects. However, it is evident that mobile phones have the potential to both enhance and detract from students' academic experiences. Moreover, the widespread adoption of mobile phones has led to a shift in the way students access and process information. Mobile phones have enabled students to access a vast array of educational

resources, including online textbooks, educational apps, and virtual learning environments (VLEs) (Sánchez-Martínez & Otero, 2009). However, the constant availability of these resources can also lead to distractions, decreased attention span, and reduced academic performance (Junco & Cotten, 2012).

In addition, the use of mobile phones has also been linked to multitasking, which can have negative consequences for academic performance. Research has shown that students who engage in multitasking while studying or attending classes tend to perform poorly on assessments and have lower GPAs (Kirschner & Karpinski, 2010; Rosen et al., 2013). In conclusion, the impact of mobile phone usage on academic performance is a multifaceted issue that requires further research. While mobile phones have the potential to enhance students' academic experiences, they can also serve as a distraction and decrease academic performance. As such, educators and policymakers must develop strategies to promote responsible mobile phone usage and minimize its negative effects on academic performance.

Methodology

This research has sought & explored the impact of using mobile phone on students' academic performance at Government College of Education Sukkur. This research was conducted by using mixed method; the data was collected through interview and questionnaire method. The interview was taken by using structured questionnaire for students and teacher, in that questionnaire the open ended and close ended questions were included, respectively, As the research topic is related with mobile phone and its effects on students academic performance so for making it more fruitful, the all questionnaire of teachers and students were also shifted in Google form which is the modern way to collect the research data online and with the help of mobile phone the data was being collected & It was used to measure various parameters through which the meaningful results were derived.

Population

The targeted population of my study was students of Government College of Education Sukkur & also from others various institutes. In Government College of Education Sukkur more than 190 students are enrolled in the B.Ed (Hons) program and more than 30 teachers giving their services.

Sampling

In this study the convenient sampling technique was used. The respondents of research were chosen from the Government College of Education Shikarpur Road Sukkur and from other institutes. The sample size is comprised of 12 male teachers and 58 male and female student-teachers of the college while the 12 students from others institute.

Instrumentation

For collecting data the three demographic pages for students (Annex C,D and E), and for the interview a separate structured questionnaires, each for student and teacher, were developed (Annex A and B). In which the open ended and closed ended questions were included to measure various parameters through which the meaningful data has been achieved.

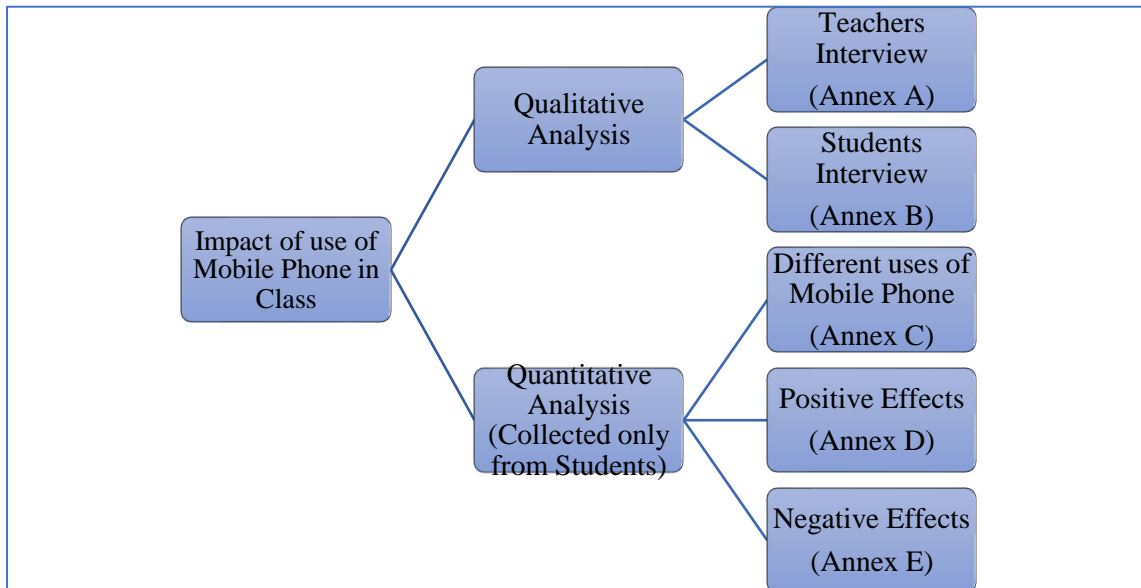
Data Analysis

Data Collection

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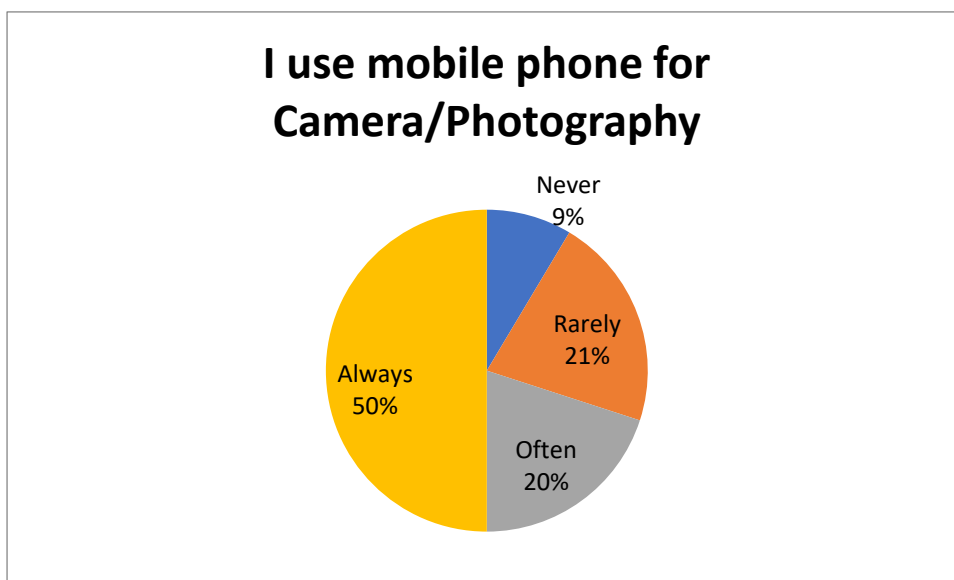
Data Analysis

The data of research was normalized with the help of data cleansing process, and it was analyzed by using mixed method; the Responses of interviews were analyzed qualitatively while the results and frequencies of demographic pages were analyzed quantitatively firstly all the data of demographics pages were being inserted in excel and therefore it was coded and analyzed quantitatively with the help of statistical package for social sciences (SPSS)



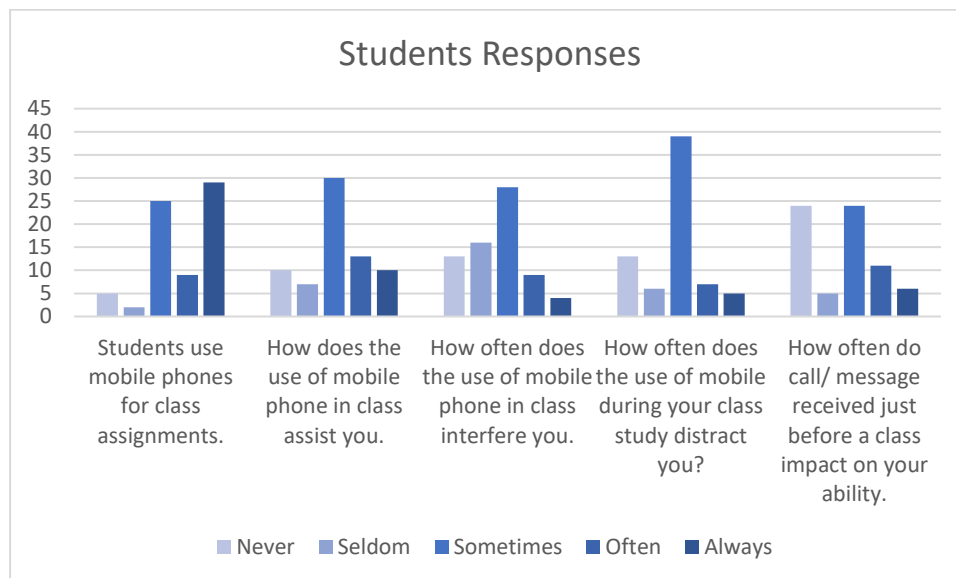
Key Findings

This study investigated the impact of mobile phone usage on students' academic performance. The findings suggest that mobile phones are an everywhere tool among students, with an overwhelming majority (98%) using them primarily for educational purposes.



The results indicate that mobile phones can have a positive influence on students, enhancing their knowledge and academic performance. However, excessive mobile phone usage can have detrimental effects, including decreased academic performance, the development of bad habits, and damage to skills. The study also found that students use mobile phones for a variety of purposes, including education, communication, and entertainment. While teachers utilize mobile phones as a teaching tool, and most students employ them to support their studies, some

students reported that mobile phone usage can be distracting and interfere with their learning. In conclusion, the study suggests that mobile phones can have a dual impact on students' academic performance, depending on how they are utilized. While mobile phones offer numerous educational benefits, excessive usage can have negative consequences. Therefore, it is essential for students, teachers, and institutions to develop strategies that promote responsible mobile phone usage and maximize its educational potential.



Results

The study investigated the impact of mobile phone usage on students' academic performance at Government College of Education Sukkur. The results showed that:

- 98% of students use mobile phones, with the majority using them for educational purposes.
- Mobile phones have a positive influence on students, improving their performance and helping them enhance their knowledge.
- Teachers also use mobile phones as a teaching tool.
- However, excessive mobile phone usage can have negative effects, such as reducing academic performance, creating bad habits, and damaging skills.

Discussion

The study's findings indicate that mobile phone usage is widespread among students, with 98% of respondents using mobile phones. The majority of students use mobile phones for educational purposes, such as contacting teachers, accessing study materials, and using educational apps. The data also reveals that students use mobile phones for various purposes, including photography, text messaging, and social media. However, more than 50% of respondents reported rarely or never using mobile phones for gaming. Teachers also use mobile phones for teaching purposes, such as audio recording, video calling, and using calculators. The study's findings suggest that mobile phones can have both positive and negative effects on students' academic performance. While mobile phones can improve knowledge, enhance performance, and provide access to educational resources, excessive usage can lead to distractions, reduced academic performance, and negative influences on students. The majority of respondents reported that mobile phones assist them in their studies, while a significant proportion reported that mobile phones interfere with their learning. The study's findings also highlight the importance of responsible mobile phone usage and the need for educators to

develop strategies to minimize the negative effects of mobile phone usage on academic performance.

Conclusion

This study investigated the impact of mobile phone usage on students' academic performance at Government College of Education Sukkur. The findings suggest that mobile phones have a significant influence on students, with both positive and negative consequences. The majority of students (98%) use mobile phones, with most using them for educational purposes. Mobile phones were found to have a positive impact on students' performance, improving their knowledge and skills. However, excessive mobile phone usage was also found to have negative effects, such as reducing academic performance, creating bad habits, and damaging skills. The study's findings suggest that mobile phones can be a valuable tool for education, but their use must be balanced and responsible. Educators and students must be aware of the potential negative effects of mobile phone usage and take steps to mitigate them. By using mobile phones optimally, students can harness their potential to improve their academic performance and achieve their goals.

Recommendations

- There is dire need to aware students about the proper or apt use of mobile phone at colleges.
- Teacher should also use mobile phone properly in class as teaching tool when it is needed.
- The modern educational application should be prepared and updated for the college students so that they can get help from this Endeavour of modern era.
- The policies should be made for the proper use of mobile phone at colleges and must remain under observation.
- The higher authority should be taken the positive steps regarding the negative use of the mobile at colleges so that this habit can be eradicated shortly.
- Institution should provide necessary infrastructure such as Wi Fi and educational apps, to support mobile phone usage for educational purpose.
- Regular monitoring and evaluation of mobile phone should be conducted to indentify for the areas of improvement and ensure that mobile phones are being used to support for academic performances.

References

- Akinwale, O. M. (2015). *THE EFFECT OF MOBILE PHONES ON STUDENTS' ACADEMIC PERFORMANCE*. Retrieved from https://www.academia.edu/29026191/THE_EFFECT_OF_MOBILE_PHONES_ON_STUDENTS_ACADEMIC_PERFORMANCE
- Bull, P., & McCormick, C. (2012). Mobile Learning: Integrating Text Messaging into a Community College Pre-Algebra Course. *International Journal on E-Learning: Corporate, Government, Healthcare, and Higher Education*, 11.
- Chatterjee, S. (2014). A Sociological Outlook of Mobile Phone Use in Society. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 1(6), 55–63. Retrieved from <http://www.ijims.com>
- Chen, S.-Y., & Tzeng, J.-Y. (2010). College female and male heavy internet users' profiles of practices and their academic grades and psychosocial adjustment. *Cyberpsychology, Behavior and Social Networking*, 13(3), 257–262. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20557244>
- Chen, Y.-F., & Peng, S. S. (2008). University Students' Internet Use and Its Relationships with Academic Performance, Interpersonal Relationships, Psychosocial Adjustment, and Self-Evaluation. *CyberPsychology & Behavior*, 11(4), 467–469. <https://doi.org/10.1089/cpb.2007.0128>
- Hong, F.-Y., Chiu, S.-I., & Huang, D.-H. (2012). A model of the relationship between

- psychological characteristics, mobile phone addiction and use of mobile phones by Taiwanese university female students. *Computers in Human Behavior*, 28(6), 2152–2159. <https://doi.org/10.1016/j.chb.2012.06.020>
- Jackson, L. A., von Eye, A., Fitzgerald, H. E., Witt, E. A., & Zhao, Y. (2011). Internet use, videogame playing and cell phone use as predictors of children's body mass index (BMI), body weight, academic performance, and social and overall self-esteem. *Computers in Human Behavior*, 27(1), 599–604. <https://doi.org/10.1016/j.chb.2010.10.019>
- Jackson, L. A., von Eye, A., Witt, E. A., Zhao, Y., & Fitzgerald, H. E. (2011). A longitudinal study of the effects of Internet use and videogame playing on academic performance and the roles of gender, race and income in these relationships. *Computers in Human Behavior*, 27(1), 228–239. <https://doi.org/10.1016/j.chb.2010.08.001>
- Jacobsen, W. C., & Forste, R. (2011). The wired generation: Academic and social outcomes of electronic media use among university students. *Cyberpsychology, Behavior, and Social Networking*, 14(5), 275–280. <https://doi.org/10.1089/cyber.2010.0135>
- Junco, R. (2012a). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162–171. <https://doi.org/10.1016/j.compedu.2011.08.004>
- Junco, R. (2012b). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior*, 28(1), 187–198. <https://doi.org/10.1016/j.chb.2011.08.026>
- Junco, R., & Cotten, S. R. (2011). Perceived academic effects of instant messaging use. *Computers & Education*, 56(2), 370–378. <https://doi.org/10.1016/j.compedu.2010.08.020>
- Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers & Education*, 59(2), 505–514. <https://doi.org/10.1016/j.compedu.2011.12.023>
- Karpinski, A. C., Kirschner, P. A., Ozer, I., Mellott, J. A., & Ochwo, P. (2013). An exploration of social networking site use, multitasking, and academic performance among United States and European university students. *Computers in Human Behavior*, 29(3), 1182–1192. <https://doi.org/10.1016/J.CHB.2012.10.011>
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior*, 26(6), 1237–1245. <https://doi.org/10.1016/J.CHB.2010.03.024>
- Kuznekoff, J. H., & Titsworth, S. (2013). The Impact of Mobile Phone Usage on Student Learning. *Communication Education*, 62(3), 233–252. <https://doi.org/10.1080/03634523.2013.767917>
- Levine, S. J. (2007). The online discussion board. *New Directions for Adult and Continuing Education*, 2007(113), 67–74. <https://doi.org/10.1002/ace.248>
- PC Magazine. (n.d.). *Encyclopedia Index*. Retrieved from <https://www.pcmag.com/encyclopedia/index/a>
- Rabiu, H., Muhammed, A. I., Umaru, Y., & Ahmed, H. T. (2016). Impact Of Mobile Phone Usage On Academic Performance Among Secondary School Students In Taraba State, Nigeria. *European Scientific Journal, ESJ*, 12(1), 466. <https://doi.org/10.19044/esj.2016.v12n1p466>
- Rosen, L. D., Mark Carrier, L., & Cheever, N. A. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers in Human Behavior*, 29(3), 948–958. <https://doi.org/10.1016/j.chb.2012.12.001>
- Sánchez-Martínez, M., & Otero, A. (2009). Factors Associated with Cell Phone Use in Adolescents in the Community of Madrid (Spain). *CyberPsychology & Behavior*, 12(2), 131–137. <https://doi.org/10.1089/cpb.2008.0164>
- Sarwar, M., & Soomro, T. (2013). Impact of Smartphone's on Society. *European Journal of Scientific Research*, 98.
- Schreiner, E. (2018). Effects of Mobile Phones on Students | The Classroom. Retrieved August

- 18, 2019, from April 25, 2018 website: <https://www.theclassroom.com/effects-of-mobile-phones-on-students-12959442.html>
- Sundari, T. T. (2015). Effects of mobile phone use on academic performance of college going young adults in India. *International Journal of Applied Research*, 1(19), 898–905. Retrieved from www.allresearchjournal.com
- Suryanarayana, N. V. S. (2015). Positive and Negative Effects of Mobile Phone on Students Career. *International Journal of Multidisciplinary Advanced Research Trends*, 2(4), 71–73.
- Tao, Y.-H., & Yeh, C. R. (2013). Transforming the Personal Response System to a Cloud Voting Service. In *IT Enabled Services* (pp. 139–156). https://doi.org/10.1007/978-3-7091-1425-4_9
- Thompson, J. D., Ansoglenang, G., & Awugah, S. A. (2018). *Students Perception about the Educational and other Effects of Mobile Phone Usage in the University for Development Studies*. 6(August), 757–767.
- Tindell, D. R., & Bohlander, R. W. (2012). The Use and Abuse of Cell Phones and Text Messaging in the Classroom: A Survey of College Students. *College Teaching*, 60(1), 1–9. <https://doi.org/10.1080/87567555.2011.604802>
- Wikipedia. (2019). Mobile Phone. Retrieved August 18, 2019, from https://en.wikipedia.org/wiki/Mobile_phone
- Wood, E., Zivcakova, L., Gentile, P., Archer, K., De Pasquale, D., & Nosko, A. (2012). Examining the impact of off-task multi-tasking with technology on real-time classroom learning. *Computers & Education*, 58(1), 365–374. <https://doi.org/10.1016/j.compedu.2011.08.029>

Annexures

Annex A: Interview Questions For Teacher

1. What is the influence of mobile phone usage on your student’s performance?
2. Can you please tell us some benefits of mobile phone in the field of education?
3. How your students are using mobile phone purposefully?
4. Do you think the mobile phone has a negative effect that the students reduce their academic performance?
5. Should your students use mobile phones for educational purposes? If yes how they should use it?

Annex B: Interview Questions for Students

1. Do you use a mobile phone?
2. For which purposes do you use it?
3. Do you use it for educational purposes?
4. Do your mobile phones help you academically and how it helps you?
5. Does your mobile phone have some negative effects/impacts? Can you please share with us?

Annex C: Different uses of Mobile Phone Questionnaire for Students

Application	Never	Rarely	Often	Always	No response
Internet					
Text message					
Voice call					
M.M.S					
Camera					
Video calling					
Calculator					
Calendar					

Games					
Radio					
Audio recording					

Annex D: Positive Effect of Mobiles on Learning Abilities Questionnaire for Students

Variable	Strongly Agree	Agree	Disagree	Strongly Disagree
I can easily contact teachers for study purpose through phone.				
I can easily contact through mobile to my class fellows to get help.				
My academic performance has increased due to mobile technology.				
Teachers use mobile phone for teaching purpose in the class room.				
Students use dictionary / thesaurus in the class room.				

Annex E: Negative Effects of the Mobile Phone on Learning Questionnaire for Students

Variables	Never	Seldom	Sometimes	Often	Always
How often does the use of the mobile phone in class interfere you?					
How does the use of the mobile phone in class assist you?					
Does any call/ message received before a class impact on your ability to learn?					
How often does the use of mobile during your class study distract you?					
Students use mobile phones for class assignments					