



## OPEN ACCESS

## EDITED BY

Amjad Islam Amjad,  
School Education Department, Pakistan

## REVIEWED BY

Sarfraz Aslam,  
UNITAR International University, Malaysia

## \*CORRESPONDENCE

Jobin Jose  
✉ jobin.jose@mariancollege.org

RECEIVED 19 March 2024

ACCEPTED 06 May 2024

PUBLISHED 17 May 2024

## CITATION

Jose J, Fernandez NJ, Anuja CS, Antony RV  
and Anitha SM (2024) Shadows in the system:  
exposing and eradicating ghost students.  
*Front. Educ.* 9:1403323.  
doi: 10.3389/educ.2024.1403323

## COPYRIGHT

© 2024 Jose, Fernandez, Anuja, Antony and  
Anitha. This is an open-access article  
distributed under the terms of the [Creative  
Commons Attribution License \(CC BY\)](#). The  
use, distribution or reproduction in other  
forums is permitted, provided the original  
author(s) and the copyright owner(s) are  
credited and that the original publication in  
this journal is cited, in accordance with  
accepted academic practice. No use,  
distribution or reproduction is permitted  
which does not comply with these terms.

# Shadows in the system: exposing and eradicating ghost students

Jobin Jose<sup>1\*</sup>, Nancy J. Fernandez<sup>2</sup>, C. S. Anuja<sup>2</sup>, Rinu V. Antony<sup>3</sup>  
and S. M. Anitha<sup>4</sup>

<sup>1</sup>Department of Library and Information Science, Marian College Kuttikkanam Autonomous,  
Kuttikkanam, India, <sup>2</sup>Department of Education, Karmela Rani Training College, Kollam, India,

<sup>3</sup>Department of Education, SNM Training College, Ernakulam, India, <sup>4</sup>Department of Education, NSS  
Training College, Changanacherry, India

## KEYWORDS

ghost students, student engagement, ripple effect, disengagement, education

## Introduction

Even today, the term “ghost student” still haunts the learning institutions of the time. In most cases, a ghost student can be described as a person who is on record for an educational course or a program code but is virtually not in attendance. Such students are those who enroll in classes but hardly attend classes, not to mention turn in their assignments or present themselves for various discussions (Salasky, 2020). Realities and solutions: Academic realities, resources involved, and the outcome are all bankrupted by the thought of ghost students and those who give education. It has to be understood what it is that brings about disengagement, be it financial difficulties, personal problems, lack of motivation, or dissatisfaction with the course and following this program to re-engage such students or to nip ghosting in the bud is implemented (Hall, 2023). The aim of this paper is to examine the sources of disengagement, the consequences of unperceived absences, and to suggest the development of technologies for this engagement. It will also discuss the ethics needed and proactive strategies for prevention and engagement. The result is an article that looks deep into the impact of ghost students, with surface analysis into bigger issues like access to education, stigma of mental health, and the ever-evolving 21st-century learning environment. The paper makes an attempt to put an all-encompassing understanding of this enigma, delineating various aspects of the presence of ghost students in the educational systems. This study addresses the causes of disengagement, ripple effects of their associated absence, and subsequently proposes ethical and technological interventions. It further attempts to outline proactive strategies which may facilitate a more inclusive and engaging learning environment for all students, along with the wider societal implications of disengagement in education. The research seeks to unveil the shadows of ghost students and, in turn, light up the ways toward equity for all in education.

## Understanding ghost students

The causes of ghosting are very often complex and woven together: financial pressures, poor levels of past academic preparation, motivational, or course content that simply didn't resonate, etc. In course delivery done on the web, ghosting behavior may be induced by the possibilities of anonymity or ease of withdrawal. Further, silently, students are in trouble with mental health problems like anxiety and depression and finally drop out.

## Consequences of disengagement

The ghost students, therefore, have a cascading negative effect: the loss of some tuition revenue to the institution and the loss of tangible and intangible resources. Faculty grapples with inadequate information on the students and hence cannot effectively evaluate the learners or assist them. Completion rates suffer, and institutions are responsible for student success but cannot reach those ghost students who silently slip away. And, with that, the seats which a motivated and possibly successful student could have been taken by ghost students, who are at an automatic disadvantage that doesn't need to exist against other people who are seeking out valid opportunities to learn (Whistle, 2019; Figlio et al., 2022).

## Technological solutions

Identifying the concept of “ghost students” becomes a more complicated issue in designing a system for its identification and redressal. This, in turn, alludes to the fact that technological advances hold out a great deal of promise for shining some light on these students in giving educators and powers that be tools for finding early signs of disengagement (Hollis, 2018). Further, data-driven predictive analytics modeling helps institutions flag students at risk through patterns of interaction, including login frequencies, course performance, and activity levels from historical enrollment and performance data. The activity tracking of the learning management system may seek out the student's engagement level in everything, right from their logins to discussion participation and finally to the completion of the coursework. While this is theoretically possible to take place in a brick-and-mortar classroom setup using this system, it poses a huge concern in the area of privacy and ethics that will need careful navigation.

Further, the proactive mechanisms that should be in place for the identification of ghost students are monitoring systems of engagement and alerts. This would mandate and require its students to do quizzes, assignments, and discussions, and during online lectures, it would require using live engagement indicators, which will be vital to the students for the level of engagement or participation with their studies. Alerting systems can be automated to let an educator know when a red flag has been raised by a student in real-time, allowing for early intervention. Besides, these are on the cutting-edge pipeline, although this also raises questions of privacy and the balance between surveillance and support in the research of smart ID badges and biometric sensors to track engagement and attendance using current wearable technology. Other tools of communication and feedback, like anonymous surveys, chatbots, and personalized feedback systems, would have a big role to play in understanding and quelling the issues that underlie disengagement. Suppose technology is implemented prudently with ethical consideration. In that case, it will be a great help for the faculties to detect and support the re-engagement of ghost students in the educational journey.

These solutions promise positive ways for the early detections against ghost students, while this review investigates the limitations and ethical implications in a critical manner. These could come in the form of introducing biases or inaccuracies into the predictive analytics models, in the way of either overlooking student's who

do not fall into the pre-defined pattern or lack of accounting for individual circumstances. Besides, the use of technology for surveillance is supported by massive ethical concerns over issues of privacy and consent. Otherwise, without careful consideration of these ethical implications in the implementation of such technologies, then the same may result in further student marginalization and violations of their rights. Thus, sensitive and nuanced approaches to the adoption of technological solutions need to be introduced with full respect for their possible downsides and ethical implications, taken on board responsibly in deploying and taking care of student privacy and freedom.

## Ethical considerations and responsible implementation

In fact, the use of technology in this line to find “ghost students” ought to combine innovation with ethics, raising issues on privacy, information safety, and misuse to public debate. Such technologies need to be deployed with very ethical guidelines to control them. For example, if a student is to be part of the study, then consent from the student should be taken in such a way that it is well-aware of its data collection, usage, and the rights for refusal. Transparency and accountability in the implementation of any technology should be pillars wherein the algorithms and methods of detection are clear to all interested parties and should suffer continuous ethical scrutiny. The central point in this context should be the use of technology in intervening and providing support to at-risk students, not for punishments, while at the same time making sure that technology is used as a bridge to engagement but not as a barrier—for example, maintenance of all student records and privacy, such as son. Maintaining student information and privacy, such as applying technology, accesses information about the rights and dignity of an individual; thus, rigorous data security protocols are required to deter unauthorized access. Ultimately, while technology serves as a useful toolkit in bringing out the picture of disengaged students, the application of technology needs to be grounded with an ethical foundation on a basis of emphasis on intervention, support, and commitment to an inclusive and equitable educational environment. The use of these tools will be used with caution on the ground of informed consent, transparency, and a guarantee of strong data security measures that would protect against misuse. Among the other major keys, respecting the privacy of the students and use of technology to foster support keep guiding the educational institutions in maintaining a relationship built on trust and collaboration. In this context, clear guidelines have to be outlined based on which technology implementation could be liable in order to assure transparency, consent, and data safety. First, there should be a clear and transparent policy on how the student data is collected, used, and protected in the institution. This encompasses explicit student consent in the use of data for monitoring and intervention. Further, strict data security protocols need to be followed against any unauthorized access or misuse of sensitive information. This would be through regular auditing and assessment on compliance with the privacy regulation and ethical guideline. Institutions should put in place technologies that are transparent, consent-based, and secure

in data usage to be able to gain the trust and accountability of the student in facilitating student engagement and success.

## Strategies for prevention and engagement

Therefore, the line of thought with regard to “ghost students” is not just in their identification but necessarily in changing the focus toward an increased focus on meaningful engagement and preventive issues of inactivity in the educational journey. Accordingly, proactive intervention is called for whereby early alert systems and support mechanisms identify the signs from their enrollment patterns, academic performance, and other relevant data long before this student is marked as disengaged. The provision of targeted support in the form of tutoring, academic coaching, or mental health resources is likely a very good way to anticipate issues of disengagement. If schools can follow through with personalized outreach further—welcome emails, regular check-ins, reminders, etc.—then students are going to feel much more welcomed, embraced, and valued as integral members of the learning community. Extensive onboarding programs can further help in the easy transition into educational settings by presenting students with all resource needs and fostering a sense of belongingness through community-building activities.

The other key strategy would be the development of an interesting learning environment involving the design of courses with active learning strategies like problem-based and collaborative projects and discussions that would be able to provoke interest and, hence, the participation of students. Offering alternatives in learning—hybrid or asynchronous courses—further the reach of those students with other life demands. Offering alternatives in learning—projects—could further the reach of those students with other life demands and better stimulate some students to see more work in their courses. In essence, this will mean creating a community of support where peer support networks and faculty-student encounters will inspire an environment whereby all come together to support the growth of a nurturing educational atmosphere. Another element is the engagement of outreach to issues that, by all means, touch the lives of students and affect engagement by the students. This may include financial hardships. The technology used should be supportive and intervening, not just keeping an unethical eye but remaining on par with the ethics of student privacy. That is to mean that this problem of ‘ghost students’ can only be curtailed through all-round, collegial approaches that would make open advocacy for community, inclusivity, and student-centered strategies that are going to create a learning environment conducive enough for the help and motivation of every student to be active.

## Broader implications and discussions

The issue of ghost students surely transcends educational facilities; it speaks much more to the issues within access to education, the stigma of mental health, and the learning landscape change within an increasingly digital world. This gives space to a wider discussion around these topics, looking for what could be the

background reasons for disengagement and searching for possible solutions that can open new paths of positive change for them and, in a more general manner, for students in educational systems.

It is because of this that a more detailed look into these factors that account for ghosting behavior—more particularly, the crushing hand of financial pressures and mental health issues—becomes a critical analysis. Therefore, the financial constraint serves as a huge barrier that does not allow student engagement and retention within the higher educational organization (DesJardins and Toutkoushian, 2005). Economic hardship among the students might portray itself in different forms, such as lack of tuition fees, lack of money to purchase textbooks, and even in an extreme form, lack of money to buy basic needs such as food and shelter. Such financial needs may cause the affected students to have a lot of stress, distracting them from engaging in academic-related activities. Just like high school students, college students are at risk of common mental health problems such as anxiety, depression, and stress; these effects can be serious and may interfere with active participation in studies (Broton et al., 2016). Such an attitude would ensure there is no increase in the number of students failing to seek help and instead worsening their problems, which then push them to drop their classes and coursework in total. This is the kind of critical analysis to ensure that such issues are tackled, right from the ghosting and success of the student.

The “ghost students” study is really problematic, due to so many gaps. First of all, the study, in a kind of a ghost of students, does not give a definition of who this “ghost” is: from the total absence to inadequate attendance. This further complicates the consistent research that compares the findings across different studies. Thirdly, the current literature on the topic is greatly dominated by cross-sectional over longitudinal studies, still leaving the progress or evolution of student engagements unclear over time. In addition, if at all some substantial data come from quantitative studies, say, on the number of ghost students that existed and performed, then there are very few qualitative inquiries that discuss the reasons for the apparition of ghost students and their teachers and administrating staff. One major shortcoming is the general approach of the study of the ghost student, more or less ignoring the specific and diverse ways in which disengagement is experienced by diverse categories of students—first-generation students or working adults. Thus, most studies within the existing literature target the developed world, leaving a significant knowledge gap within the developing countries, which offer differing educational systems and challenges.

It is, therefore, these gaps that need to be bridged, and such gaps can be bridged through the following future research recommendations: The development of standardized data collection methodologies will enhance the reliability of the prevalence of any nature of violence and provide better opportunities for comparisons with relevance across different educational scenarios. This is a proactive effort not to allow the potentiality of the students’ disengagement to become ghost students through research on the early warning systems’ capacity to predict or identify. Of course, searches for technology-driven solutions that are very promising in enhancing engagements and offering tailor-made support. This calls for further critical investigation into effective intervention measures and the kind of support services ghost students require regarding academic,

mental health, and communication strategies to address the causes of disengagement. The examination of institutional policies—from attendance requirements and intervention protocols to financial penalties—designed by institutions to curb the ghost student phenomenon would yield some useful contributions for policy-based remedies. This paper will attempt to respond to these gaps and will work on the recommendations with the aim of guiding the field to give deeper insights and more comprehensive strategies to serve “ghost students” better and consequently improve educational outcomes.

Putting these aside, the overall societal and systemic issues that have to be resolved to ensure a lack of student engagement and the birth of ghost students must be done in unison. This would perhaps include revisiting issues such as accessibility to education, the stigma of mental health, and also the face of learning within a more digital environment. By airing a bigger conversation regarding such issues, more insights as to the causes of dropping out are going to be got, and thus look for holistic solutions that handle the multifaceted needs of the student. At the same time, bridging gaps in research also entails putting in a concerted effort to ensure diverse perspectives and experiences are brought forward, and in this case, specifically from marginalized communities and developing countries that are currently left behind in today’s literature. This, therefore, may be considered an inclusive and equitable educational environment in which every student is offered an opportunity to excel, as a outcome of research and policy initiatives to promote inclusivity and equity.

## Conclusion

The study highlights the disengagement issue that is ever common for educational institutions. So common, in fact, it is given the label “ghost students”. The manuscript thus seeks to, through an investigation of proactive intervention strategies and ethical consideration as part of the cure for this social ill, causes, consequences, and technological solutions. Implications for practice and policy: This will have important implications for all institutions and educators working with at-risk students for disengagement, demanding concerted efforts in applying

early alert systems, personalized outreach, and engaging learning environments. Policy should then focus on dialogue between policymakers, educators, and ultimately students, regarding both the opportunity to learn and mental health stigma to make for an inclusive learning environment. The above threats of ghost students can be bridged through the research gaps and comprehensive strategies put in place to ensure everyone has equitable access to transformative education. Unlock meaningful learning experiences for every student, fulfilling the promise of education through data-informed insight, empathy, and proactive support.

## Author contributions

JJ: Writing—original draft. NF: Writing—original draft, Conceptualization. CA: Writing—review & editing, Supervision. RA: Writing—review & editing, Investigation. SA: Writing—review & editing.

## Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Publisher’s note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

## References

- Broton, K. M., Goldrick-Rab, S., and Benson, J. (2016). Working for college: the causal impacts of financial grants on undergraduate employment. *Educ. Eval. Policy Anal.* 38, 477–494. doi: 10.3102/0162373716638440
- DesJardins, S. L., and Toutkoushian, R. K. (2005). “Are students really rational? The development of rational thought and its application to student choice,” in *Higher Education: Handbook of Theory and Research*, ed. J. C. Smart (Springer), 191–240.
- Figlio, D., Hart, C. M., and Karbownik, K. (2022). The Ripple effect. *Educ. Next* 22, 48–54. Available online at: [https://www.educationnext.org/wp-content/uploads/2022/01/ednext\\_XXII\\_1\\_figlio\\_et\\_al.pdf](https://www.educationnext.org/wp-content/uploads/2022/01/ednext_XXII_1_figlio_et_al.pdf)
- Hall, E. (2023). Ghost students. *Chron. High. Educ.* 70, 8–9. Available online at: <https://link.gale.com/apps/doc/A767584663/AONE?u=anon~71ce2e4c&sid=googleScholar&xid=8e36a1b5>
- Hollis, L. P. (2018). Ghost-students and the new wave of online cheating for community college students. *New Direct. Commun. Coll.* 2018, 25–34. doi: 10.1002/cc.20314
- Salasky, J. (2020). *Ghost Students*. Available online at: <https://ssrn.com/abstract=3727018> (accessed May 5, 2024).
- Whistle, W. (2019). *Ripple Effect: The Cost of the College Dropout Rate*. Washington, DC: Third Way.