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Research Article

Understanding the Learner's Course Completion in the New Normal: Graduation Cohort Analysis

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ABSTRACT

The pandemic COVID-19 unveiled and magnified the various learning challenges experienced by learners which yield to learning gaps, losses, and higher dropout rates, especially in the tertiary level of education. With this, there is a need to investigate on how learners are able to complete their respective course programs in the new normal. This study attempted to understand the learner's course completion through a graduation cohort analysis approach which is anchored on a quantitative-qualitative research design. Results uncovered that gender and residency of the learners are positively correlated to the length of their course completion. In addition, the course completion varies on the learners' gender and residency. Furthermore, 79% of the learners were able to complete their course on-time with an average of 3.72 years and standard deviation of 1.09 years. Consequently, financial, mental-health, and lack of resources were the emerging reasons for the temporary discontinuation of their studies. Hence, these findings can be used as a basis for the Philippine Private Higher Education Institution to plan and implement an institutional learning recovery program.

Keywords: *Graduation cohort analysis, Higher education institution, Learner's course completion, New normal*

Introduction

One of the unexpected events during the pandemic COVID-19 is the closure of educational institutions and emergence of various learning modality. This has presented various and serious consequences on the learner's learning and wellbeing. It was observed during this transition that learners, educators, academic leaders, and other stakeholders had

their own challenges in coping (Donnelly & Patrinos, 2021). Some of the challenges sprouted during this time are higher dropout rates, technical difficulties due to poor internet connection, lack of access to online platforms, lack of necessary equipment, and individual space for online learning (Salakhova et al., 2022). These have further magnified and widened the learning gaps and losses experienced

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by the learners. Thompson (2022) emphasized that learning loss due to school closures are one of the biggest global threats to medium and long term recovery from the recent pandemic. In addition, Cecilia (2022) described that learning loss inflicted damages that no one expected. It was estimated about USD 17 trillion losses in lifetime earnings among the learners if corrective action is not urgently taken. With these, it can be deemed that the temporary closure of educational institutions have unfolded long-term educational, social, and economic consequences (Deslandes-Martineau et al., 2020). Thus, it places everyone and each nation on the verge of uncertainty.

In November 2022, most of the Philippine educational institutions re-opened and resumed face-to-face classes after operating remotely and closed for approximately 510 days. This is based on the mandates and directives of the Philippine Department of Education (DEPED) Order 34, Series of 2022 and Commission on Higher Education (CHED) Memorandum Order No. 09, Series of 2022 (Galvez, 2022). With the resumption of face-to-face classes, returning learners shall face a different learning environment than before, especially for those who opted to drop out during the peak of the pandemic COVID-19. Hence, there is a need to address any indifference and learning gaps and losses through a learning recovery program. However, implementing such a program shall need a different set of know-how and abilities for the learners, educators, academic leaders, and other members of the community to familiarize them with this program. Hence, this unveils the risk of a different strand of learning gaps and losses. In support, Sabates et al. (2021) reported the learner's average learning loss is 66% is observed in any transitions or migrations of learners from one modality of learning to another modality. However, these learning gaps and losses were observed prior to the recent pandemic. It can be traced in the sudden increase of dropout rates, lower graduation rates, mismatch of graduates' competencies and job opportunities, results of local and international assessments, and the like. Considering these, the Philippine Educational System through the various agencies have adapted various educational frameworks to address and

mitigate these challenges to ensure that each of the Filipino graduates are locally and internationally competitive. These are evident in the underpinning principles and directives of the curriculum and framework being implemented in the basic and higher education level through the Enhanced Basic Education Act or Republic Act 10533 and Outcome-Based Education respectively. (Estrellado, 2022; Ortega-Dela Cruz, 2023). Recently, the DepEd adopted the National Learning Recovery Program through DepEd Order No. 012, series of 2023.

A closer look at the Philippines situation, most HEIs consider graduation rates to be one of their key metrics to measure their success as an educational institution (Drezek et al., 2020). However, Cruz (2023) reported that there is a mismatch on the enrollment rates and graduation rates among the HEIs. Consequently, the dropout rate among Filipino college students has significantly increased to 34% over the years due to the cost of education and other pandemic-related reasons. Whereas, Nurmalitasari et al. (2023) cited similar observations among college students from other nations and countries. This is an evident

Aforementioned, this prompted the researchers to conduct this study to explore and understand the learner's course completion in a Philippine Private HEIs located in the National Capital Region, Philippines. By doing so, the researchers can provide an overview of the characteristics of the graduates through their demographics and timeliness to complete their respective degrees. Hence, propose a basis for an institutional learning recovery program. Since this institution offers course programs specializing in the field of computing, business, liberal arts, design, and the arts which are quite challenging to be offered remotely due to the different needs and demands of each course. Thus, this might affect the learning progress and completion of the learners, especially during the peak of the pandemic COVID-19. To guide the researchers, the Lewin's Change Model was adopted as the conceptual framework. This framework suggests that educational institutions are constantly experiencing changes due to various factors (Darrin, 2021). This is quite relevant as the institution changed its pedagogies and approaches due to

pandemic-related learning disruptions. These are reflected on how educators shifted their teaching and assessing approaches, curriculum adjustments, changes in institutional policies and programs to mitigate the impact of the pandemic COVID-19.

Methods

In this study, the researchers considered a quantitative-qualitative research design through the graduation cohort analysis and documentary analysis approaches. This enables the researchers to describe and understand the learner's course completion and common reasons associated with the delay of completing the course program on-time (Dovetail, 2023; McCombes, 2019). Thus, the researchers contextualized graduation cohort analysis as a comprehensive examination of graduation rates through the use of appropriate descriptive, correlational, and comparative analysis (Doles, 2023; Weiss, et al. 2023). While documentary analysis was based on the suggestions by Bowen (2009).

Furthermore, researchers considered the institution's record of graduates from 2019 to 2020. Data points were purposely selected by considering records of graduates from 2019 to 2020, non-transferees, and completed the Philippines K-12 basic education program. Afterwards, 4 cohorts were generated based on the year of graduation. Cohort 1 for 2019 graduates, Cohort 2 for 2020 graduates, Cohort 3 for 2021 graduates, and Cohort 4 for 2022 graduates. The researchers observed appropriate protocols in the data collection phases based on

the Philippines Data Privacy Act of 2012. With this, the researchers segmented the data collection phase into 2 stages.

Primarily, Stage 1 focused on data mining and cleansing through Orange. In this stage, the researchers extracted the records of graduates from 2019 to 2022 from the institution's records and database. While, the researchers collated and reviewed the documents filed by learners who expressed to temporarily discontinue their studies. In addition, these documents are selected based on the Student ID number who joined the institution from 2015 to 2018. Since these are the learners expected to graduate in the identified graduation years.

Afterward, Stage 2 focused on data aggregation and insights. In aggregating the collected data, the researchers observed proper protocol and utilization of a licensed IBM Statistical Package for Social Sciences, Orange, and nVIVO to analyze the collected data. Appropriate descriptive, correlational, and comparative analyses were performed. Thus, the generated insights from the results will serve as a basis for the institutional learning recovery plan in the new normal.

Result and Discussion

In this study, the researchers considered 697 records out of 714 records based on the inclusion criteria for the graduation cohort analysis. Furthermore, 145 documents were considered in the documentary analysis. With this, the following are the salient findings of this study:

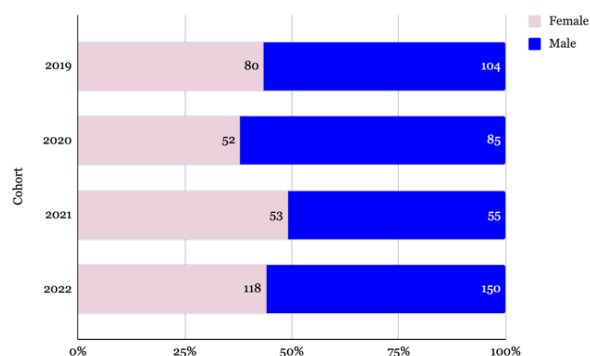


Figure 1. Gender Distribution of Graduates in each Cohort

In Figure 1, it shows the gender distribution of the graduates in each cohort. Descriptive

analysis shows that 43% of the graduates were female and 57% were male. This implies that

there are more male learners which can be associated with the nature of the course program offered by the institution. While correlational analysis conveys that gender is positively correlated to the length of course completion, $r = 0.236$, $p = 0.001 < 0.05$. In addition, a comparative test reveals that there is a significant difference between the course completion of the graduates once grouped based on their

gender, $z = 5.002$, $p = 0.027 < 0.05$. This suggests that gender can be associated with the learner's course completion. In support, Madara & Namango (2016) reported that gender-difference affects learners' course completion. In a more recent context, Parker (2021) highlighted that female learners are more likely to complete a college course program.

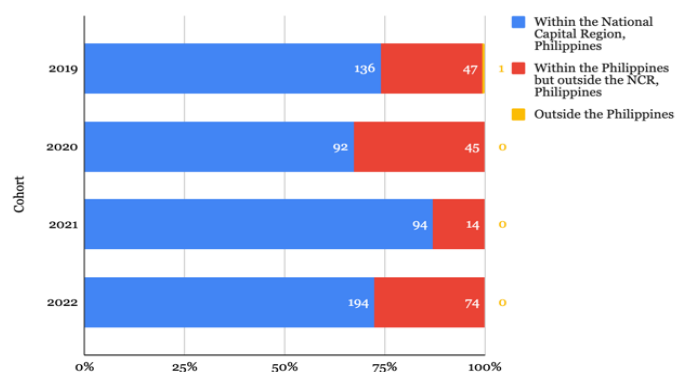


Figure 2. Residency Distribution of Graduates in each Cohort

In Figure 2, it layouts the residency distribution of the graduates in each cohort. It can be gleaned that the majority of the graduates are located within the National Capital Region (NCR), Philippines. Descriptive analysis reveals that 74% of the graduates were residents from National Capital Region (NCR), Philippines; 24% were resident outside the NCR but within the Philippines and 1% of the graduates is resident from another country. More so, correlational analysis shows that there is a positive correlation ($r = 0.105$, $p = 0.006 < 0.05$) between the residency and length of course completion. While comparative test reveals that

there is a significant difference in the course completion of the graduates once grouped according to their residency, $F(2, 692) = 3.914$, $p = 0.020 < 0.05$. This suggests that residency of a learner can be associated with the learner's course completion during the pandemic COVID-19. However, the residency of learners is a potential reason to drop out from the institution as mentioned by Parreño (2019). Due to the pandemic COVID-19 and modality of learning, some of the graduates took advantage of the situation in order for them to complete their respective course programs.

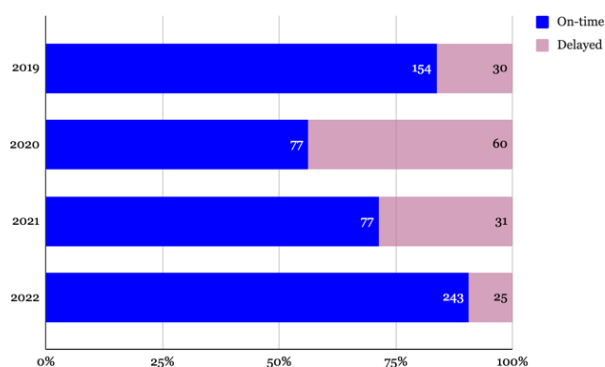


Figure 3. Timeliness of Course Completion in each Cohort

Figure 3 layouts the timeliness of course completion among the graduates in each cohort. Prior to the peak of the pandemic COVID-19, there were already learners who were delayed in completing their respective course programs. It is worth noting that there is an increase in the number of delayed graduates during the peak of the pandemic COVID-19 from 2020 to 2021. Researchers reviewed the records of these graduates. It was noticed that these graduates took advantage of course offerings in online modality in 2020. While, 2021 students who filed for a temporary discontinuation of their studies returned and completed their respective course programs. Moreover, it is noticeable that the gap between on-time and delayed is closing as the institution is transitioning to the new normal.

Furthermore, the timeliness of course completion is categorized into on-time and delayed. On-time means that a learner was able to complete a bachelor's degree usually in 4 years. The graduation cohort analysis reveals an overall mean of 3.72 years with a standard deviation of 1.09 for learners to complete their respective course programs. This signifies that a learner can complete a certain program within 3 to 4 years with a possible delay of approximately 1 year upon entering the institution. Consequently, 84% of graduates are on-time for the 2019 cohort, 56% of the graduates are on-time for the 2020 cohort, 71% of graduates are on-time for the 2021 cohort, and 91% of the graduates are on-time for the 2022 cohort. Overall 79% of the graduates were able to complete their respective course program on-time based on the descriptive analysis while 21% were delayed. The computed course completion rate is higher than the reported rate of 49.80% among college graduates in the 21st century by Hanson (2022). This is also higher than the reported course completion among Filipino college graduates of 24.40% by the Philippine Business for Education (PBE). On one hand, 21% of the graduates were delayed which is lower than the reported value of Hanson (2022) of 23.50%.

Moreover, documentary analysis revealed that financial, mental-health, and lack of resources were the most common reasons for the students to file a temporary discontinuation of

their studies within the institution. This is quite similar to the findings of Banzuelo (2021), Parreño (2019), and Bolsoni-Silva et al. (2018) in their respective studies. Some of the students stepped back from schooling due to uncertainty of financial stability brought by the pandemic COVID-19. While, mental health status was caused by the anxiety related to coping with the academic demands, personal struggles, and other challenges that greatly affected their mental health and well-being. On one hand, lack of resources is described as the lack of appropriate devices needed in their respective course programs, licenses to software, stable internet connection, quiet and comfortable place to study, and the like.

Conclusion

Through this study, the researchers were able to investigate the learner's course completion in the new normal through a graduation cohort analysis. It can be gleaned that 79% of the learners were able to complete their course program on-time with an average of 3.72 years and standard deviation of 1.09 years. Whereas gender and residency of the graduates are positively related to their course completion. At the same time, course completion varies based on their gender and residency. In addition, financial, mental health, and lack of resources were the common reasons for graduates to step back from schooling. However, it is notable that learners are returning to the institution to complete their respective courses. With this, the following were recommended by the researchers:

1. The Institutional Learning Recovery Program could comprise of the following:
 - 1.1 Planning, designing, and implementing a remedial program for current learners to mitigate any impact of the sudden shift of learning and assessing modality. This program shall provide thorough review and discussions to competencies and skills that might be overlooked during the transition of teaching and learning modality. This can also be offered to learners who already completed the course programs;

- 1.2 Revisitation of the entrance examination used in admitting learners to gauge the competencies and skills in preparation for the course program;
- 1.3 Development and validation of an exit examination to diagnose the mastery of the competencies and skills of the learners in their respective courses. This shall provide an overview of learning gains and loss basis for conducting remedial programs;
- 1.4 Revisitation of the course curricula and other learning and assessment materials used by the educators within the institution;
- 1.5 Revisitation of existing policies and guidelines related to admission of the learners, partnership with government and non-government organizations in providing scholarships and other forms of financial aid, and long-term mental health and well-being program, and other institutional programs that have a direct impact to the learner's learning experience; and
- 1.6 Integration of artificial intelligence framework and tools to innovate teaching and learning practices as well as improving the institution's operations such as monitoring the course completion of each student in a faster and efficient manner, responding to concerns of the learners and other stakeholders.
2. Further investigation on the learner's course completion by expanding to comparative approaches to other institutions within the country and region;
3. Investigation on the employability and employment status of graduates from 2019 to 2023 from the institution through graduation tracer study and other approaches; and
4. Investigation on the soft and hard skills among the graduates and current students of the institution as a basis for designing a learning recovery program to ensure that the necessary competencies and skills in the 21st century are being harnessed among the students.

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References

- Donnelly, R, Patrinos, H. (2021). Learning loss during Covid-19: An early systematic review. *Prospects*, 51(4), 601-609. <https://doi.org/10.1007/s11125-021-09582-6>
- Salakhova, VB, Shukshina, LV, Belyakova, NV, Kidinov, AV, Morozova, NS, Osipova, NV. (2022). The Problems of the COVID-19 Pandemic in Higher Education. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.803700>
- Thompson, G. (2022). Learning loss must be recovered to avoid long-term damage to children's wellbeing and productivity, new report says. *Unicef.org*. <https://www.unicef.org/philippines/press-releases/learning-loss-must-be-recovered-avoid-long-term-damage-childrens-wellbeing-and>
- Cecilia, E. (2022, October 19). The state of learning loss in children. *The Manila Times*; *The Manila Times*. <https://www.manilatimes.net/2022/10/20/campus-press/the-state-of-learning-loss-in-children/1862939>
- Deslandes-Martineau, M, Charland, P, Arvisais, O, Vinuesa, V. (Eds.). (2020). Education and COVID-19: challenges and opportunities. Canadian Commission for UNESCO. <https://en.ccu-nesco.ca/idealab/education-and-covid-19-challenges-and-opportunities>

- Department of Education (DEPED) Order 34, Series of 2022 [<https://www.deped.gov.ph/2022/10/17/on-the-issuance-of-an-amendatory-deped-order-to-do-34-s-2022/>], accessed January 18, 2023.
- Commission on Higher Education (CHED) Memorandum Order No. 09, Series of 2022 [<https://chedro3.ched.gov.ph/wp-content/uploads/2022/09/CMO%20No.%209%20S.%202022.pdf>], accessed July 13, 2022.
- Galvez, D. (2022, July). DepEd orders all schools to shift to face-to-face classes by November 2. INQUIRER.net; INQUIRER.net. <https://newsinfo.inquirer.net/1626494/deped-orders-all-schools-to-shift-to-face-to-face-classes-by-november-2>
- Sabates, R, Carter, E, Michael, J. (2021). Using educational transitions to estimate learning loss due to COVID-19 school closures: The case of Complementary Basic Education in Ghana. 82, 102377–102377. <https://doi.org/10.1016/j.ijedudev.2021.102377>
- Estrellado, C. J. (2022, February 6). Transition to Post-Pandemic Education in the Philippines: Unfolding Insights. Ssrn.com. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4027679
- Ortega-Dela Cruz, R. (2023). View of Learners' attitude towards outcomes-based teaching and learning in higher education. Tuning Journal for Higher Education. Tuningjournal.org. <https://tuningjournal.org/article/view/1965/2963>
- DepEd Order No. 012, series of 2023 [<https://www.deped.gov.ph/2023/07/04/july-3-2023-do-012-s-2023-interim-guidelines-for-the-educational-service-contracting-program-for-school-years-2022-2023-and-2023-2024/>], accessed August 1, 2023.
- Drezek, A., Beaudin, L., & Kaminaga, A. (2020). University President's Gender and Graduation Rates. https://digitalcommons.bryant.edu/cgi/viewcontent.cgi?article=1030&context=honors_economics
- Cruz, R. (2023). CHED reports higher enrollment; graduation, drop out rates unchanged. ABS-CBN News; ABS-CBN News. <https://news.abs-cbn.com/news/05/18/23/ched-reports-higher-enrollment-graduation-drop-out-rates-unchanged>
- Nurmalitasari, Z Faizuddin, M. (2023). Factors Influencing Dropout Students in Higher Education. Education Research International, 2023, 1–13. <https://doi.org/10.1155/2023/7704142>
- Darrin, D. (2021). Lewin's Change Model. Educational Research Techniques. <https://educationalresearchtechniques.com/2021/06/28/lewins-change-model/>
- Dovetail. (2023). Descriptive Research: Design, Methods, Examples, and FAQs. Dovetail.com; Dovetail. <https://dovetail.com/research/descriptive-research/>
- McCombes, S. (2019, May 15). Descriptive Research | Definition, Types, Methods & Examples. Scribbr. <https://www.scribbr.com/methodology/descriptive-research/>
- Doles, B. (2013). The Basics of Cohort Analysis. <https://www.tune.com/blog/basics-cohort-analysis/>
- Weiss, J., Haithcock, W., Kecler, K., & Sawyer, L. (2023). Four-year graduation rate – cohort analysis (school year 2021-22 0 graduation class of 2022). <https://www.kusd.edu/docs/educational-accountability/cohort-report.pdf>
- Madara, D, Namango, S. (2016). Longitudinal Comparative Study: Females' vs. Males' Graduation Outcomes in Undergraduate Engineering. 7(30). <https://files.eric.ed.gov/fulltext/EJ1118903.pdf>
- Parker, K. (2021). What's behind the growing gap between men and women in college completion? Pew Research Center. <https://www.pewresearch.org/short-reads/2021/11/08/whats-behind-the-growing-gap-between-men-and-women-in-college-completion/>

- Parreño, S. (2019). Reasons for School Dropout in the Philippines. Social Science Research Network. <https://doi.org/10.2139/ssrn.4148093>
- Hanson, M. (2019). College Graduation Statistics [2023]: Total Graduates per Year. Education Data Initiative. <https://educationdata.org/number-of-college-graduates>
- State of Philippine Education Report 2023 [<https://www.pbed.ph/blogs/47/PBEd/State%20of%20Philippine%20Education%20Report%202023>], accessed August 15, 2023
- Banzuelo, N. (2021). Half of PHL students consider putting off school amid pandemic - BusinessWorld Online. BusinessWorld Online. <https://www.bworldonline.com/the-nation/2021/06/23/377499/half-of-phl-students-consider-putting-off-school-amid-pandemic/>
- Bolsoni-Silva, A, Barbosa, R, Brandão, A, & Loureiro, S. (2018). Prediction of course completion by students of a university in Brazil. *Psico-USF*, 23(3), 425–436. <https://doi.org/10.1590/1413-82712018230303>