Effects of College Level Students' Time Management Strategies in a Hybrid Environment

Andrea de Souza Fonseca

Erika Yamaguchi Petersen

University of Tampa

EME 603 - Inquiry and Measurement

Table of Contents

Abstract

The number of online and hybrid courses have increased in the past years. Several courses are now are offered in hybrid environment and Universities are highly investing in technological infrastructure worldwide. This research investigates how college-level students' time management strategies can affect their performance in a hybrid course. Providing a perspective on how time management strategies could affect them and how they can benefit from this environment. In addition, this study offers the IDTs background knowledge to design better hybrid courses.

Purpose of the Research Study & Problem Statement

The number of online and hybrid courses have increased in the past years. Universities in the U.S. and around the world have made a lot of investment in the technological infrastructure to redesign their courses. Traditional lecture has been criticized because it fails to accommodate different types of learners. The article "Implementing flexible hybrid instruction in an electrical engineering course: The best of three worlds?", argues that hybrid courses offer stronger personalized experience giving students a more active role (He, Gajski, Farkas, & Warschauer, 2015). It seems that hybrid courses can be beneficial and a motivational tool, playing an important role in the learning process.

Despite the increase in number of hybrid courses in high level education, some researchers suggest that students' performance in hybrid courses are not better nor worse than their performance in traditional courses. More research may conclude that learning to manage time will have a beneficial impact in students' performance in hybrid course. Kumrow argues that students must carefully transition from teacher-directed learning environment to a student-managed learning environment, if they want to be academically successful in a hybrid course. Time management is an important skill that they must control by themselves to achieve their goals. For this reason, the time management strategy was selected to be studied.

This study will investigate how college level students' time management can affect their performance in a hybrid course. He et al. (2015) state that "time management could be a pressing problem in flexible hybrid environment". In addition, it will offer the IDTs background knowledge to design better hybrid courses as well.

Research Question:

1. Do college level students' time management strategies affect performance in a hybrid environment?

Literature Review

With the increase of online courses, it is important to understand how time management strategies could affect and benefit the student's performance in this environment. The following are some of the studies in this field:

Ackerman (2008) offers her views about engagement strategies in hybrid learning in higher education, based in her experience in this learning environment and through her research and observation of various adult audiences at graduate and undergraduate levels. Through this study we have relevant access to the five categories of hybrid learning techniques used as engaging applications. These five concerns (perceived security and self-confidence, drama and engagement, learner context and control, learner support, and digital and demographics) are deeply explained and detailed with enriching examples. Suggestions of different strategies, such as identifying students' skill levels to pair them according to a goal, keeping the learners engaged or calming down the novice users, are just a few of the many interesting tips given by the author. In conclusion, it seems that applying these strategies is viewed positively and efficiently in hybrid learning in higher education.

He et al. (2015) investigate the impact of class attendance, out-of-class study time, and motivation on student exam performance in hybrid courses. The study took place in an undergraduate electrical engineering course at a large public university in the United States.

From the total of 159 enrolled students, 139 gave consent to participate in the research. The majority (86%) were males and 72.66% were freshman. Student performance was measured by: exams, surveys and institutional data. Results confirmed that attendance, study time and motivation were associated with exam performance. They also implied that time management could be a pressing problem in a flexible hybrid environment, when class attendance was made optional. This study is useful to understand how time management can affect performance in hybrid courses.

Hensley et al. (2018) propose to study a range of indicators of time management: setting goals and priorities, mechanics of time management, preference for organization and, procrastination. The primary goal of the study was to gain a better understanding of students in a college course and their time-related behaviors and attitudes. A total of 414 students from a public university in the United States participated in the study. During the first 2 weeks of a college course, students completed 2 self-reported surveys measuring 4 aspects of time management. The 4 dependable variables were moderately correlated. Gaining a better understanding of time management is essential to provide academic support and help students achieve better academic performance. The definitions of indicators of time management will help us to clearly explain our own research.

Kumrow (2007) presents a study that analyzes whether anticipating and focusing in the five self-regulatory strategies (time management, study environment, effort regulation, help seeking, and peer learning), can positively affect students academically in hybrid-learning nursing courses. The study used three research instruments; demographic data collection form, affective measure survey and resource management strategies survey; applied in specific times

during the course. In short, it could be concluded from this investigation that four of the self-regulatory strategies examined did not have strong connection to the students' grade in the end of the term.

Maia Peixoto et al. (2012) present the reader a research with health students in hybrid courses in a Brazilian university. The advancement of the internet brought new possibilities and practices to the educational process, generating new forms of teaching and accessing the student. For this reason, the reflective practice of learners, the self-strategies to achieve their goals and skills needed to succeed in the hybrid environment are analyzed in this study. Participants' characteristics, their study habits and learning strategies were investigated. The information was collected using a quantitative data, through an online questionnaire, during one month in 2011. As a result, the authors present us relevant data and conclusions, highlighting the importance to have integrated strategies in the student's routine in hybrid health courses.

Nakos et al. (2018) present a research performed in three different sessions in a hybrid business course. In this study, the performance of 182 patients, who were frequently exposed to short exams, was evaluated. The results of the research showed that the possibility of being frequently evaluated leads students to participate more effectively in the proposed online activities, checking their readings and preparing themselves better for the class. Consequently, it improves the quality of the classes with productive and enriching discussions.

Thibodeaux et al. (2017) suggest the need for remediation of time management skills. How students manage their time, is critical for academic performance. The purpose of the study is to understand the relationship among first year students time use and GPA results. There were 589 first semester undergraduate students from a public university participating in the study.

They used questionnaires, self-reported surveys and GPA results. Comparing students plans with what they really did. This study is useful to understand that planning is a critical component of self-regulated learning.

Data Collection

All participants in this research were 18 years of age or older. The graduate and undergraduate students of The University of Tampa were studied in a hybrid environment and their ability to self-manage time was measured.

This study used a blended method to analyze how college-level students' time management strategies can affect their performance in a hybrid course.

A semi-structured and informal interview with a graduate professor from IDT program and undergraduate professors from Mathematics and Psychology hybrid were prepared to collect and measure qualitative data. Another interview with a graduate student who is attending a hybrid course was prepared, to help us to gather more qualitative data and views about the topic. Both interviews included ten open questions.

In order to collect and measure quantitative data, an online survey was created and distributed through Qualtrics, guaranteeing the participants' confidentiality. Two sections were created in this online survey. In the first section, general information was asked about gender, age, and degree of the participants. The second section included 14 Likert-type scale and one last open question. The surveys were sent by email and by Qualtrics distribution system. The participants received a link to access the online survey. It should be completed individually in 15 minutes.

Data Analysis

The data gathered from the respondents were analyzed for the purpose of answering the research question: "Do college level students' time management strategies affect performance in a hybrid environment?". The questionnaires were analyzed using the Qualtrics data collection. We analyzed descriptive statistics in order to collect the frequency count and percentages. They were presented in the table form.

Results/Findings

The data collected reflected a small population of IDT graduate students. In the table below, it is possible to see the results and make numerical comparisons (Table1).

Table 1 – survey question.

#	Field	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Total
4	4. I always prepare myself by reading all required material for a face-to-face class.	0.00% 0	16.67% 2	8.33% 1	75.00% 9	0.00% 0	12
5	5. I have a quiet and adequate place to study.	0.00% 0	0.00% 0	0.00% 0	66.67% 8	33.33% 4	12
3	3. I always prepare myself by reading all required material for an online class.	0.00% 0	25.00% 3	8.33% 1	58.33% 7	8.33% 1	12
6	6. Hybrid classes allow me to have more free time to do other things.	0.00% 0	0.00% 0	8.33% 1	58.33% 7	33.33% 4	12
11	11. Managing my time well will affect my performance/grades in hybrid courses.	0.00% 0	0.00% 0	0.00% 0	58.33% 7	41.67% 5	12
12	12. Managing my time well will affect my performance/grades in traditional courses.	0.00% 0	0.00% 0	0.00% 0	58.33% 7	41.67% 5	12
7	7. I use notebooks and/or smart phone apps to organize my study time.	0.00% 0	25.00% 3	8.33% 1	50.00% 6	16.67% 2	12
10	10. In my opinion, everyone can attend a hybrid course.	0.00% 0	25.00% 3	16.67% 2	41.67% 5	16.67% 2	12
1	1. I enjoy attending hybrid courses.	0.00% 0	0.00% 0	8.33% 1	33.33% 4	58.33% 7	12
8	8. My routine organization may affect my performance in a hybrid course.	8.33% 1	25.00% 3	25.00% 3	33.33% 4	8.33% 1	12
13	13. My grades are better in hybrid courses than in traditional courses.	8.33% 1	16.67% 2	33.33% 4	33.33% 4	8.33% 1	12
14	14. The assignments in a hybrid course are easier than in traditional courses.	16.67% 2	16.67% 2	33.33% 4	33.33% 4	0.00% 0	12
2	2. I would prefer to have traditional courses.	8.33% 1	41.67% 5	25.00% 3	25.00% 3	0.00% 0	12
9	9. In online classes, not spending time with classmates would affect negatively my performance and results.	16.67% 2	41.67% 5	25.00% 3	16.67% 2	0.00% 0	12

According to the respondents, 100% of them agree (58.00% agree and 42.00% strongly agree with it) that time management is important in both environments.

Regarding having a quiet and adequate place to study, 100% of the participants agree or strongly agree.

Another finding is that 91.00% of the participants enjoy attending hybrid courses (33.00% agree and 58.00% strongly agree), and the number of respondents that enjoy attending traditional courses is 25.00%.

One of the points also revealed by the online survey is that 75.00% of participants agree that they are always better prepared for face-to-face classes and 58.00% agree that they are always prepared for the online classes.

There is no consensus among the participants about the routine organization affecting performance in a hybrid course. It was not clear if the grades are affected by the type of classes.

In regards to the qualitative data, one of the undergraduate professor's interviewed argues that students spend more time preparing for hybrid courses than traditional courses. In her opinion, any student can attend a hybrid course, however, she agrees that they need to be vigilant and organized. For her, the advantage of a hybrid course is that learners can work at their own pace. If they don't understand a topic, they can watch the videos as many times as they want.

In another interview, the professor explains that in a hybrid course, the blackboard reminders are quite relevant in order to help students self-organize and be aware of assignment

due dates, managing their time better. According to the professor, it is easy to get overloaded with assignments if the students do not have their time under control. In the professor's opinion, students prepare themselves more for face-to-face classes because they could be asked questions.

Implications/Conclusion

The findings of this survey study suggest that time management is an important factor in both environments, face-to-face and online classes. However, the statistics also show that the students are better prepared for traditional classes than online classes.

Analyzing each survey question, we have a better understanding of how students' time management strategies may affect or benefit students' performance in this environment. Besides that, the findings of this study will offer the IDTs background knowledge to design better hybrid courses. For future research, the focus can be more on questions related to time management strategies.

Possible Limitations

There were some variables that we did not expect. The undergraduate hybrid courses are summer classes only, which made it harder to compare to the graduate hybrid course that happens in the fall and spring semesters as well.

Another limitation was the few numbers of respondents. A larger sample population would have helped to provide more data.

Ethical Considerations:

Participation in this project was voluntary and the respondent could withdraw any time during the project.

The survey was conducted anonymously. The survey data is stored and protected through University of Tampa Qualtrics, which only the researchers have access to. No names were collected. However, the current grade level, gender and age of the students was asked. No personal identifiable information will be published in our findings. All data collected will be securely protected in the researches' computer.

The interview data will be protected digitally in the researches' computers which only researchers have access to and will be deleted when study is over. The interviewee names will not be published. The researchers do not anticipate any risks due to this study.

References

Ackerman, A.S. (2008). Hybrid learning in higher education: Engagement strategies. *College & University Media Review*, 14(1), 145-158. Retrieved from http://esearch.ut.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=44881355&site=ehost-live

He, W., Gajski, D., Farkas, G., & Warschauer, M. (2015). Implementing flexible hybrid instruction in an electrical engineering course: The best of three worlds? *Computers & Education*, *81,* 59-68. https://doi-org.esearch.ut.edu/10.1016/j.compedu.2014.09.005

Hensley, L.C., Wolters, C.A., Won, S., & Brady, A.C. (2018). Academic probation, time management, and time use in a college success course. *Journal of College Reading & Learning*, 48(2), 105-123. https://doi-org.esearch.ut.edu/10.1080/10790195.2017.1411214

Kumrow, D. E. (2007). Evidence-based strategies of graduate students to achieve success in a hybrid web-based course. *Journal of Nursing Education*, *46*(3), 140-145. Retrieved from httpp://esearch.ut.edu/login?url+http://search.ebscohost.com/login.aspx?direct-true&db=ehh&AN=24185106&site=ehost-live

Maia Peixoto, H., Maia Peixoto, M., & Dornelles Alves, E. (2012). Learning strategies used by undergraduate and postgraduate students in hybrid courses in the area of health. *Revista Latino-Americana De Enfermagem*(RLAE), 20(3), 551-558.

Nakos, G., & Whiting, A. (2018). The role of frequent short exams in improving student performance in hybrid global business classes. *Journal of Education for Business*, *93*(2), 51-57. https://doi-org.esearch.ut.edu/10.1080/08832323.2017.1417231

Thibodeaux, J., Deutsch, A., Kitsantas, A., & Winsler, A. (2017). First-Year College Students'

Time Use. Journal of Advanced Academics, 28(1), 5-27. doi:

10.1177/1932202X16676860

Appendix 1

INFORMED CONSENT

THE UNIVERSITY OF TAMPA

Project Title: Effects of College Level Students' Time Management Strategies in a Hybrid Environment.

Principal Investigator: Andrea Fonseca and Erika Petersen.

Faculty Member: Assistant Professor Suzanne Y. Ensmann

Purpose of Project: The purpose of this study is to investigate how college level students' time management strategies can affect their performance in a hybrid course.

Procedures: Surveys, Interviews.

Risks/Benefits: Minimal risk/ Participants will benefit from reflecting about time manage skills.

Confidentiality: No personal identifiable information will be published in our findings. All data collected will be securely protected with the researcher.

CONDITIONS OF PARTICIPATION

Participating in this project is voluntary, and refusal to participate or withdrawing from participation at any time during the project will involve no penalty or loss of benefits to which the subject is otherwise entitled. The principal investigator may terminate participation of a subject or the project entirely without regard to the subject's consent. In the event of questions or difficulties of any kind during or following participation, the subject may contact the Principal Investigator as indicated above.

CONSENT

I have read the above information and my questions and concerns, if any, have been responded to satisfactorily by project staff. I believe I understand the purpose, benefits, and risks, if any, of the study, and give my informed and free consent to be a participant.

_____

SIGNATURE   DATE

THIS RESEARCH PROJECT HAS BEEN APPROVED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS OF THE UNIVERSITY OF TAMPA (Phone: 813-253-3333)

Appendix 2

Survey Instructions

You are about to participate in a research survey to investigate how college level students' time management strategies can affect their performance in a hybrid course. By agreeing to participate, you will be asked to fill out a survey of 15 questions. It should take no more than 15 minutes. No personal identifiable information will be published in the findings. All data collected will be securely protected by the researcher. This research is being conducted by graduate students in the Instruction Design Program at The University of Tampa. The researchers can be contacted by email: andrea.fonseca@spartans.ut.edu and/or erika.petersen@spartans.ut.edu and/or irb@ut.edu.

Participants must meet the requirements below to participate in the survey:

- 18+ years of age

- Currently enrolled in hybrid classes at The University of Tampa

----

I agree to participate in this study by answering the following survey questions and I am aware that it is anonymous, voluntary, and that I may opt out at any time. I also certify that I have read the above criteria and meet all requirements.

Likert-type scale through the Qualtrics tools for questions 1 to 14.

Strongly disagree/ Disagree/Unsure/Agree/Strongly agree

One open question to conclude the survey.

Online survey questions for students:

1. I enjoy attending hybrid courses.

2. I would prefer to have traditional courses.

3. I always prepare myself by reading all required material for an online class.

4. I always prepare myself by reading all required material for a face-to-face class.

5. I have a quiet and adequate place to study.

6. Hybrid classes allow me to have more free time to do other things.

7. I use notebooks and/or smart phone apps to organize my study time.

8. My routine organization may affect my performance in a hybrid course.

9. In online classes, not spending time with classmates would affect negatively my performance

and results.

10. In my opinion, everyone can attend a hybrid course.

11. Managing my time well will affect my performance/grades in hybrid courses.

12. Managing my time well will affect my performance/grades in traditional courses.

13. My grades are better in hybrid courses than in traditional courses.

14. The assignments in a hybrid courses are easier than in traditional courses.

15. What strategies do you use to manage your time?

Appendix 3

Interview Guide: Time Management in Hybrid Courses

Interview Questions for Students

Protocol:

All participants are 18 years of age or older. The graduate and undergraduate students of The University of Tampa will be studied in a hybrid environment and their ability to self-manage time will be measured. They are of different ages, from different courses and backgrounds. Undergraduate students attend two courses: Mathematics and Psychology in hybrid mode. The graduate student population will all be from the IDT program. The interview will take place in person on campus, preferably in a quiet room. The interviewer will take notes and, with the interviewee consent, an audio will be recorded as well. No more than 30 minutes is expected to conclude the interview. The purpose of this interview is to learn more from the students and collect qualitative data.

Introduction:

Thank you for taking your time to participate in this research study. Everything you shared will remain confidential. Our goal is to have a better understanding of the influence of time management skills in a hybrid course. Your participation will help us to achieve this goal. We appreciate.

Questions:

Interview Questions for Students

1. How do you feel about hybrid course? Do you feel comfortable attending this type of course?

2. Do you spend the same number of hours to prepare for an online class and for a face-to-face class?

3. Could you briefly describe your routine organization that may affect your performance in a hybrid class?

4. In your opinion, can everyone attend a hybrid course?

5. What characteristics should a student have in order to attend a hybrid course?

6. Which are the advantages of attending a hybrid course?

7. Do you believe that spending less time with classmates in hybrid classes would affect your performance/grades? Explain why.

8. What strategies do you use to manage your time?

9. What is the importance of managing your time?

10. How do you prepare yourself for exams?

Closing Script:

Thank you for taking your time to participate in this research study. Everything you shared will remain confidential. Our goal is to have a better understanding of the influence of time management skills in a hybrid course. Your participation will help us to achieve this goal. Do you have any questions? Thanks again!

Interview Guide: Time Management in Hybrid Courses

Interview Questions for faculty

Protocol:

All participants are 18 years of age or older. The graduate and undergraduate students of The University of Tampa will be studied in a hybrid environment and their ability to self-manage time will be measured. They are of different ages, from different courses and backgrounds. Undergraduate students attend two courses: Mathematic and Psychology in hybrid mode. The graduate student population will all be from the IDT program. The interview will take place in person on campus, preferably in the faculty office. The interviewer will take notes and, with the interviewee consent, an audio will be recorded as well. Between 30 and 45 minutes is expected to conclude the interview. The purpose of this interview is to learn more and collect qualitative data, from the faculty perspective about students' time management in hybrid courses.

Introduction:

Thank you for taking your time to participate in this research study. Everything you shared will remain confidential. Our goal is to have a better understanding of the influence of time management skills in a hybrid course. Your participation will help us to achieve this goal. We appreciate.

Interview Questions for faculty

1. How do you feel about teaching hybrid courses? Do you prepare your online classes in the same way you prepare your face-to-face classes?

2. Since the hybrid courses were introduced at The University of Tampa, do you think that the number of students interested in this program increased?

3. Do you believe that students spend the same number of hours preparing for an online class and for a face-to-face class?

4. In your opinion, is there any special routine organization that may affect the students' performance in a hybrid course?

5. In your opinion, can everyone attend a hybrid course?

6. Which are the advantages of attending a hybrid course?

7. Do you believe that spending less time with classmates in hybrid classes would affect students' performance? Explain why.

8. What strategies do you think are important for the students to manage their time?

9. Do you believe that the students with time management skills perform better in exams?

10. What do you imagine courses will be like in the future? Do you think that technology will bring more changes to the class environments?

Closing Script:

Thank you for taking your time to participate in this research study. Everything you shared will remain confidential. Our goal is to have a better understanding of the influence of time management skills in a hybrid course. Your participation will help us to achieve this goal. Do you have any questions? Thanks again!