

A Modified Monthly Study Tracker Designed for the Contents of Lessons

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The aim of this study was to help students in need of developing a self-study habit outside the classroom to allocate longer self-study hours by the use of a modified monthly study tracker designed for the contents of lessons. The study participants included first-year engineering majors attending a national institute of technology (KOSEN), who were enrolled in the first semester of a year-round English course. The findings suggest that the use of the modified monthly study tracker for monitoring study habits and self-study hours play a role in allowing for an overview of students' study habits and increasing self-study hours.

Keywords:The Bullet Journal method (BuJo), Self-efficacy, Self-monitoring, Self-regulatory cycle

1. Introduction

The National Institute of Technology (KOSEN) is an educational institution providing five years of specialized engineering education after finishing junior high school. The KOSEN students study theory and acquire practical engineering skills at the university level during these five years. After graduating from KOSEN, some students enter the job market and others transfer to universities. KOSEN has a credit system which differs from universities. One credit from KOSEN consists of 30 credit hours while university counterparts consist of 45 credit hours with a significant amount of self-directed study. As the scholastic year progresses, some KOSEN courses have a credit system similar to universities that includes a generous amount of self-study hours in preparation for a university transfer.

The Institute of Social Science, the University of Tokyo (ISS) and the Benesse Educational Research and Development Institute (2022) conducted surveys on educational activities of students who were in elementary schools, junior high schools, or senior high schools in 2019, 2020, and 2021. The surveys included study hours of educational activities taking place outside the classroom, and the results showed that the junior high school students spent 38 minutes per day on self-study while the senior high school students spent 49 minutes per day in 2021.

The participants in this study included 172 of 213 first-year KOSEN students who were enrolled in the first semester of the year-round English course conducted by the author beginning in April 2022. Most of the students graduated from junior high school in March 2022. The author conducted a survey on self-study hours for the year-round English course of the participants during the first two months of the course in April and May 2022, using the monthly study tracker (Ishimizu, 2020). The result was that the participants spent 77.89 minutes per week on self-study for class-content preparation, class-content review, assignments, and preparation for vocabulary quizzes. Realizing their self-study hours mostly consisted of preparation for vocabulary quizzes conducted weekly, the author was urged to introduce a teaching approach encouraging students to become autonomous learners.

The author had introduced the monthly study trackers (Ishimizu, 2020) to help the students taking the courses conducted by the author to monitor their own study habits since 2019. The author developed the monthly study tracker on the concept of the Bullet Journal Method (BuJo), which is a hand-written journaling system of the personal organization created by a digital designer Ryder Carroll and is customizable according to users' needs. While the monthly study tracker developed by the author played a role in allowing students to monitor their study habits and

facilitate the organization of class requirements (Ishimizu, 2020), it was uncertain whether the monthly study tracker prompted an increase in study hours outside the classroom. Therefore, the author modified the monthly study tracker according to the requirements of each class such as the date of quizzes and submission of assignments and distributed this modified monthly study tracker to each class, resulting in an increase in self-study hours.

2. Literature review

2.1. The Bullet Journal method (BuJo)

Carroll (2018) states that the Bullet Journal method (BuJo) “will help you track the past and order the present so that you can design your future.” It is a method of the customizable personal organization system designed to suit users’ needs unlike a planner instructing users how to use it. As he states, it is “the analog system for the digital age.” A pen and a notebook are all that is needed to start. According to Carroll (2018), BuJo “helps you identify and focus on what is meaningful by stripping away what is meaningless.”

The BuJo method includes a system composed of two elements: Rapid Logging and Collections. Rapid Logging involves taking notes or journaling. Journaling facilitates preparation and review of lessons by recording thoughts derived from lessons. Yet, Carroll (2018) points out that the problem with traditional journaling is “that it is loosely structured and time-intensive,” making it difficult to incorporate it into a daily routine. He says “Rapid logging leverages the best aspects of journaling by stripping away everything that’s not essential.” Collections consists of the Daily Log, Monthly Log, Future Log, and Index. The contents of Collections are logged by Rapid Logging. The Monthly Log is arranged as a spread of facing pages with a linear calendar page on one side and a task page on the other, which “offers a bird’s-eye view of the things you have to do, as well as your available time” (Carroll, 2018).

2.1.1. Trackers

It is common for the Bullet Journalists to incorporate Trackers into their Bullet Journals to monitor progress toward goals. “Trackers are a great example of how we can take larger goals and deconstruct them into smaller actionable steps” (Carroll, 2018). Adopting a habit tracker into your Monthly Log facilitates monitoring habits which you want to develop in your daily routine. The monthly study tracker (Ishimizu, 2020) consists of the Monthly Log and Trackers to allow for an overview of students’ study habits and facilitating the organization of class requirements.

2.1.2. Goals and Sprints

As Carroll (2018) says, “Goals give us the opportunity to define what we want,” setting goals helps us focus on what we want to achieve. In the monthly study tracker (Ishimizu, 2020), goals are set for the month, which might be more difficult to attain. Therefore, the goals should be divided into small feasible tasks assigned to each week. According to Carroll (2018) , “Breaking down long-term goals into smaller, self-contained goals can turn what seems like a marathon into a series of sprints. Sprints cover the same ground, just in shorter, more manageable intervals.” Sprints are a weekly to-do list allowing for these smaller tasks to be accomplished over 7 days, resulting in more flexibility than a traditional to-do list that includes daily tasks.

2.2. Self-efficacy

The introduction of self-efficacy to a teaching approach by monitoring study habits may facilitate nurturing autonomous learners. According to Bandura (1994), self-efficacy is defined as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives.” He mentions that with a strong sense of self-efficacy, people “approach difficult tasks as challenges to be mastered rather than as threats to be avoided.”

According to Bandura (1994), the four main sources of influence below can help people enhance beliefs about their self-efficacy:

- (1) mastery experiences;
- (2) the vicarious experiences provided by social models;
- (3) social persuasion;
- (4) reducing stress reactions and altering negative emotional proclivities and misinterpretations of their physical states.

In their first years in KOSEN, students take KOSEN credit courses, where credits can be gained with relatively fewer self-directed learning hours outside the classroom. However, as they advance, they are required to engage in much longer self-study hours to complete coursework, indicating that a teaching approach fostering self-efficacy may help students study autonomously.

2.3. Self-monitoring

Introducing a teaching approach with self-monitoring seems to be essential to provide the four main sources of influence that develop students' beliefs about their perceived self-efficacy, encouraging students to nurture self-monitoring. Mace, Belfiore, and Hutchinson (2001) mention that self-monitoring includes two steps:

- (1) self-monitoring requires the individual to discriminate the occurrence of the target response that is to be controlled;
- (2) the individual records (i.e., self-recording) some dimension of the target response (i.e., frequency, duration, or latency).

2.4. Self-regulatory cycle

According to Zimmerman, Bonner, and Kovach (1996), "high achievers report setting more specific learning goals for themselves, using more strategies to learn, self-monitoring learning progress more frequently, and more systematically adapting their efforts on the basis of learning outcomes," which can be implemented by self-regulatory cycle "designed to enhance not only students' learning but also their perception of self-efficacy or control over the learning process."

3. Research question

As the scholastic year progresses, KOSEN students are required to study more autonomously in order to obtain course credits which are complemented by a considerable amount of self-study hours outside the classroom. Therefore, it is necessary to incorporate an approach into the study environment that encourages students to study autonomously, not only in class but also outside the classroom. After introducing the monthly study tracker modified for each of the class requirements in an English course, it was considered helpful to determine whether the use of modified monthly study trackers: played a role in helping students to allocate longer self-study hours outside the classroom for course preparation and review.

4. Experiment

4.1. Method

4.1.1. Participants

Participants in this study included 172 first-year KOSEN students majoring in mechanical engineering, electrical engineering, control engineering, information engineering, or chemical engineering, who were enrolled in a required year-round English course called "English I." The course was 90 to 180 minutes per week, depending on specific majors. Mechanical engineering and control engineering majors took a 90-minute class each week, and electrical engineering, information engineering, and chemical engineering majors took two 90-minute classes each week.

4.1.2. Procedure

The author of this study served as a language teacher in the English I course. The study was conducted during the first 16-week semester from April 2022 to August 2022. The goal of the course was to nurture reading comprehension, basic grammatical competence, and vocabulary acquisition in the language by learning the language in a comprehensive approach.

(1) Introduction of a monthly study tracker

In the first class of the academic year 2022, the author distributed the first monthly study trackers to the English I students with guides on how to log self-study habits for English I. The first monthly study tracker included a sample with translation and guides printed on its back (See Appendix 1). After the students tracked their self-study habits using the first monthly study trackers for a month, the author collected all the trackers at the beginning of the following month to see whether the students took notes on their self-study habits. At the end of the month, blank monthly study trackers for the next month were distributed to the students.

(2) Customization

At the beginning of each month, the author collected the monthly study trackers. After collecting the first monthly study trackers, the author observed that lower achievers were not able to utilize the monthly study trackers to take inventory of their study habits, providing some hints on how to customize the upcoming monthly study trackers for the students to facilitate preparation for the class. The author added schedules, coverage of word quizzes, and assignment submission dates depending on each major (See Appendix 2).

5. Results and Discussion

When the author first collected the monthly study trackers in early May, an average of 77.89 minutes was spent on self-study per week in April, 106.85 minutes in May, 126.64 minutes in June, and 163.65 minutes in July. The increase of May seemed to be attributed greatly to preparation for mid-term examinations administered in early June. A similar increase was observed in the monthly study trackers for July when final semester examinations were administered at the end of the month. The increase observed in the June monthly study tracker modified for each of the class requirements appeared to result from preparation for the mid-term examination; however, some students maintained long self-study hours after the examinations, which seemed to be attributed to the customization added to the monthly study tracker, allowing for reminding the students of what to do to attain their goals.

In addition to the modified monthly study tracker, the author who was teaching the course conducted vocabulary quizzes on a weekly basis and communicated the results to the students before the following week so that they were able to see how much effort was required to achieve the desired results.

The students summarized their monthly self-study habits in an overview of the month. The overviews enabled the author to observe how the students spent their self-study hours outside the classroom. The following are overviews from some of the students translated into English by the author:

- (1) realized how important it is to study on a daily basis;
- (2) made rules for myself to prevent wasting time;
- (3) tended to forget words easily when memorizing them without example sentences;
- (4) realized it is necessary to make a study plan flexible enough to adjust to unexpected schedule changes;
- (5) doubled self-study hours for examinations, but resulted in a poor performance, which means I need to review learning strategies;
- (6) shocked at the test results, and realized that I should have spent more time on preparation for the examinations.

The research question posed in this study included: Does the use of modified monthly study trackers play a role in helping students to allocate longer self-study hours outside the classroom for course preparation and review? The results of this study suggest that using modified monthly study trackers designed for lesson contents enabled students to monitor their study habits and achievement so that they might increase their study hours outside the classroom.

This study had a number of limitations, including its small sample size and the fact that the data collection occurred during a short period of time. A larger sample size and a longer period of data collection may have revealed different and more valuable results. Further research is required in order to clarify these possibilities. On the other hand, the aim of the modified monthly study tracker is to monitor students' study habits and increase self-study hours. In this sense, the author was able to observe an increase in self-directed study hours outside the classroom.

6. Conclusion

This study investigated a teaching approach using a modified monthly study tracker designed for the contents of lessons. The modified monthly study tracker can be developed with a pen and a notebook, implying its possibility of easy application in a classroom environment.

By utilizing a modified monthly study tracker, students obtained opportunities to monitor their self-study habits so that they might increase their beliefs about their self-efficacy and self-directed study hours. The implications gained from this study can be applied to students who need to develop good self-study habits.

References

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Appendix 1: The monthly study tracker with translation and guides

Class: _____ No: _____ Name: _____

STUDY TRACKER (ENGLISH I READING) April 2022

今月の目標
7日間で
取り組ま
なければ
ならない
項目

Goals: _____

単語の範囲 Listening wkbk 回数 Expression wkbk 回数 予習 復習 実際にかいた時間(分)を記録 その日の感想

Sprints	Voca quiz	wkbk(L)	wkbk(E)	Date	Prop	Re	Overview of the week
				1 Fri.			
				2 Sat.			
				3 Sun.			
				4 Mon.			
				5 Tue.			
				6 Wed.			
				7 Thu.			
				8 Fri.			
				9 Sat.			
				10 Sun.			
		p.8	pp.2,3	11 Mon.		40	
				12 Tue.	30		
	1			13 Wed.	15		
	2			14 Thu.	15		100 min./week
	3			15 Fri.			
	4	pp.4,5		16 Sat.			
	1~4			17 Sun.			
				18 Mon.			
				19 Tue.			
				20 Wed.			
				21 Thu.			min./week
				22 Fri.			
				23 Sat.			
				24 Sun.			
				25 Mon.			
				26 Tue.			
				27 Wed.			
				28 Thu.			min./week
				29 Fri.			
				30 Sat.			

この月の感想
Overview of the month: _____

Next month: _____

来月への引継ぎ、目標など

週(7日間)の
自習時間
合計
min./week

月の合計
自習時間
min./month

