COVID-19 and New Normal Education: Modular Learning Styles, Study Habits, and Performance of Grade I Learners

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ABSTRACT

Learning styles and study habits are essential in developing knowledge and perception. Study habits reveal how much a person will learn, how far he wants to go, and how much money he wants to make. All these things can be determined throughout one’s life by studying habits. As a result, it’s considered that study habits are linked to learning style or academic success. This descriptive-correlational study investigates the relationship between the learners’ study habits, learning styles, and academic achievement, considering 64 randomly chosen participants. The researchers applied descriptive statistics to describe the participants’ study habits, learning style, and academic success and Pearson’s r to determine the relationship among the variables. The findings revealed that the learners favored feelings and doing. They have adaptors as their primary learning styles, and they have a modest level of study habits. They also have a high academic achievement level. Finally, there were substantial connections between the variables. The study’s findings can help instructors design and deliver effective instructional interventions.

Keywords: Academic Performance, COVID-19, Learning Styles, Modular Learning, Study Habits

Introduction

Learners have a learning style and study habits that they can use well. Some learners choose their primary learning style, while others use several learning styles depending on the situation. Learning styles and study habits are crucial at this time of the pandemic. Every learner has a particular learning style; each has the study method that allows them to acquire and comprehend the material quickly. In the same regard, Proctor et al. (2006) affirmed that study habits involve several behaviors such as time management, goal planning, selecting a good study environment, employing proper note-taking procedures, selecting main ideas, and organizing. Quality learning experiences,
however, do not occur exclusively within the four walls of the classroom; learning can occur at any time and from any location (Pentang, 2021c).

Each learner has a method or style of learning that allows them to remember and apply information in a learning scenario. Learning styles have proven that personality traits can be considered in the design and delivery of teaching to improve learning (Dziuban et al., 2004). To ensure quality instruction, curriculum, and assessments, educators must be aware of differences in their students’ learning styles. Kolb’s Learning Style Inventory is one of the most widely used questionnaires for determining adult learning styles (LSI). Concrete experience (feeling), reflective observation (viewing), abstract conceptualization (thinking), and active experimentation are the four dimensions of doing. Kolb and Kolb (2005) identified four learning styles based on four areas: accommodating, divergent, convergent, and assimilative.

Meanwhile, a learner’s study habit is a method of studying effectively. Study habits are crucial for a learner’s efficient and effective learning. It assists a person in achieving mental calm and allowing him to interact appropriately. Study habits are essential in learners’ lives (Hsieh et al., 2011). Additionally, Fouché (2017) comprehensively claimed in his study that their study habits determine each learner’s success or failure. Effective study habits include finishing homework, actively participating in class, managing time, remaining focused, and working hard on every task they are assigned have a substantial favorable link with academic success. Likewise, Chilca (2017) asserted that learners must acquire study habits because these are study practices used in learning. Our kids will not be able to build study habits if they do not develop and begin to formulate study habits.

A learner’s learning styles and study habits impact their academic success. External elements such as sound study practices, which include how often a learner engages in studying sessions, self-evaluation, and learning in a suitable atmosphere like external factors are mostly the ones that aid the study process of learners (Cerna & Pavliushchenko, 2015).

Learning style preferences impact learning and academic success and may help explain how learners learn. Academic achievement is based on good study habits. Learners can function if they know to study well and develop strong study habits. Further, by developing effective study habits, Barrass (2002) found that learners can enhance their critical thinking, time management, work preparation, memorization capacity, and health management.

With the COVID-19’s existing challenges, the learning process should be done at home using self-learning modules (Agayon et al., 2022; Bacomo et al., 2022; Bonilla et al., 2022; Hamora et al., 2022). The modules are given by teachers to their learners in different subject areas to specific grade levels to be answered at home with the help of the learner’s parents and then submitted to the concerned teachers for checking on the scheduled date and time given by the teachers during Homeroom. On the other side, various issues arose during distance learning, such as motivation, self-discipline, time management, lack of engagement and conversation with the teacher and peers, stress, and failure to comprehend the lesson (Manochehr, 2006). It is apparent that maintaining strong study habits and being alert is imperative to fully absorb the substance of every modular activity the learners are given since failure to preserve this integral part of the academe is the root cause of the issue.

**Objectives of the Study**

This study determined the modular learning styles, study habits, and academic performance of Grade I learners.

Specifically, this study aims to:

1. describe the study habits of Grade I learners in terms of schedule, study routine, reading and writing skills, concentration, and engagement;
2. determine the learning style of Grade I learners using Kolb’s learning styles in terms of diverger, assimilator, converger, and accommodator in academic performance;
3. describe the academic performance of Grade I learners in terms of their skills, completeness of submission of modules,
timeliness of submission, grades/scores and outputs/product; and
4. find if there exists a significant relationship between the learning styles, study habits, and academic performance of the Grade I learners.

Literature Review

Brown (2000) defined learning styles as to how people perceive and process information in learning circumstances. It refers to the broad approaches pupils take when studying a new language or any other subject. Simply said, learning styles are the distinct ways a person obtains, perceives, and processes data. Elevera (2021) illustrates that learners' learning styles during the onslaught of COVID-19 are affected in the aftermath of the outbreak.

Study habits are concerned with a learner’s academic performance. The learners’ hard work and effort enable them to improve their academic achievement. Study habits are ingrained in a learner’s daily routine at school. It makes a substantial contribution to the development of knowledge and perceptual abilities. Study habits reveal how much a person wants to learn, how far he wants to go, and how much money he wants to make. All of this could be determined by one’s study habits throughout one’s life, following Rabia et al. (2017). Positive academic achievement is correlated with an organized, effective, and efficient study habit. The keys to academic achievement are having good study habits and understanding the learning patterns of your classmates.

The style of learning, academic success, and study habits are intertwined. Similarly, Gokalp (2013) found that learners’ learning styles during the COVID-19 pandemic significantly impact their metacognitive awareness, and study habits have a consequential effect on the development of knowledge and perceptual capabilities of learners in school. Studies have been undertaken all around the world that relates to the academic performance of learners.

Methodology

Research Design

The researchers employed a descriptive and correlational design in the investigation. The descriptive component focused on the learner’s profiles, learning style preferences, study habits, and academic accomplishments. The correlational part next focused on the association between learners’ learning style choices, study habits, and academic achievements. This methodology is appropriate for this study since it allowed the researchers to explore the knowledge that can be gained with the prevalence of the pandemic.

Conceptual Framework

Some parents want their children to go to a school where the learners have more in common regarding manners, morals, health, and linguistic habits. Learning experiences result from minor interactions between the
child and his parents and the instructor at school. The notion of academic performance is where the complexity of the performance begins. School readiness, intellectual accomplishment, and school performance are all terms that have been used to describe it.

Following the convention, academic performance should be used in university populations and school performance in traditional and alternative primary education populations.

**DEPENDENT VARIABLES**

**STUDY HABITS**
- Time schedule
- Study routine
- Writing skills
- Engagement
- Concentration

**LEARNING STYLES**
- Diverger
- Assimilator
- Converger
- Accommodator

**INDEPENDENT VARIABLES**

**ACADEMIC PERFORMANCE**
- Skills
- Completeness of submission of modules
- Timeliness of submission
- Grades/scores
- Outputs/product

**Participants**

The study's participants were Grade I learners from a selected elementary school in Palawan, Philippines. Through a simple random sampling, sixty-four (64) learners were chosen since they represent the first stage of formal schooling. In Grade 1, learners begin to recognize keywords, write, and understand the sound correspondence of most letters in the alphabet.

**Instrumentation**

The Learning Styles Surveys, Study Habits Inventory, and academic performance of the Grade I learners based on skills, completeness, and timeliness of module submissions, grades, test scores, and output/product were all used in the study.

In this study, a 15-item questionnaire about learning styles was used. Kolb's learning styles were used to create it: converging (abstract, active), diverging (concrete, reflecting), assimilating (abstract, reflective), and accommodating (abstract, reflective) (concrete, functional). The Learning Style Inventory was given to the participants promptly, with all relevant explanations in advance. The study of Credé and Kuncel (2008) was used as a basis for designing the Study Habit Inventory.

The academic accomplishment of the kids was utilized to evaluate their learning abilities. Quarterly exam scores and outputs or products were calculated to assess learners' academic achievement, skills, completeness, and timeliness of module submission. Furthermore, the researchers, who were also teachers, evaluated their findings regarding learning styles and study habits during the process.

**Data Gathering Procedures and Analysis**

The study began with a questionnaire about learning styles and study habits. The learners were requested to complete the learning style inventory questionnaire and the study habit assessment form. The researchers conducted the study in November 2021, with the authorities' approval and the concerned party's consent.

We calculated the score of each item of study habits, which includes time management, study routine, writing abilities, engagement,
focus, and learning styles, which including agreeing (1) and disagree (0) optional responses, to get the score of study habits and learning styles data. The scores for each item were then added together. The researcher then used a percentage to qualitatively examine the data to investigate the learner's learning styles and study habits. After all, the learner’s learning outcomes.

The researchers gathered all the data on learners' skills, completeness and timeliness of module submissions, quarterly exam scores, and outputs or products of Grade 1 learners during the first quarter of the school year 2020-2021 to measure the learner's academic performance. After data collection, relevant statistical tools were used to interpret the study’s findings. Descriptive analysis was employed to describe the variables under study and Pearson’s r for the correlational analysis. The researchers analyzed the data using the jamovi software, as Pentang (2021d) suggests.

Results and Discussions

Study Habits of the Grade 1 Learners

Table 1 reveals that the study routine had the highest mean of 12.8 among the learners. It means that the pupils follow a reasonable pattern regarding their study habits. Meanwhile, engagement was ranked second in terms of mean with 12.2, indicating that learners perceived themselves to be somewhat engaged. Writing skills came in third place among the means, with 11.8, telling that the learners had a moderate level of writing ability. Concentration gained of 11.8 was ranked fourth, indicating a fair concentration. Time management and schedule ranked fifth with a mean of 9.2, showing that the learners had poor time management regarding their academics. As reflected, most learners evaluate themselves as having a moderate degree of all the study habits and skills mentioned. Study routine, involvement, writing skills, and concentration were the top four study habits and talents evaluated. As a result, it is necessary to continue developing these habits among the learners. Madison (1995) claimed that having strong study habits will help pupils create a better level of career aspiration. While Igun and Adogbeji (2007) also found that effective study habits help pupils achieve greater skill levels. In the same manner, Slate et al. (1998) agreed that educators need to know how far their learners have progressed in developing independent learning abilities and habits. Further, Magulod (2019) believed emotions influence learners' writing styles.

Based on the result of this study, impacts of different study habits, time management/schedule, study routine, writing skills, concentration, and engagement were leading on learners. Some considerations can be presented that the learners with excellent study habits have outstanding scores, and some practices may impact the learning performance of the learner. The success or failure of each learner depends upon their study habits. Nowadays, where modular distance learning is prevalent, parents and teachers must help improve learners' study habits. Education improves by planning where, when, and how much to study. Regular study habits reward learners in the sense of achievement of success. To address the changing and challenging times, teachers and parents may learn to adopt appropriate and available educational technologies to cope with the pandemic (Pentang, 2021b), which is necessary to facilitate the diverse study habits of the learners.

Table 1: Study Habits of the Grade 1 Learners

<table>
<thead>
<tr>
<th>Study Habits and Skills</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Management/Schedule</td>
<td>9.2</td>
<td>Moderate</td>
<td>5</td>
</tr>
<tr>
<td>Study Routine</td>
<td>12.8</td>
<td>Moderate</td>
<td>1</td>
</tr>
<tr>
<td>Writing Skills</td>
<td>11.8</td>
<td>Moderate</td>
<td>3</td>
</tr>
<tr>
<td>Engagement</td>
<td>12.2</td>
<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Concentration</td>
<td>11.8</td>
<td>Moderate</td>
<td>4</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td><strong>12.8</strong></td>
<td><strong>Moderate</strong></td>
<td></td>
</tr>
</tbody>
</table>

Legend: 15.20-20 = Always; 10.20-15.19 = Sometime; 6.20-10.19 = Low; 1.20-6.19 = Very low
Learning Styles of the Grade I Learners

**Diverger.** The learners are people-oriented and eager to learn more (Table 2). Understandably, the learners are imaginative, open to new experiences, and capable of generating fresh ideas with others. **Assimilator.** The learners are willing to learn with their peers and can distinguish right from wrong. **Converger.** The learners learn best with what they have in the present and can learn these things with others. **Accommodator.** The learners are open, and they can share with anyone.

It is observed that the accommodators had higher average scores. In this sense, it is difficult to say how many learners will strongly prefer just one modality. The learning styles of learners are not fixed personality traits. Sadler-Smith (2001) asserted that it might be a knowledge of learning techniques that makes it easier for learners to adapt to different situations. In addition, teachers must provide adequate support strategies for learners with different learning styles. The findings suggest that most learners learn best when given "hands-on" applications, can carry out plans, are motivated by action and results, adjust to changing circumstances, and prefer a trial-and-error approach.

Similarly, thinking and watching (assimilators) emerged as the minor learning style preferences of the learners. The findings suggest pupils are likelier to remember and understand reading concepts and information. Most like to learn by seeing words from sources, on the board, or in workbooks or textbooks. They demonstrate excellent knowledge of their classes by presenting information using lecture notes, slides, and handouts that their professors can supply. The individual's abilities, environment, and learning history influence their learning (Brunton, 2015).

Furthermore, the learners have a slight learning style preference. This suggests that when the learners are given practical implementations of concepts and theories, they do better when learning. They prefer to participate in hands-on activities in the classroom. They demonstrate a desire to appreciate classroom learning activities such as experiments. As a result, role-playing, field trips, and active engagement will help learners learn more effectively. Finally, the learners felt and watched the diverging learning styles as minor learning preferences, indicating that the learners manifest nine little learning styles through hands-on experiences with models and materials, spoken explanations, and learning individually. The study's findings revealed that the learners have learning preferences for contextualized and experiential learning. This means that while many learners nowadays can carry out plans, are involved in action and outcomes, and prefer a trial-and-error method, others struggle with practical applications and decision-making and lack prior experience.

Table 2: Learning Style of the Grade I Learners

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Frequency (n = 64)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diverger</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I actively seek out new learnings.</td>
<td>55</td>
<td>85.94</td>
</tr>
<tr>
<td>I enjoy learning with other people.</td>
<td>50</td>
<td>78.13</td>
</tr>
<tr>
<td>I ask questions to learn new things.</td>
<td>32</td>
<td>50.00</td>
</tr>
<tr>
<td>I am challenged to learn more.</td>
<td>35</td>
<td>54.69</td>
</tr>
<tr>
<td><strong>Assimilator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tend to judge things and learn from them.</td>
<td>41</td>
<td>64.06</td>
</tr>
<tr>
<td>While I learn, I am willing to share my ideas with others.</td>
<td>58</td>
<td>90.63</td>
</tr>
<tr>
<td>I can learn with flexibility.</td>
<td>36</td>
<td>56.25</td>
</tr>
<tr>
<td>I learn both what is right and wrong.</td>
<td>59</td>
<td>92.19</td>
</tr>
<tr>
<td><strong>Converger</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learn a lot from considerate people.</td>
<td>48</td>
<td>75.00</td>
</tr>
<tr>
<td>I learn best with the present as compared to the past.</td>
<td>60</td>
<td>93.75</td>
</tr>
<tr>
<td>I learn from the results of my actions.</td>
<td>47</td>
<td>73.44</td>
</tr>
<tr>
<td>I have fun learning with other people.</td>
<td>57</td>
<td>89.06</td>
</tr>
<tr>
<td><strong>Accommodator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am open to what I feel.</td>
<td>60</td>
<td>93.75</td>
</tr>
<tr>
<td>I am not irritated when learning.</td>
<td>54</td>
<td>84.38</td>
</tr>
<tr>
<td>I listen but I talk more.</td>
<td>55</td>
<td>89.00</td>
</tr>
</tbody>
</table>
Academic Performance of the Grade I Learners

The learner’s academic achievement is good, with a mean grade of 82.77. The table also shows that 2 (3%) have excellent academic performance, 13 (20%) have very good academic performance, 31 (49%) have good academic performance, 16 (25%) have satisfactory academic performance, and 2 (3%) have poor academic performance. The learners fairly attained the learning outcomes set by the teachers with the curriculum standards. This result is similar to Bacomo et al. (2022), where learners performed satisfactorily with their self-learning modules. Additionally, this affirms Pentang (2021a), where learners under a home study program could work independently with their self-learning modules. Academic performance is a good measure of a learner's progress in an educational environment. Learners’ academic performance reflects their knowledge of different areas or subjects. Likewise, Steinmayr et al. (2014) revealed that academic performance is the learner’s product, usually communicated through grades. Thus, teachers and parents must ensure that the learners are motivated during this pandemic even at a young age. Motivating the learners in a modular setting may be challenging for teachers (Agayon et al., 2022; Hamora et al., 2022) and parents (Bonilla et al., 2022). Still, it will ensure a meaningful learning experience for the learners.

Table 3: Academic Performance of the Grade I Learners

<table>
<thead>
<tr>
<th>Point Brackets</th>
<th>Description</th>
<th>Frequency (n = 64)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 and above</td>
<td>Excellent</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>85-89</td>
<td>Very Good</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>80-84</td>
<td>Good</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>76-79</td>
<td>Satisfactory</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>75 and below</td>
<td>Poor</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Mean Grade = 82.77 (Good)  Std. Dev. = 19.0

Correlation between Learning Styles with Academic Performance of the Grade I Learners

The analysis found a significant relationship between learners’ learning styles and academic success (Table 4). Abidin et al. (2011) also found a strong link between overall academic achievement and learning styles. The positive relationship between the learners’ academic achievement and their learning styles suggests that the more contextualized and experiential the learners are expos, the higher their academic performance. The result clearly shows that the learner’s learning preferences, as thinkers, doers, feelers, and watchers, are attribution to their performance. Thus, these styles need to be boosted to ensure that the learners develop a commendable achievements.

Table 4: Relationship between Learning Style and Academic Performance

<table>
<thead>
<tr>
<th>Learning Style</th>
<th>r</th>
<th>p-value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking and Doing (Convergers)</td>
<td>0.923</td>
<td>0.008</td>
<td>Significant</td>
</tr>
<tr>
<td>Thinking and Watching (Assimilators)</td>
<td>0.724</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Feeling and Doing (Accommodators)</td>
<td>0.841</td>
<td>0.041</td>
<td>Significant</td>
</tr>
<tr>
<td>Feeling and Watching (Divergers)</td>
<td>0.558</td>
<td>0.028</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Correlation between Study Habits with Academic Performance of the Grade I Learners

The learner’s academic success and study habits have a significant association (Table 5). The result follows Looyeh et al. (2017) as they similarly yielded a result that there is a link between study habits and academic achievement. Likewise, Kaur and Pathania (2015) discovered strong links between academic achievement and study habits. In parallel, Magulod (2019)
claimed that when learners have good time management, they can manifest their duties in conformity with their academic priorities linked to academic performance. Furthermore, Alsalem et al. (2017) asserted that pupils with time management skills have higher academic accomplishments. Similarly, Nasrullah and Khan (2015) argue a link between time management ability and learner educational attainment. As a result of the positive relationship between writing ability and academic achievement, as learners' writing attitudes and skills improve, so will their academic performance.

Similarly, they know how to develop theoretical models as well as gain practical experience. Grade I learners have excelled academically regarding rates, scores, output, products, and submission timeliness. Grade I learners may find submitting all their modules on time challenging.

Their learning styles and study habits influence the academic achievement of the learners. Learners who understand their distinctive learning styles can participate purposefully in the learning process, which is especially important in this era of modular distance learning. Individual preferences for learning styles vary significantly and can be measured. The greater the selection, the more critical it is to provide suitable instructional methodologies, interventions, environmental design, and resources that lead to enhanced academic accomplishment and learner attitudes toward learning. When concentrating on new or challenging educational information, most learners may learn to use their learning style strengths. The teacher and parents should know the learner's learning style and study habits.

**Table 5. Relationship between Study Habits and Academic Performance**

<table>
<thead>
<tr>
<th>Study Habits</th>
<th>r</th>
<th>p-value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Management/Schedule</td>
<td>-0.830</td>
<td>0.040</td>
<td>Significant</td>
</tr>
<tr>
<td>Study Routine</td>
<td>-0.042</td>
<td>0.019</td>
<td>Significant</td>
</tr>
<tr>
<td>Writing Skills</td>
<td>0.303</td>
<td>0.027</td>
<td>Significant</td>
</tr>
<tr>
<td>Engagement</td>
<td>-0.250</td>
<td>0.041</td>
<td>Significant</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.480</td>
<td>0.039</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Conclusion**

The study expressed that the learners have the best study routines and writing skills, although their involvement and focus need attention. The learning styles that Grade I learners learn best are accommodators (feeling and doing) and assimilators (thinking and watching). Their learning styles and study habits influence the academic achievement of the learners. Learners who understand their distinctive learning styles can participate purposefully in the learning process, which is especially important in this era of modular distance learning. Individual preferences for learning styles vary significantly and can be measured. The greater the selection, the more critical it is to provide suitable instructional methodologies, interventions, environmental design, and resources that lead to enhanced academic accomplishment and learner attitudes toward learning. When concentrating on new or challenging educational information, most learners may learn to use their learning style strengths. The teacher and parents should know the learner's learning style and study habits.

**Recommendations**

Develop a comprehensive parent training program and make it available when parents need it to assist learners in understanding their distinctive learning styles. As time progresses, learners change their learning preferences simultaneously, so the parents should have a profound understanding of this matter. With this, the learners can participate purposefully in the learning process, which is especially important in this era of modular distance learning.
will be collected by their adviser weekly. It will help the learner form a study routine. Consider incorporating focus enhancement and involvement activities in the pupils' modular activities. Consider creating four varieties of instructional materials that will cater to the differences in learners' learning styles to provide ease in their academe amidst the distance learning.

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