

## Implementation of an Online Learning Strategy Based on Student Resilience (GRIT) at Charis Christian Elementary School

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### ABSTRACT

The Covid-19 pandemic has changed education in the world and especially in Indonesia, every school must begin to adjust to be able to continue to provide quality distance learning. Charis Christian Elementary School has been using online learning strategies since the first day distance learning was implemented in Indonesia. Student grit is one of the important factors for students to be able to successfully undergo online learning. Grit is a combination of passion, resilience, determination, and focus that will encourage a person to be disciplined and optimistic in pursuing what he is doing even though he has to face discomfort, rejection, and progress that is not too significant. The results of the pretest using the Grit Scale get an average result of 36.2 with a total of 30 students (N = 30) respondents, while the posttest results get an average (mean) = 39.56. Success in online learning requires students to demonstrate self-regulation, discipline, fortitude, toughness, and all the attributes that describe grit. Through this research, it is hoped that it can inspire and encourage the development of grit-based learning that will enable students to achieve success in running online learning.

**Keywords:** Online Learning, Motivation, ARCS, Grit, Resilient.

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### INTRODUCTION

The Covid-19 pandemic has transformed education worldwide, and particularly in Indonesia, requiring every school to adapt in order to continue providing quality distance learning. Charis Christian Elementary School has implemented an online learning strategy from the very first day of distance learning in Indonesia. Online learning at Charis Christian Elementary is conducted fully using platforms such as *Google Classroom* and *Zoom*.

This online learning activity has opened many opportunities for both teachers and students to develop. During the pandemic, teachers' ICT skills have improved almost uniformly across Indonesia (Nuraini et al., 2020; Subandi et al., 2018). However, challenges in implementing distance learning are not few. For teachers, adjusting from face-to-face teaching to using new platforms significantly affects their teaching methods, classroom management, and guidance processes for students (Pramana, Kholis Ernawati, et al., 2021). For students, participating in online learning is challenging because they must adapt to a new way of learning without direct interaction with peers. They are required to be more independent, especially if they lack parental guidance at home, and need to develop self-regulation skills over their own learning.

Schools need to clearly define learning goal orientations. These goals are no longer solely content-centered but also focus on how, why, and under what conditions students learn (Anderman & Maehr, 1994; Pintrich & Schunk, 2002). Goal orientation also refers to general student engagement (Nicholls, 1992). From these concepts, students are considered capable of taking responsibility for their engagement and, consequently, their achievement when supported by a conducive environment (Kaplan & Maehr, 2007).

In addition to a supportive environment, achievement is not solely determined by ability and opportunity. Self-regulation and resilience play a crucial role in success. Perseverance in facing difficult situations or failure impacts achievement. Students who persist through challenges and difficulties exhibit what Duckworth calls grit (Duckworth et al., 2007). Hochanadel and Finamore argue that Dweck's theory offers hope for those striving, especially in online learning contexts (Hochanadel & Finamore, 2015). Similarly, Khasali notes that online learners face challenges typical of current shifts in the education system. For instance, platforms like Udacity and Coursera attract many enrollees, yet program completion rates remain low (Kasali, 2018).

Grit combines passion, resilience, determination, and focus, motivating individuals to remain disciplined and optimistic in pursuing tasks despite discomfort, rejection, or slow progress (Duckworth et al., 2007). Individuals with grit exert extra effort to achieve their goals. Daniels, in *Grit for Kids*, describes them as adventurers who follow a map to reach their objectives, facing obstacles along the way but continuing until they succeed (Daniels, 2016). Grit requires endurance and high motivation.

Grit is an important character trait for children's futures, as they will need to understand their direction and how to achieve their goals. They must develop self-control and the ability to avoid distractions while staying focused on tasks, which will enable them to progress further (Goodwin & Miller, 2013). To foster grit in students, it is essential to cultivate a school culture emphasizing character and perseverance (Bashant, 2014). One strategy is motivating students to face challenges. A math teacher, for example, encourages students to struggle with geometry problems independently, fostering curiosity and intrinsic motivation rather than focusing solely on grades (Pappano, 2013).

Grit involves working diligently for something meaningful, committing to a task until the best results are achieved. It is not about chasing multiple successes but about following through on what has been started (Daniels, 2016). This is particularly relevant for online learning during the pandemic, where the end is uncertain. Research shows that first-generation students face a fourfold higher risk of dropping out compared to peers with parents holding college degrees (Lu, 2013). Grit can help these students complete their studies. Other studies suggest grit can address low student performance, helping students escape poverty (Center & Williams, 2012; Lipman, 2013; Tough, 2011).

Daniels (2016) identifies several benefits of developing grit in children: 1) fostering effort over innate talent; 2) encouraging calculated risk-taking to pursue dreams without fear of failure; 3) benefiting others by turning children's interests into skills and actions for the community; 4) providing role models for facing difficulties; 5)

teaching perseverance in school and life. Strategies to develop grit include: teaching self-control, reducing negative feelings, fostering self-respect and respect for others, encouraging curiosity, self-discovery, planning, following processes, celebrating small victories, preparing for setbacks, applying learned knowledge, guiding decision-making, focusing on priorities, and being a role model (Daniels, 2016).

## RESEARCH METHOD

This study aims to examine the implementation of online learning based on student resilience (grit) at Charis Christian Elementary School. The research was conducted using a survey method (Sofian, Effendi, & Singarimbun, 2012). The data used in this study consisted of pretest questionnaire results measuring students' grit levels and posttest results from students at Charis Christian Elementary School as the research subjects. The data source was students of Charis Christian Elementary School, Malang City, East Java, with a sample size of 30 students.

The data collection technique employed in this study involved distributing a questionnaire to measure students' grit levels through the following stages: a) administering a pretest using the Grit Scale questionnaire at the beginning of the session to assess students' initial grit levels in online learning based on grit; b) implementing grit-based online learning at Charis Christian Elementary School; and c) administering a posttest using the Grit Scale questionnaire at the end of the semester.

The research instrument used to collect data was a closed-ended questionnaire, where respondents only selected answers from options provided by the researcher. The instrument employed in this study was the Grit Scale, developed by Angela Duckworth to measure individual grit levels (Duckworth, 2016). The instrument consists of 12 items (Duckworth et al., 2007). In this study, all questionnaire items were used sequentially from number 1 to 12. The language of the questionnaire was adapted to the students' language proficiency and consulted with the classroom teacher to ensure that every question could be understood clearly without altering the essence of each item.

**Table 1.** Grit Scale

No.	Question	Options
1	I can overcome all obstacles to face the challenges given to me.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
2	When there is a new idea, project, or task, my attention to previous ideas, tasks, or projects is easily diverted.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
3	My hobbies or interests change every year.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
4	Failure or setbacks do not discourage me.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
5	I enjoy starting new ideas or projects quickly, but then I get bored.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
6	I am a hard worker.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all

No.	Question	Options
7	I often set goals but end up doing something else.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
8	I have difficulty staying focused on tasks or projects that take a long time to complete (e.g., weeks or months).	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
9	I always complete any ideas, tasks, or projects I start.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
10	I have achieved goals I set for myself over several years.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
11	I am interested in doing something new every few months.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all
12	I am a diligent student.	a. Very much like me b. Like me c. Somewhat like me d. Not like me e. Not like me at all

Responses on the Grit Scale produce scores that reflect how students perceive themselves at the time of completing the questionnaire. Students' grit levels may vary at different points in time. Duckworth (2016) states that "grit has two components: passion and perseverance." These two components indicate two distinct indicators, which can be outlined as follows:

**Table 2.** Duckworth's Indicators (Duckworth et al., 2007)

No.	Indicator	Item Numbers	Total Items
1	Passion	2, 3, 5, 7, 8, 11	6
2	Perseverance	1, 4, 6, 9, 10, 12	6
3	Total	1-12	12

Reliability testing in this study was conducted using SPSS Release 23.0 for Windows with Cronbach's Alpha. An instrument was considered reliable if the correlation coefficient exceeded the critical value or if Cronbach's Alpha was greater than 0.6 (Singarimbun, 1995). Validity testing was conducted through item content validation to determine how accurately the instrument's content could be used. Since both instruments had been theoretically validated based on prior journals by the authors, the questionnaire was tested for reliability using Cronbach's Alpha with a significance level of 5%.

## RESULTS AND DISCUSSION

### Results

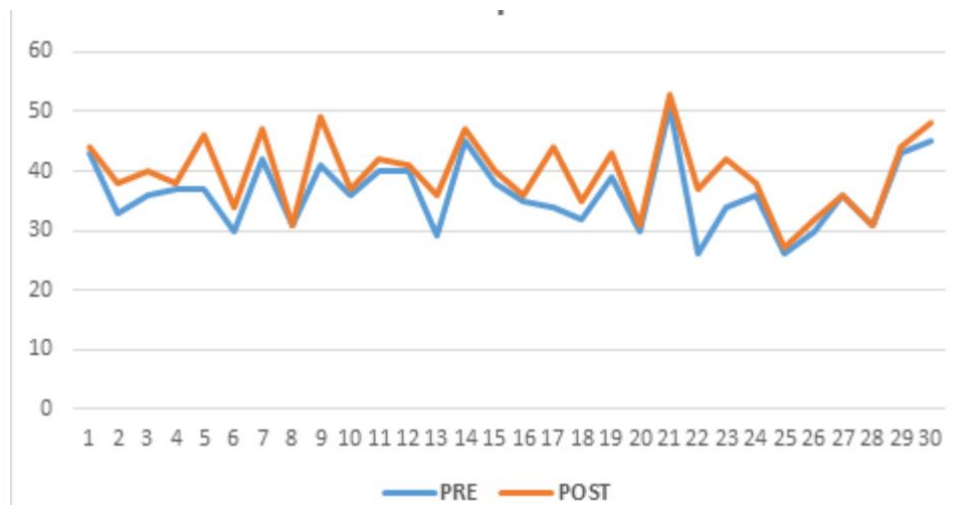
The Grit Scale used in this study was analyzed for item content validity using the product-moment correlation technique with the help of SPSS 23.0. The validity test using SPSS 23.0 indicated that some items in the Grit Scale were not valid, as shown by negative correlation values. Therefore, these items were excluded, and the summary of

the validity test showed a Cronbach's Alpha value of 0.773. One item in the instrument was excluded from the data, with details as follows:

**Table 3.** Grit Scale Content Validity Test

No.	Indicator	Item Numbers	Total Items
1	Passion	2, 3, 5, 7, 8, 11	6
2	Perseverance	1, 6, 9, 10, 12	5
	Total	11	11

Furthermore, the results of the pretest and posttest from the sample can be seen in Figure 1.



**Figure 1.** Pretest and Posttest Results of the Grit Scale

The validity and reliability test of the Grit Scale showed a Cronbach's Alpha of 0.712 ( $\alpha > 0.05$ ) with  $N = 12$ , indicating that the Grit Scale overall had a high level of validity. However, the item-level validity and reliability test revealed one item with a negative correlation (Item No. 4), which was therefore removed. The second validity and reliability test of the Grit Scale with  $N = 11$  produced a Cronbach's Alpha of 0.773 ( $\alpha > 0.05$ ), with all item correlations above 0.05, confirming that the Grit Scale was valid and reliable.

Using the validated and reliable Grit Scale, the research results for the pretest and posttest of the sample data were obtained. The pretest results showed a mean score of 36.2 with 30 respondents ( $N = 30$ ). The posttest results using the Grit Scale showed a mean score of 39.56.

## Discussion

The research findings depicted in Figure 1 reveal a significant difference between the pretest and posttest Grit Scale scores. Duckworth (2016) defines grit as a combination of passion, resilience, determination, and focus, which motivates individuals to remain disciplined and optimistic in pursuing their goals despite discomfort, rejection, or slow progress. She emphasizes that grit is not only

perseverance in the face of failure but also commitment to sustaining effort over a long period.

The above-average pretest results (above 30) indicate a fairly good level of grit among students at Charis Christian Elementary School. Based on the background of Charis Christian Elementary, it can be understood that throughout the academic year prior to this study, the school implemented an annual theme program: Resilient (Grit). This comprehensive school-wide program indirectly fostered grit among students. This aligns with Dean's statement (Bashant, 2014) that developing character and grit in students requires cultivating a school culture that emphasizes character and grit.

Recent studies have further explored the role of grit in educational settings. For instance, a study by Ibrahim et al. (2025) found that grit and learning agility significantly influenced academic accomplishment in K-12 students. Similarly, research by Chen et al. (2024) provided evidence that grit predicts student outcomes during the challenging period of the COVID-19 pandemic. These findings underscore the importance of fostering grit to enhance student performance.

Moreover, interventions aimed at building grit have shown positive outcomes. Calo et al. (2025) reported that targeted programs, including education, yoga, mindfulness, and deep breathing activities, effectively developed grit, resilience, and a growth mindset among students. These interventions contribute to students' ability to positively adapt to challenges in their academic journey.

In conclusion, the research highlights the significance of grit in academic success. The above-average pretest results at Charis Christian Elementary School suggest that the school's annual theme program has been effective in fostering grit among students. The integration of grit-focused interventions further supports the development of this essential trait, ultimately contributing to improved student outcomes..

## CONCLUSIONS

As the need to conduct learning activities online becomes inevitable, it is necessary to provide services that enhance students' ability to complete tasks and even achieve success in the online learning process. Success in online learning requires students to demonstrate self-regulation, discipline, perseverance, resilience, and all the attributes that characterize grit. This study is expected to inspire and encourage the development of grit-based learning, enabling students to achieve success in carrying out online learning.

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