



# THE MEANING OF LEARNING IN VIRTUAL CLASSROOMS: STUDY OF THE UTILIZATION OF DRILL MODELS AND PRACTICES IN SDIK NURUL QURAN

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## ABSTRACT

*In this research, the problem is that there are still teachers and students who do not understand ICT while the facilities in the school already support to use of the drill and practice model, in addition, the drill and practice model is not suitable to be applied in all subjects. The drill and practice learning model are one of the learning models that use ICT to train students' skills in applying the concepts, knowledge, and skills that students have through speed in solving problems and providing hands-on training and experience to students. The purpose of this research is to know the utilization of drill and practice models so that learners are more meaningful improve the effectiveness of student learning during online learning and know the use of ICT to students with teachers in using drill and practice models. This type of research uses a qualitative approach with a case study research method and data analysis technique through observation and interview of SDIK Nurul Quran teacher. The results showed that SDIK Nurul Quran has used drill and practice models in the learning process, and facilities in schools strongly support the application of drill and practice models using Information and Communication Technology. Based on the results of this drill and practice model research can improve the effectiveness of student learning and learning feels more meaningful during online learning.*

**Keywords:** *Drill and practice model, Learning, Meaningfulness, Online learning, Information and Communication Technology.*

## 1. INTRODUCTION

In the midst of the current pandemic online learning is one of the policies taken so that the teaching and learning process must be implemented from home through online or distance learning so that students get the right to learn. Thus the development of student learning is very dependent on the process of teaching and learning activities delivered by educators / teachers (Nurhayati, 2013). The development of student learning at home during the current pandemic tends to be different from the development of learning in schools so teachers who act as facilitators must have various innovations and models in conveying learning and providing motivation for students in carrying out online learning activities so that learning goals are achieved (Sudjana, 2017).

Online learning in elementary can be seen today educators still do not use the model when online learning so learners are still less effective which affects student learning outcomes. The learning model is a way to present information to convey learning goals. Drill and practice model as a basis for learning a scientific field. After a deeper review, this drill and practice model is still rarely studied and rarely used in the learning process in school, only a few schools that have used this model even though there are still schools that know the steps of the drill and practice learning model. This drill and practice learning model is one of the learning models that use Information and Communication Technology to train students to have skills and apply a concept knowledge, rules, or procedures learned so that learning feels more meaningful (Munir, 2012).

Meaningful learning is fun learning that has the advantage of finding and getting information in its entirety to improve students' abilities. Meaningful learning is characterized by the relationship between new aspects, concepts, information, or situations with relevant components in the cognitive structure of the student (Putri, 2015). The learning process is not just memorizing concepts but is an activity of connecting concepts to produce a complete understanding so that the concepts learned will be well understood and not easily forgotten. For meaningful learning to occur, teachers must always try to know and explore the concepts possessed by students



and combine them with new knowledge that will be taught (Rusman, 2013). So, learning will be more meaningful if the child experiences directly in everyday life and connects with what has been learned.

This drill and practice model uses repeated exercises that help students smooth out and remember a concept until it is completed. This model is suitable for use in calculation learning materials, foreign languages, and improvements in the mastery of newly acquired vocabulary (Alessi, & Tropp, 2011). The form of interaction is advanced in the form of feedback or feedback for every student who does the problem correctly. The goal of the drill and practice model is to gain students' skills in remembering systematically with repetitive teaching techniques, knowing the skills students have through speed in solving problems, and being able to provide students with hands-on experience (Mutia, 2019). The purpose of this study is to find out the effectiveness of the drill and practice model and the online learning process in the pandemic era.

Online learning is one of the distance learning solutions when social distancing during the current pandemic period. Online learning is a formal education organized by each school where students and teachers are in separate locations so they need systems and communication tools as a connecting medium for both to continue the learning process (Syarifudin, 2020).

Research conducted by Nurfaedah (2019) "Analysis of Utilization of Information and Communication Technology in the Learning Process at SMK Negeri Se-Kota Makassar". Nurfaedah's research results showed that the ability possessed by teachers in the utilization of ICT at the time of learning in SMK Negeri in Makassar city is very good while the ability of students in the criteria is very good so the utilization of ICT in the learning process runs smoothly without obstacles based on the results of research observations (Nurfaedah, 2019). The difference with this study is to find out whether learning feels more meaningful in virtual classes by benefiting the drill and practice model in SDIK Nurul Quran in the learning process.

Research conducted by Heriyanto (2020) "Utilization of ICT in Improving blended learning model of Teachers of Buddhist High School and Vocational Education in Tangerang". The results of Heriyanto's research showed that the utilization of ICT in improving the blended learning model of high school and vocational school Buddhist education teachers in Tangerang consists of the utilization of social networks, the use of internet technology, the use of email, and making media based on interactive multimedia learning (Heriyanto, 2020). The disparity between Heriyanto's research and this study lies in both the model or topic employed to gauge ICT utilization in learning, as well as the resulting findings. In the author's investigation, it is revealed that despite the presence of supportive ICT facilities within schools, there persists a notable proportion of teachers and students who lack a comprehensive understanding of ICT. Moreover, the utilization of the drill and practice model, while feasible within certain contexts, proves unsuitable for application across all subjects. Notably, the demographics of the study participants also vary, with Heriyanto focusing on high school students, while this study centers on elementary school children. Consequently, these discrepancies underscore the substantial differences between Heriyanto's research and the present study.

Research conducted by Rahman et al. (2018) "Development of web-based learning media using drill and practice model". The results of the study reveal that the web-based learning media drill and practice model meets the criteria of completion and practicality so that it is suitable for use in the learning process. This web media development must pay attention to the needs of teachers and learners and media design must be made as attractive as possible, so that it can be accessed easily by many people through Android. The difference with the research conducted by the author is to find out whether learning feels more meaningful in virtual classes by benefiting the drill and practice model in SDIK Nurul Quran in the learning process so that it affects the achievements obtained in school using drill and practice models.

Research conducted by Sari et al. (2019) "Drill And Practice As An Alternative Learning Method For Manufacturing Accounting Practicum Subjects In Vocational High Schools" The results of this research drill and practice learning method can be recommended as an alternative learning method for manufacturing accounting practicum subjects because this method focuses on exercises that are very suitable with the material that is There is in school so that it can improve the ability of students in training and remembering them in subjects. The



difference with the research conducted by the author is to find out whether learning using drill and practice models feels more meaningful in virtual classrooms by benefiting Information and Communication Technology at SDIK Nurul Quran in the learning process to foster ability for students in the learning process.

Based on the above research, it can be concluded that the drill and practice model show that the utilization of Information and Communication Technology can improve students' ability in the learning process with ICT facilities that support student learning such as computers/laptops, internet networks, and media tools used in learning both visual media and audio media.

Based on the results of research observations conducted at SDIK Nurul Quran researchers found there are still teachers and students who do not understand Information and Communication Technology while the facilities in the school itself are already supportive, besides this drill and practice model is not suitable to be applied in all subjects because this model uses exercises and then there is application at the end of learning, This model is more relevant applied to calculating subjects (mathematics) and foreign languages such as Arabic and English. This model if continuously given exercise, students tend to be bored and lazy to learn. Based on the description above, researchers want to reveal a deeper question about what is learning more meaningful by benefiting the drill and practice model in virtual learning during this pandemic. Then the researchers attached this title with the theme "The Meaning of Learning in Virtual Classrooms: Study of Utilization of Drill Models and Practices in SDIK Nurul Quran".

## 2. METHODS

The research method the authors use is a case study using a qualitative approach. Qualitative research leads to a detailed description of the conditions and processes, that relate to the subject matter found in the research objective (Supoto, 2006). Case study research is research that focuses on some cases in detail by digging data in depth to obtain various sources of information that want to be researched to find the necessary data (Creswell, 2015). In this study, the subject of research was the teacher of SDIK Nurul Quran which numbered 5 people. The sampling technique used by researchers is purposive sampling. The data instruments used in this study are observations and interviews.

This case study research technique uses observation, and in-depth interviews with teachers about models used to support student learning in virtual grades (Meleong, 2014). The researchers conducted the data using the Spradley Technique. Information obtained from the results of research of SDIK Nurul Quran teacher then is described based on this research problem. This research focused on the application of the drill and practice model in learning, conformity of drill and practice model in learning, whether school facilities support to implementation drill and practice model in learning, how teachers can apply drill and practice models, and Supporting factors and inhibiting its implementation.

## 3. RESULTS & DISCUSSION

The drill and practice model is a mode of learning by training students on the subject matter that has been given, through the drill and practice model found certain habits in the form of exercises. With continuous exercise, embedded and then over time become a habit (Sutrisno, 2012). In addition to instilling habits, this model can also increase speed, determination, and perfection in doing things, and can also be used as a way to repeat the exercise material that has been delivered to increase speed (Rusman, 2012).

This model provides a more specific or real and meaningful learning experience by creating an imitation of the experience that approaches the actual atmosphere. The benefits of the drill and practice model are that it can provide feedback to students, create student learning motivation so that learning is more meaningful, Students less time, and teacher time is also more efficient (saving teacher time) (Roblyer, 2017).

The steps in learning the exercise model are as follows: 1.) Introduction/introduction. 2.) Present the problem in the form of a training problem. 3.) Students do exercises. 4.) The teacher records the student's appearance, gives evaluations, and provides feedback. 5.) If the student's answer is correct, the teacher will ask the next question, if the student's answer is wrong, the teacher will provide facilities for retraining, and a complete exercise can be given at the end of the question. 6.) Cover (Djamal, 2011).



Analysis of data from the results of this study with interviews from several teachers who use drill and practice learning models, namely:

1. Application of drill and practice models in learning

Based on the results of interviews with several teachers in schools, all teachers have applied the drill and practice model at several meetings during the learning process. The facilities in the school are very supportive to implementing the drill and practice model by using Information and Communication Technology such as laptops/computers, books, internet, audio and visual media, InFocus, and so on. However, the drill and practice model is not suitable for all subjects, this model is more relevant for mathematics and foreign language subjects (English and Arabic) because the learning is by providing exercises and after that, there is application or practice, because the learning is essentially from the results of learning concepts. Mastery of mathematical concepts and foreign languages requires practice, skill, and repetition to increase the effectiveness of students in such learning (Susilowati, 2013).

2. Suitability of drill and practice models in delivering learning

Based on the results of teacher interviews, the drill and practice model is suitable for the delivery of learning because by using this learning model students practice more, indirectly students are faster to receive a lesson. Plus, they directly do their exercises, so that they can hone students' knowledge and skills and easy to practice in everyday life. The purpose of this learning model is to provide a more concrete learning experience through the provision of problem exercises aimed at testing students' performance and abilities through the speed of solving the problems that have been given (Kurniawan, 2015). The use of information and communication technology in subjects can make it easier for teachers and students to convey the desired learning goals.

3. Improve the effectiveness of student learning by using drill and practice models

Based on the results of the interview, applying the drill and practice model can increase the effectiveness of student learning, because with this model students are required to practice first, then practice directly in the field so that this learning model feels more meaningful and effective.

Effectiveness in learning can be measured through the success of a process of interaction between students and between students and teachers in educational situations to achieve the goals of learning (Masruri, 2017). Effectiveness in learning can be seen from the activities carried out by students during learning, student response to learning, and mastery of concepts that students have during the learning process so that learning feels more meaningful (Rohmawati, 2015).

4. School facilities that support the implementation of drill and practice model

Based on the results of the interview, the facilities in the school already support the application of drill and practice models in learning, using Information and Communication Technology such as laptops/computers, internet networks, InFocus, audio and visual media, and others. Teachers who act as facilitators must have various innovations in delivering learning and providing motivation for students to carry out online learning activities to achieve the expected results in learning (Sudjana, 2017).

5. The Ability of teachers to apply drill and practice models

Based on the results of the interview, the teacher's ability to apply the drill and practice model in the learning process can be seen from teachers who use drill and practice model steps in learning. Start the preliminary stage by starting the implementation steps provided with continuous exercises with learning materials until students understand and get used to ending by motivating the learning spirit for students and providing feedback (Padmanthara, 2012).

The drill and practice model uses practice repeatedly so that it helps students smooth and remember a concept until it is completed. This model is suitable for learning count materials, foreign languages, and improvements in the mastery of new vocabulary (Deni, 2013).

6. Supporting factors and inhibiting the implementation of drill and practice learning models

Based on the results of the interview there are supporting factors and there are factors that hinder the implementation of the drill and practice model in schools, the supporting factor of the drill and practice learning model is to create media that can be used in the learning process, the availability of infrastructure in schools such



as internet networks, laptops/computers, InFocus, and the availability of learning media both audio and media. Visual media to support the implementation of drill and practice models (Hamzah 2011, 9).

While the inhibiting factor of the drill and practice model is that not all teachers and students understand Information and Communication Technology (ICT), there are still some students and teachers who find it very difficult to follow the learning process by using the drill and practice model and when applying it, and if constantly given training students will tend to be bored and lazy to learn.

Based on the results of the analysis of interview and observation data in SDIK Nurul Quran, it can be known that the use of drill and practice models using ICT already uses drill and practice models and facilities in schools have supported to implementation of the model. This can be seen from the interviews of teachers in schools who have applied this model in the implementation of learning to increase effectiveness and meaningful in learning students. There is also the purpose of this drill and practice learning model is to hone students' skills and improve students' skills by learning to create a new atmosphere. And the lesson is more meaningful (Sagala, 2017).

The supporting factor in the implementation of the drill and practice learning model is to create media that can be used in the learning process and the existence of supporting facilities and infrastructure in schools such as wifi, computers, and audio media and visual media to support implementation with drill and practice models. While the inhibiting factor of the drill and practice model is that not all teachers and students understand Information and Communication Technology (ICT), there are still some students and teachers who find it very difficult to follow the learning process by using the drill and practice model and when applying it, and if constantly given training students will tend to be bored and lazy to learn.

Based on the above research, it can be concluded that the drill and practice model show that the utilization of Information and Communication Technology can improve students' ability in the learning process with ICT facilities that support student learning such as computers/laptops, internet networks, and media tools used in learning both visual media and audio media. Based on the results of the analysis of interview and observation data in SDIK Nurul Quran, it can be known that the use of drill and practice models using ICT already uses drill and practice models and facilities in schools have supported to implementation of the model. This can be seen from the interviews of teachers in schools who have applied this model in the implementation of learning to increase effectiveness and meaningful in student learning. The purpose of this drill and practice learning model is to hone students' skills and improve students' skills by learning to create a new atmosphere and more meaningful lessons.

#### 4. CONCLUSION

The problem in this study is that not all teachers and students understand Information and Communication Technology (ICT), there are still some students and teachers who find it very difficult to follow the learning process using drill and practice models and when applying, and if constantly given training students will tend to be bored and lazy to learn. After the authors analyze the data, research using the drill and practice learning model can be used as one of the learning models that provide exercises to students so that they can hone students' skills and improve students' skills by learning to create a new atmosphere and learning becomes more meaningful. This can be seen from the interviews of teachers in schools who have applied this model in the implementation of learning to increase effectiveness and meaningful in student learning. Readiness of educators in the utilization of drill and practice models by using Information and Communication Technology in the learning process and the existence of supporting facilities and infrastructure in schools such as wifi, computers, and audio media and visual media to support implementation with drill and practice models to achieve the desired learning goals. For further research, the author suggested that researching on the development of media used drill and practice models to improve ICT in learning, especially during the 19th pandemic so that learning is more effective for teachers and students and not bored in learning. In this study, the limitations of the authors are the time and place of the study so they cannot compare the drill and practice model used in learning in one school with other schools given the current pandemic situation.



## REFERENCES

- Rahman, A., Kaharuddin, and Yani, A. (2018). Pengembangan media pembelajaran berbasis web menggunakan model drill and practice. Thesis. Universitas Negeri Makassar.
- Alessi, S. M., & Tropplip, S. R. (2011). *Multimedia for Learning Methods and Development 3rd*. <http://digilib.stiem.ac.id:8080/jspui/bitstream/123456789/329/1/Pengembangan%20Media%20Pembelajaran.PDF>.
- Creswell, J. W. (2015). *Penelitian Kuantitatif & Desain Riset*. Yogyakarta: Pustaka Pelajar.
- Deni, D. (2013). "Teknologi Pembelajaran." Dalam . Bandung: PT. Remaja Rosdakarya.
- Djamal, M. A. (2011). "Tips Efektif Pemanfaatan Teknologi Informasi dan Komunikasi dalam Dunia Pendidikan." Dalam . Yogyakarta: Diva Press.
- Hamzah. (2011). *Teknologi Pembelajaran & Informasi Pembelajaran*. Jakarta: Bumi Aksara.
- Heriyanto. (2020). "Pemanfaatan TIK dalam Peningkatan model Blended Learning Guru Pendidikan Agama Budha SMA dan SMK di Tangerang." <https://files.osf.io/v1/resources/g9pmj/providers/osfstorage/5c6e242782a395001ac8ceeb?direct=&mode=render>.
- Kurniawan. (2015). "Pembelajaran Berbasis Teknologi Informasi dan Komunikasi." Dalam . Jakarta: Rajawali Pers.
- Masruri. (2017). "Analisis Efektifitas Program Nasional Pemberdayaan Masyarakat Mandiri Perkotaan." *Padang: Akademia Permata*. <https://journal.umy.ac.id/index.php/GPP/article/view/2995>.
- Meleong, L. (2014). *Metodologi Penelitian Kualitatif dan kuantitatif*. Bandung: PT Remaja Rosdakarya.
- Munir. (2012). *Multimedia Konsep & Aplikasi dalam Pendidikan*. Bandung: Alfabeta.
- Mutia. (2019). Pelaksanaan Standar Pengelolaan Pendidikan di Madrasah Tsanawiyah Negeri 2 Bandar Lampung. Thesis. Universitas Islam Negeri Raden Intan Lampung.
- Nurfaedah. (2019). "Analisis Pemanfaatan Teknologi Informasi dan Komunikasi dalam Proses Pembelajaran pada SMK Negeri Se-Kota Makassar." <http://eprints.unm.ac.id/13246/>.
- Nurhayati, Fitri. (2013). Efektifitas pembelajaran dengan metode drill and practice dan learning cycle 5E disertai media pembelajaran crossword puzzle terhadap prestasi belajar siswa pada materi pokok hidrokarbon kelas X semester genap SMA Negeri Kebakkramat Tahun Pelajaran 2012/2013. *Jurnal Pendidikan Kimia (JPK)* 2(3), 191-198.
- Padmanthara, S. (2004). Pembelajaran Berbantuan Komputer (PBK) dan Manfaat sebagai Media Pembelajaran. *Tekno*, 1, 15-22.
- Putri, A. C. (2015). Pengembangan media pembelajaran fisika berbasis web untuk meningkatkan adversty goutient peserta didik. *Prosiding Seminar Nasional Fisika (E-Journal) SNF2015*, 4, 165-168.
- Roblyer, et al. (2017). *Integrating Educational Technology into Theaching*. New York: Person Education.
- Rohmawati, A. (2015). Efektivitas Pembelajaran. *Jurnal Pendidikan Usia Dini*, 9(1), 15-32.
- Rusman. (2012). *Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi Mengembangkan Profesional Guru*. Jakarta: Rajawali Pers.
- Rusman. (2013). *Belajar dan Pembelajaran Berbasis Komputer Mengembangkan Profesionalisme Guru Abad 21*. Bandung: Alfabeta.
- Sagala, S. (2017). *Konsep dan Makna Pembelajaran*. Bandung: Alfabeta.
- Sudjana. (2017). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT. Remaja Rosdakarya.
- Supoto. (2006). *Metodologi Penelitain Kualitatif*. Surakarta: UNS.



- Susilowati, et al. (2013). "Penggunaan Metode Pembelajaran Drill and Practice Sebagai Upaya Meningkatkan Presentasi Belajar." *Jupe UNS*, 1(3), 1-10.
- Sutrisno. (2012). *Kreatif Mengembangkan Aktifitas Pembelajaran Berbasis TIK*. Jakarta: Referensi.
- Syarifudin, A.S. (2020). Implementasi Pembelajaran Daring untuk Meningkatkan Mutu Pendidikan Sebagai Dampak Diterapkannya Social Distancing. *Metalingua: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 5(1), 31-34.
- Sari, V.F. Afriyenti, M. and Betavia, A.E. (2019). "Drill and Practice Sebagai Metode Pembelajaran Alternatif Untuk Mata Pelajaran Praktikum Akuntansi Manufaktur di Sekolah Menengah Kejuruan. *Wahana Riset Akuntansi*, 7(2), 1541-1550.