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Sys Rev Pharm 2020;11(1 2):1 236 - 1242 A multifaceted review journal in the field of pharmacy 1236 Systematic Reviews in Pharmacy Vol 11, Issue 1 2 , Dec ember 2020 Teaching Factory-Based Curriculum Management (A Case Study At St. Michael Catholic Technical High School Surakarta) Alexius Dwi Widiatna 1 , Purwani Puji Utami 2 , Herlyna 3 , Alpha Ariani 4 , Ardya Setya Nuryrita 5 , Isthifa Kemal 6 1,5 STKIP Widya Yuwana, Madiun, Indonesia 2 STKIP Kusuma Negara, Jakarta, Indonesia 3 STBA Pertiwi, Jakarta, Indonesia 4 Universitas Achmad Yani, Banjarmasin, Indonesia 6 STKIP Bina Bangsa Getsempena, Banda Aceh Indonesia ABSTRACT The purpose of this study is to explore the management of the school curriculum to implement teaching factory.

Teaching factory which is part of the curriculum and instruction is a learning environment that is suitable, to integrate educational processes and industrial processes, and to bridge the need for skilled labor from industrial companies with the competence of students at schools. This study uses a qualitative approach by using a case study method.

Data was collected through observation, participatory observation, documentation, and in-depth interviews with the school principal, vice-principal for curriculum, the head of the expertise program, and the head of the workshop. The data collected was analyzed through the process of data condensation, data display, and drawing conclusions.

As a result of the research, researcher found teaching factory-based curriculum management at St. Michael Catholic Technical High School (SMK St. Mikael) Surakarta, increasing the competence of each student so that they are ready to work in business and industrial companies. It is expected that this research would be a meaningful reference field for relevant researchers, education stakeholders, and education

practitioners who wants to develop technical education or vocational education through teaching factory.

Keywords: Learning Factory, Curriculum Management, Teaching Factory, Vocational and Technical Education Correspondence : 1 Alexius Dwi Widiatna STKIP Widya Yuwana, Madiun, Indonesia alexius.widiatna@widya yuwana.ac.id 6 Isthifa Kemal STKIP Bina Bangsa Getsempena, Banda Aceh, Indonesia isthifa@bbg.ac.id INTRODUCTION Vocational education (SMK) is secondary education that prepares students primarily to work in certain fields.

In other words, SMK graduates are middle-level workers who have sufficient skills or competencies in accordance with the demands of the times, and are ready to work in the business and industrial world (Finch & Crunkilton, 1999). The main objective of vocational learning is to prepare students to become successful workers in the labor market.

Because of having specific skills (Forster & Bol, 2018), vocational school graduate students have a greater chance for getting a job than general education graduates when they enter the labor market (Forster, Bol, & Werfhorst, 2016). In short, students are prepared both for life and for livelihood or to earn a living. The biggest challenge experienced by SMKs today is that curriculum and learning systems that are less synergistic with the business world, so that the competence and expertise of vocational graduates are incompatible (mismatch) with market needs (Chamadia & Shahid, 2018) or the business and industrial world.

What is taught in vocational schools, especially in terms of competence, does not meet the expectations and demands of the industrial world. In teaching, teachers only convey information in front of the class, students are only as passive listeners on teaching and learning activities (Dombrowski, Wullbrandt, & Reimer, 2017).

Therefore, the Vocational School must revitalize the curriculum and instruction so that the graduates have competencies in accordance with the needs of the business and the industrial world (Kemal & Setyanto, 2017). One form of systematic and integral revitalization is to implement teaching factory or learning factory, namely "learning" in a "factory" environment (Abele, et al., 2017).

The process and objectives of learning as well as assessment of teaching and learning activities in schools must be like in industrial settings, "in close-to-reality industrial settings" (Lanza, Minges, Stroll, Moser, & Haefner, 2016) not just a production unit and there are transactions at school. Many educational institutions have tried to bring

educational practices closer to industrial practices with the concept of teaching or learning factory (Mavrikios, Sipsas, Smparounis, Rentzos, & Chryssolouris, 2017).

Teaching factory refers to the standards and procedures that are applied in the industrial world, and is carried out in an atmosphere like what happens in the industrial world as well as fostering the character of students, as well as building an industrial culture at schools (Setyanto, Sulhan, Miranti, & Kemal, 2020). Thus, teaching factory will be able to bridge the competency gap needed by the industrial world by using the knowledge learned in schools and the competencies generated by vocational learning (Kemal, Suryadi, Rosyidi).Teaching Factory-Based Curriculum Management (A Case Study At St.

Michael Catholic Technical High School Surakarta) 1237 Systematic Reviews in Pharmacy Vol 11, Issue 1 2 , Dec ember 2020 Based on the background of the problem, the researchers conducted a teaching factory based curriculum management research, with the formulation of the problem namely how is the teaching factory-based curriculum management at the Catholic Vocational School (SMK) St.

Mikael Surakarta so that it can produce graduates (output) who are competent and ready to enter the business world and the industrial world? This study aims to explore the teaching factory-based curriculum management in SMK St. Mikael Surakarta, a private school that has for years implemented a teaching factory to improve the competence of each student.

This research is expected to contribute thoughts on the development of vocational school curriculum management that applies teaching factory learning, so the results of this study are expected to be used as a reference material for other vocational schools. In addition, this research can also help to solve practical problems in the world of vocational education, especially in managing curriculum and teaching- learning processes in schools in order to improve graduate competencies. THEORETICAL STUDY A.

Management of Curriculum and Instruction To improve the competence of each student, schools are given autonomy, authority and freedom to choose strategies, methods, techniques of teaching and learning that are effective in accordance with the characteristics of the subjects, characteristics of students, teachers, and available resources.

Autonomy (for costs, teaching staff, and curriculum) must be used to make changes that directly impact teaching and learning or teaching and learning processes (Wohlstetter &

Odden, 1995) which ultimately leads to an increase on the ability of students. The vocational and technical curriculum deals directly with helping the student to develop a broad range of knowledge, skills, attitudes, and values, each of which ultimately contributes in some manner to the graduate ' s employability (Finch & Crunkilton, 1999, p. 15).

The vocational school curriculum are directly related to helping students in developing a variety of knowledge, skills, attitudes, and values, each of which ultimately contributes on several ways to the employability of graduates in the business and industrial world. In the whole educational process, the curriculum has a very central position. The main purpose of education is student learning.

The curriculum is the main determinant of school activities, because it directs all forms of educational activities so that educational goals are achieved (Suryadi, Kemal, Setyanto, Rachmadtullah). One of the most important tasks of a series of management task that must be carried out by a school principal is curriculum management (Dean, 1995).

Effective curriculum management is proven by successful graduates after completing education at the school, whether they can directly work in the business world or in the industrial world, or the graduates continue to higher education (College of Business, 2015) . Therefore, schools have the responsibility to develop, plan, and implement curricula that answer the needs of both students and the community.

The process of developing a technical education and vocational education curriculum must reflect the best thinking of vocational school educators and must be delivered in a systematic and orderly manner (Finch & Crunkilton, 1999). A good curriculum must be up-to-date (current), responsive and innovative in accordance and responsive to the development of the industrial world (Setyanto, Kemal, Suryadi, Matin, Soefiajanto, 2020).

In addition, the curriculum and teaching are managed so that not only focus on tools to develop logical and sensible new constructs of knowledge in various fields of study, but must also aggressively foster a culture that fosters the growth of creativity in all learners in order to develop their competence (Jacobs, 2010). Vocational High Schools are required to contextualize teaching by providing learning approaches to real factories and hands-on experience for students (Sackey, Bester, & Adams, 2017), because engineering education is the main training in the art of using knowledge to produce goods (Whitehead, 1961).

The school is managed as a place of education as well as industry by the aim of

developing students' competencies effectively which includes several competence domains, namely professional, methodological, social and personal, to enter the business world and the industrial world (B ü th, et al., 2017). By a teaching factory, students and companies will experience a learning environment and the growth of student competencies that are suitable for increasing work productivity. Students are able to bring and apply various theories in the real work environment (Ogorodnyk, Granheim, & Holtskog, 2016). B.

Teaching Factory The concept of teaching factory first appeared in 1994, when it was first discovered at Pennsylvania State University (Schuh, Prote, Dany, Cremer, & Molitor, 2017). This concept originates from medical disciplines, especially in the hospital learning paradigm, which is a medical school that also operates with hospitals (Mavrikios, Konstantinos, & Chryssolouris, 2019).

The aim is to integrate the learning environment and the work environment, where real and relevant learning experiences emerge (Mavrikios, Papakostas, Mourtzis, & Chryssolouris, 2013). Since, this concept has increasingly developed in the world of technical education and vocational schools whose aim is to bring the industrial world closer to the learning spaces at school.

Then, in the same sense, the term learning factory emerges, which refers to the educational approach to learning activities (learning and teaching) and the industrial environment (factory) for manufacturing education (GraBler, Taplick, & Yang, 2016). Because of the same understanding and concepts, many vocational education researchers and practitioners use the term learning factory or teaching factory (Moldavska & Abreu-Peralta, 2016).

Various definitions of "learning factory" and "teaching factory" are identified, analyzed and compared in order to produce a general understanding of learning factory. The dominant key features of the learning factory were extracted, resulting in a general understanding of the concept of teaching factory or learning factory (Tisch, Laudemann, KreB, & Matternich, 2017) .

Learning factory is a learning environment that is specified by authentic processes, includes many sections, and consists of technical and organizational aspects, settings that can change and resemble real value chains, products produced, and the concept of teaching (didactical concept) consisting of formal, informal, and non- formal learning, which is made possible by the actions of the students themselves in the learning approach in place (Abele, et al.,

2017); (Tisch, Laudemann, KreB, & Matternich, 2017). Teaching factory integrates the factory environment with the classroom where are teaching and learning activities take place. The concept of "factory-to- classroom" learning is intended to transfer the real production or manufacturing environment to the class and bring the class to the real factory (Chryssolouris, Mavrikios, & Rentzos, 2016), a replica of a real factory, specifically to deliver competence and expertise in optimizing the production process (Jaeger, Mayrhofer, Kuhlang, Matyas, &Teaching Factory-Based Curriculum Management (A Case Study At St.

Michael Catholic Technical High School Surakarta) 1238 Systematic Reviews in Pharmacy Vol 11, Issue 1 2 , Dec ember 2020 Sihn, 2012). Every student has the opportunity to apply the development process and at the same time see the results directly (Sackey, Bester, & Adams, 2017). Teaching factory is managed as learning that synergizes with the industrial world to produce graduates who are competent in their fields according to market needs (Kemal, Suryadi, Rosyidi).

In other words, one of the objectives of teaching factory is to enable students to develop their competence in transferring or applying knowledge that has been learned into practical situations in solving problems or completing work (Abele, Bauerdick, Strobel, & Panten, 2016). Meanwhile, the purpose of vocational education is to obtain qualifications related to a particular profession, art or workforce or that provide training needs and certain expertise such as technical knowledge, so that students are able to practice a profession, art and activities independently according to age and level their skills (Mortaki, 2012).

Teaching factory will encourage technological and organizational innovation and simultaneously develop student competencies effectively (Tvenge, Martinsen, & Kolla, 2016). METHOD The study was conducted in March 2017 to March 2018 at SMK St. Mikael Surakarta. It aims to explore teaching factory-based curriculum management in order to improve the competencies of students in vocational schools through curriculum management and teaching.

The researcher uses a qualitative approach by using a case study method, because teaching factories in this school have advantages and uniqueness that must be explored in detail, by bringing into the main questions relating to how and why teaching factory is practiced in this school. Researchers used data sources from internal informants consisting of the Principal, Vice Principal for Curriculum, the Head of the Expertise Program, and the Head of the Workshop, as well as several internal school informants who were directly involved in the teaching factory, namely the practical teachers who were also as production supervisors who each day running teaching factory.

Data collection techniques used were documentation, archival records, interviews, direct observations, participatory observations and physical devices. The dominant data collection was carried out in addition to in-depth interviews with informants, the researchers also observed participants for eight full weeks as trainees as students learned to improve competence and produce goods according to industry standards.

What is felt, thought, and done by researchers during the entire research process also includes data (Saldana, 2011). Researcher conducted data analysis before entering the field, during the field, and after completion in the field. According to Miles, Huberman, and Saldana (Miles, Huberman, & Saldana, 2014), data analysis consists of three activities that occur simultaneously, namely: data condensation, data display, and drawing conclusions or verification. RESULTS AND DISCUSSION At SMK St.

Mikael Surakarta, teaching factory is really the main focus of learning in this school. Besides using the government curriculum, to support the implementation of teaching factory, SMK St. Mikael has the autonomy and flexibility in allocating resources and managing teachers and developing or adjusting to the school needs and competencies needed by each student (Lee, Cheng, & Ko, 2018). In the whole educational process, the curriculum has a very central position.

The curriculum is the main determinant of school activities, because the curriculum directs all forms of educational activities so that educational goals can be achieved effectively. Based on the research findings, to implement teaching factory, SMK St. Mikael manages the curriculum and teaching more effectively, which involves curriculum structure, block schedules, product, job sheets, and industrial culture.

a) Curriculum Structure St. Vocational School Mikael Surakarta opened two skills programs, namely Mechanical Drawing Engineering and Machining Engineering. To strengthen vocational training in the factory, they add 7 hours of learning, which according to the provisions of 48 hours per week, becomes 55 hours per week. In class X implanted sense of quality, class XI instilled sense of efficiency, and in class XII instilled sense of creativity and innovation.

The principal decided to improve the quality of learning and competence of students by increasing the number of hours of study in the area of expertise from the government curriculum, to strengthen vocational or expertise in accordance with the demands of the industrial world. In learning at SMK, the number of practical hours must be greater than theoretical hours to reach each student's optimal competency.

The curriculum developed and implemented must be current, responsive and innovative. It means that the curriculum must meet the needs of every student and at the same time, the needs of the business world and the industrial world or the community of SMK graduates.

The process of developing a technical and vocational education curriculum must reflect the best minds of educators and must be delivered in a systematic and orderly manner with the main objective of increasing the competence of students so that they become skilled and employable (Finch & Crunkilton, 1999). Through the addition of practical lesson hours, curriculum management based on teaching factory aims to integrate various existing competencies in students.

Teaching or learning factory is a physical learning space where social skills, practical and theoretical skills can meet and develop (Tvenge & Martinsen, 2018). b) Block Schedule After determining the curriculum structure, the vice-principal of the curriculum field manages the lesson schedule using a block system. The scheduling of the teaching-learning process with a block system is structured to (1) improve students 'learning ability, namely achieving the students' competency standards in a structured and sustainable, uninterrupted manner and (2) to effectively regulate the use of machine-production facilities: one students, one tool or one machine, (3) to set the hours of theory and practice: a week of theory, a week of practice, and (4) to arrange teaching and learning activities and workshop practices such as factory or company arrangements with two shifts: 07.00 - 15.30 and 15:30 - 22:00 WIB.

According to Hackmann and Valentine (Hackmann & Valentine, 1998) and in accordance with the results of research, scheduling with this block model is a mechanism to facilitate achieving school goals and objectives, namely supporting quality curriculum and teaching, optimizing and intensifying teacher assistance to students in developing competencies, and increasing collegiality and teacher collaboration in teaching so the learning process can run effectively and efficiently.

The block schedule is an important component of teaching factory learning with the aim of integrating industrial practice into classroom learning (factory-to- classroom) with a weekly learning cycle, by the aim of enabling each student to develop competence in transferring or applying knowledge that has been learned into practical situation or in the environment and the real industrialTeaching Factory-Based Curriculum Management (A Case Study At St.

Michael Catholic Technical High School Surakarta) 1239 Systematic Reviews in Pharmacy Vol 11, Issue 1 2 , Dec ember 2020 atmosphere. It is in line with the teaching factory

objectives stated by Abele et al. (Abele, Bauerdick, Strobel, & Panten, 2016) which states that one of the main objectives of teaching factory is to enable students to develop their competence to transfer knowledge that has been learned into practical situations.

Each student experiences a lively interaction with the factory through equipment and practical work in the workshop (Rentzos, Mavrikios, & Chryssolouris, 2015). c) Product In addition, to regulating continuous learning to achieve certain competencies, this block system lesson schedule also regulates the process of production practices that produce goods according to market standards using the job sheet guide.

Job sheets are arranged with reference to the block schedule containing the stages of activities that guide students in carrying out production practices so that they have the competence and at the same time produce goods. According to the results of the research, the product marketing coordinator in charge of receiving orders from companies or individuals, in collaboration with the head of the Machining Engineering expertise program in determining product goods together with the practice teachers.

The teacher practices in the workshop as well as being the supervisor of production of goods in the SMK production unit. In accordance with the theoretical study of teaching factories that industrial products available on the market can be selected for teaching purposes, but must remain in accordance with industry standards (Abele, et al., 2017), every student at SMK St. Mikael produces goods that comply with industry standards and market needs.

Thus, each student has competence according to industry standards. Teaching factory will produce competent students, namely graduates who have demonstrated ability qualifications to apply knowledge, skills, and attitudes to achieve observable results (Mavrikios, Papakostas, Mourtzis, & Chryssolouris, 2013).

In other words, certain knowledge, skills and abilities or so-called competencies, which are needed by students to complete the work properly can be developed through teaching factory (Posselt, B ö hme, Aymans, Herrmann, & Kauffeld, 2016). As said by Sterten et. al (Sterten, Nordskogen, & Verlan, 2016) that through the final project (project work) every student of SMK St.

Mikael, which is a center of learning, is encouraged to develop creativity or develop the habit of creative thinking (Sterten & Ogorodnyk, 2016), the practical ability to make presentations, compete with other groups, collaborate and innovate by producing certain products. Likewise in his study, GraBler et al. (GraBler, Taplick, & Yang, 2016) mention that this type of training learning factory in the process of product creation is a

"project work" completed in one semester.

The same thing is done by SMK St. Mikael. For example, one of the project work or final project at SMK St. Mikael is a chisel slitting product part of a lathe made by class XII students in groups. d) Job Sheet In accordance with research findings, at SMK St. Mikael, every student must follow the job sheet guidelines in completing product products.

Then, it is followed by an evaluation of product products that are carried out transparently between teachers and students. In the job sheet or product completion worksheet, there is an item product evaluation sheet. The assessment of the product products that have been completed by these students simultaneously assesses the achievement of the students' competencies.

Does the student have the expected competence or not? Every student at SMK St. Mikael for three years is progressively-integrally encouraged to develop the five competencies mentioned above to prepare themselves to enter the business world and the industrial world. This communication ability at SMK St.

Mikael is grown especially in class XII by fostering a sense of creativity and innovation by completing the final project or project work in groups. According to Decius and Schaper (Decius & Schaper, 2017), there are five basic competency domains: professional competence, interpersonal competence, methodological competence, knowledge-based competence, and verbal or communication skills. To improve verbal competence, each group makes presentations in completing project work.

e) Industrial Culture In the research findings mentioned that the implementation of curriculum and teaching through the three components of teaching factory namely block schedules, product and job sheets, will shape the character of each student and form a culture that can nourish students' creativity (Jacobs, 2010). The dominant values or culture in this teaching factory are discipline, honesty, responsibility, tough, thorough and obedient to the procedure, as well as 5 R (ringkas/concise, rapi/neat, resik/clean, rawat/caring, rajin/diligent). Industrial culture at SMK St. Mikael is also developed in the industrial world.

Thus, the implementation of teaching factory that is integrated in the curriculum and instruction, through block schedules, product, and job sheets is very effective in shaping industrial culture in schools. In other words, curriculum management and the learning and teaching system are synergistic with the industrial world, so as to produce goods that meet industry standards and simultaneously produce students or graduates as competent workers. In addition, researchers found that the culture of work discipline at

SMK St.

Mikael is very emphasized to achieve better work efficiency and productivity. Methodology 5 R (ringkas/concise, rapi/neat, resik/clean, rawat/caring, rajin/diligent) originating from developed industrial countries, Japan, 5 S (seiri, seiton, seiso, seiketsu, shitsuke) is applied in many countries. At SMK St. Mikael 5 R's work culture has been instilled early on by the school. Ogorodnyk et al.

(Ogorodnyk, Granheim, & Holtskog, 2016) also stressed the importance of 5 S (sort, set in order, shine, standardize, sustain) implemented in order to trigger work activities by creating and experiencing a supportive learning environment as the main key in teaching factory. All teachers and students at SMK St. Mikael together builds an industrial culture in the learning environment.

During the learning process there is a social contract or agreement between the teacher and students, which is the process in which the teacher and students develop together values, various rules, and their consequences. Actually, teachers and students effort to build social emotional relationship in their school. Teachers with high social and emotional competence have strong relationship-building skills and are better able to develop mutual understanding with their students (Gregory, Skiba, & Mediratta, 2017).

In the end the school culture is developed which is at the same time an industrial culture that will prepare students to enter the industrial world. To establish a culture of discipline, which is one of the dominant values in SMK St. Mikael, schools make rules that must be obeyed. School discipline affects students ' performance, meaning that depending on how disciplined the school is, the better the students will perform (Baumann & Krskova, 2016).

Various offenses committed by students do not return the tool or workpiece in place, careless use tool, damaging the machine or tool, a punishment which is called by compensation. This punishment is not just a punishment,Teaching Factory-Based Curriculum Management (A Case Study At St. Michael Catholic Technical High School Surakarta) 1240 Systematic Reviews in Pharmacy Vol 11, Issue 1 2 , Dec ember 2020 but a means to foster a sense of responsibility in students themselves. Students must understand that they are responsible for their own attitudes or behavior.

There is a reward for those who behave positively and it must be well understood that there is a punishment for students who behave badly. In addition, in accordance with the results of the study, a culture of discipline with full and timely attendance supported by a compensation system, will improve the quality and efficiency of work and improve

the quality of products produced by each student of SMK St. Mikael. According to Ogorodnyk et al.

(Ogorodnyk, Granheim, & Holtskog, 2016) self-discipline is important capital to achieve better work efficiency and better product quality. Teaching factory is more effective in achieving its goal of increasing the competence of students as evidenced by in addition to continuing to higher education both inside and abroad scholarships, the more demand for workforce graduates of SMK St. Mikael.

Even before graduating, many companies have recruited students before graduation. This is consistent with the concept of effective curriculum management as evidenced by successful graduates after completing education at the school, whether they can directly work in the business world or in the industrial world, or the graduate continues to a higher level of education. No one has graduated from SMK St.

Mikael Surakarta is unemployed. Every year, graduates of SMK Mikael Surakarta must work right away, even before graduating, it has been requested by a certain company, and went on to college or polytechnic. Therefore, researchers argue that the changes and modifications to the curriculum and teaching factory teaching methods at SMK St.

Mikael has been implemented effectively and efficiently, to ensure the readiness of graduates to work (Ellahi, Khan, & Shah, 2019). The teaching factory implementation at SMK St. Mikael, which uses components of block schedules, job sheets, and product products, deliver the competencies of each student and at the same time produce goods according to industry standards and are marketable.

This practice is very much in line with the basic principles of teaching factory which is the integration of industry experience into the school curriculum. Teaching factory becomes a replica of a real factory, specifically to deliver competence and expertise in optimizing the production process (Jaeger, Mayrhofer, Kuhlang, Matyas, & Sihn, 2012). Ogorodnyk et al.

(Ogorodnyk, Granheim, & Holtskog, 2016), also expressed a similar thing, even though it sounds more emphasizing the product of goods. The main purpose of learning factory or teaching factory is to emphasize the stages of producing products ranging from planning to realizing the product goods and training students how to optimize each stage of the production process in order to gain practical skills that will be useful in their future profession (Sterten & Ogorodnyk, 2016). CONCLUSION In the framework of organizing superior technical vocational education, SMK St.

Mikael Surakarta, applies a teaching factory, so that the learning process runs effectively and efficiently in improving the competence of its human resources. Effective teaching factories need to be supported by effective curriculum management and teaching by utilizing organizational structure and job descriptions to participate in making decisions that are at the heart of school management.

Based on the organizational structure and job descriptions that have been determined, the principal organizes his people in compiling and modifying curriculum and instruction that implements teaching factory which include the preparation of curriculum structure, block schedules, job sheets, product, and industrial culture in schools. Furthermore, the school principal monitors the implementation of curriculum and instruction in schools.

Finally, at the end of each semester and at the end of the school year the principal conducts curriculum and instruction control through evaluation of the curriculum and implementation of learning. Effective curriculum management and instruction in implementing teaching factory, as evidenced by graduates of SMK St. Mikael who are ready to work and immediately get a job, entrepreneurship, or an increasing number of graduates who go on to higher education, polytechnics or universities.

But, schools have to remain consistent in developing the curriculum by regulating more practice hours than theoretical subjects. The more hours of theoretical subjects (normative and adaptive), the more difficult it is to arrange a schedule of practice blocks that increase expertise while maintaining a pattern of learning a week of theory, a week of practice. REFERNCES 1. Abele, E., Bauerdick, C. J., Strobel, N., & Panten, N. (2016).

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