Embracing the Future: Digital School Culture in Tabanan High Schools

Reynald Setyawan

English Department, Faculty of Humanities and Creative Industries, Petra Christian University, Siwalankerto 121-131, Surabaya, 60236, INDONESIA
E-mail: a11180083@john.petra.ac.id

ABSTRACT

Digitalization has been an inevitable part of human lives, and education is not an exception. Digitalization is, however, only a part of the change. While digitalization is just using digital technologies and digitized data for an impact, digital transformation is broader adoption of digital technology and cultural change. It is more about the people, rather than the technology. One of the most prominent examples is the integration of the digital culture and the school culture, creating "digital school culture". Concerns arise from the change, especially isolation from peers and decreased effectiveness on practical lessons . In this case, the creativity to integrate digital culture in online settings to accommodate these concerns is necessary. This research attempts to find the three high schools in Tabanan's current state of digital school culture and plan of development for the future. The data is gained through semi-impromptu interviews with three high schools' vice-principal of curriculum and vice-principal of student affairs in Tabanan. Their answers are then analyzed through digital culture and school culture theory. Their answers will also be compared with each other to figure out the similarities and differences in their implementation of digital school culture.

Keywords: digital culture, school culture, digital school culture, digital transformation, digital native, digital immigrant, Tabanan high school

INTRODUCTION

Digitalization has been a part of people's lives since decades ago, and with digitalization, comes digital transformation. When talking about digitalization, people might think about the change from film rolls to digital photos, rotary phones to smartphones, and many more. While it is a part of digitalization, it is not digitalization per se. That is digitization: conversion of analog to digital. Digitalization is using digital technologies and digitized data to make an impact. In an online discussion, Obringer (2020) pointed out that a digital culture is basically a culture shaped by usage and emergence of digital technologies. This is digitalization, as digital technologies made an impact, it being on a cultural scale.

These transformations happen when factors that prompted a need for change are met. Our current education system is not exempt from this rule. Our current education system found it necessary to change from traditional to digital due to an urgent factor: Coronavirus. With that change comes other changes, such as more prominent use of classroom management programs like Google Classroom, curriculum changes to make it more online friendly, and many more.
These changes are not restricted to private-owned schools. In Bali, government-funded schools have been the go-to for many Balinese people. Tabanan is no exception. Before the *Zonasi* system from the government, people used to go to a "favorite" school. However, this favorite system is no longer valid due to the *Zonasi* system, where a huge percentage of the school's students are based on their living location, not their grades and achievements (Putsanra, 2019). However, these did not change

much, as the originally favorite schools were equipped to stay at the top, even with the *Zonasi* system.

Before discussing digital culture, we need to understand what "culture" is. Tylor (2018) mentioned that culture is an umbrella term for social behavior and norms found in human societies. This includes knowledge, beliefs, arts, laws, customs, capabilities, and habits of individuals within these groups. Therefore, culture could not be separated by the existence of humans. In fact, without the existence of humans, culture would not exist.

In a video by Snider Films (2019), Arizona State University states that digital culture encompasses the growing world especially in how people influence technology and vice versa. In an online discussion, Obringer (2020) mentioned that a digital culture refers to a culture shaped by the emergence and use of digital technologies. From these explanations, the researcher concluded that digital culture is a cultural phenomenon where media and people influence each other. It is shaped by the existence, emergence, and usage of digital technologies.

To understand digital culture, we need to understand the people within the phenomenon. We can separate two generations during the rapid technological and digital advancements: digital natives and digital immigrants. According to Čut (2017), digital natives are those who have been interacting with technology from childhood. As such, they are most comfortable using said technologies. On the other hand, the term digital immigrant mostly applies to individuals who were born before the spread of digital technology and who were not exposed to it at an early age.

A journal by Hinde (2004) described school culture as "difficult to define" in her abstract, but ultimately decided in her paper that school culture develops through interactions of staff members, students, and the community. It becomes the behavioral guide of school members. Hinde also mentioned that it is a self-repeating cycle, and an interruption of this cycle is needed to introduce change. The researcher concluded that school culture is a cultural cycle based on the constant interaction of elements in said school environment, which can be disrupted to introduce change. Therefore, when talking about digital school culture, the researcher concluded that it is a fluid culture based on the interaction of elements from both school culture and digital culture, as opposed to school culture through a digital medium.

Through interviewing three (3) educational leaders of high schools in Tabanan (SMA Negeri 1 Tabanan, SMA Negeri 2 Tabanan, and SMA Negeri 1 Kediri), the researcher intends to find out these high schools' current state of digitalization and further forward-looking program to strengthen and sustain their digital school culture. The researcher also intends to find out the similarities and differences in these high schools' implementation of their digital school culture.

The concerns for students' ability to receive the changes calls for a solution from every single school, including SMA Negeri 1 Tabanan, SMA Negeri 2 Tabanan, and SMA Negeri 1 Kediri Tabanan. Each school may come up with different solutions which obviously affects students' integration of the changes to be a part of their school life. The researcher wants to figure out the answers to these questions: What is the current state of digitalization in their school culture? What sort of further forward-looking program do they have in mind to strengthen and sustain their digital school culture? What are the similarities and differences in the schools' implementation of their digital school culture?

METHOD

The research was conducted in a 3-month period. The researcher used a qualitative approach in the form of a semi-impromptu interview with each school's representative leaders to get the answers through several prepared questions and questions that pop up during the interview. The purpose of the semi-impromptu interview was to get the most optimal answer the interviewee could muster, but also unbiased answers through the impromptu questions. The interviews were conducted online via Google Meet or Zoom, depending on the interviewee's preference.

The researcher's subjects of research were SMA Negeri 1 Tabanan, SMA Negeri 2 Tabanan, and SMA Negeri 1 Kediri. All three (3) subjects are chosen through purposive sampling. The reason why these three (3) high schools were chosen was because of their location and status as the top three high schools in Tabanan before the Zonasi system was implemented. The location is crucial due to the Zonasi (location-based enrollment) policy. As a result, we can minimize random external variables such as location and social class. Their former status shows that the schools have an equal standing with each other, eliminating external variables such as economic or resource capabilities. The researcher will interview the vice-principal of curriculum and vice-principal of student affairs. Through purposive sampling, these two positions were chosen due to their direct involvement with the teachers, the study materials, and the students themselves. Therefore, a total of six (6) people were interviewed.

The step-by-step process were as follows: 1) Each interviewee was interviewed online (recorded) and was asked several prepared and impromptu questions, 2) the researcher reviewed the recordings and compared the answers to the prepared and impromptu questions, 3) the researcher drew the conclusion for each school and analyzed the answers with digital culture and school culture theory.

FINDINGS AND DISCUSSION

In this chapter, the researcher will discuss and compare the background information, the current state of digitalization, and the future forward-looking program of each school based on the digital culture and school culture theory.

Background Information
The researcher found it necessary to understand the basic information about the schools before discussing the findings. There are three high schools that were interviewed: SMA Negeri 1 Tabanan, SMA Negeri 2 Tabanan, and SMA Negeri 1 Kediri Tabanan.

SMA Negeri 1 Tabanan was founded on July 1, 1961, with a vision as stated: "SMA Negeri 1 Tabanan memiliki keunggulan dalam melahirkan Sumber Daya Manusia (SDM) yang mempunyai kepribadian: Pancasila, kecerdasan komprehensif, kompetitif, dan berwawasan lingkungan." This can be roughly translated into "SMA Negeri 1 Tabanan has the edge on producing human resources with Pancasila principles, comprehensive intellect, competitive spirit, and environmental awareness."

SMA Negeri 2 Tabanan was founded on July 30, 1980, with a vision as stated: "Dengan pelayanan prima tercipta warga didik yang cerdas, kompetitif, berbudaya dan berwawasan lingkungan." This can be roughly translated into "A prime service will create students with intellect, competitive spirit, culture, and environmental awareness."

SMA Negeri 1 Kediri Tabanan was founded on January 29, 1998, with a vision as stated: "Mewujudkan insan yang cerdas, kompetitif dan berkarakter." This can be roughly translated into "Embodying human with intellect, competitive spirit, and character." This vision was further described as mirroring the school's future-oriented goal, following the people's wishes and norms. All the schools' vision included intellect, competitive spirit, and character building. By this information, the researcher saw that these schools do not only focus on school subjects as "education" but considers character building in education as well. Therefore, the researcher concluded that all three schools are student oriented. However, the researcher noticed a difference in SMA Negeri 1 Kediri Tabanan's vision which was explicitly described as future oriented. This reflected well in what the researcher found after interviewing each school.

With this information, the researcher understood each school's school culture before the introduction of a disruption (in this case online school setting), which necessitates the transformation into digital school culture.

The Current State
To gain an understanding of the current state of digitalization in each high schools, the researcher questioned whether there were changes in four (4) aspects:

Student-teacher Communication
All three (3) schools found changes in the communication between student and teacher. Before online school setting was made mandatory, not much student-teacher communication happened outside of class setting. Even when it happened, they rarely found it happening outside school hours or school events. It was rare for students to contact their teachers via communication devices for questions outside school hours. Rare cases of this happening include parents calling school or their child's homeroom teacher to inform them of absence due to sickness or family matters. Even then, it was still extremely rare, as parents preferred sending letters when their child finally attended class (for example: a letter notifying that their child was sick accompanied by a doctor's note). During online school setting, the difference between digital natives (the students) and digital immigrants (the teachers) became more apparent. As digital natives, students were more comfortable in using any online communication mediums. Teachers, on the other hand, did not have this luxury. However, the teachers of all three schools were already using *WhatsApp*, so that application was viewed as the most suitable means of communication between students and teachers. It is not a surprise to see a compromise made between students and teachers in which online communication medium to choose as all three schools have a student-oriented school culture. Through this phenomenon, we can see the integration of digital culture in the form of chat room application into the schools' student-teacher communication culture. This integration created a new digital school culture in the three schools: a more intensive student-teacher communication through chat room application inside and outside school hours and school events when necessary. Assignments and materials were sent through *Google Classroom* and classes were conducted through *Google Meet* and *Zoom*. We can see that through online school setting as a disruption, an opening was created which integrated class management application and video conference service (digital culture) into classroom teaching sessions (school culture).

All three schools mentioned two negative effects of this digital school culture. First, it is difficult to discern speakers' intentions through text messaging. Intention is not only shown through what is being said, but also how it is being said (tone, body language, etc.). With text messaging, people can only see what is being said. All interviewees feared that this might discourage students from

asking questions to their teachers due to fear of sounding rude or fear of receiving disingenuous-sounding answers. Second, it is difficult to control digital natives as digital immigrants. The interviewees mentioned that unlike offline school settings, they cannot directly see and know what students are currently doing. Crafty students could easily turn off their camera or even disconnect from the class and say that it was their internet connection. Teachers could not accuse students of doing so, because the possibility of it being true is not small.

Practical Classes

All three schools found changes in how practical classes are conducted. These classes include physical education, arts and crafts, and laboratory experiments. Before online school setting, classes such as physics, biology, and chemistry could be conducted in the laboratory when practical lessons or exams were needed. Classes such as physical education were done in fields owned by the school or by the state. For example, SMA Negeri 2 Tabanan's students could have their physical education class in their basketball court or in *Stadion Debes* right next to their school. During online school setting, practical classes could not be done as effectively as before. Team exercises and on-site physical exercises could not be done as it would violate the health protocol. Scientific practices needing the use of laboratories could not be done too. Video examples were then used to solve this problem. The videos can come from three sources: handpicked by the teachers, handpicked by online learning services like *Ruangguru*, or searched on *YouTube* by the students. The first two sources were used as a base which suited the curriculum. The latter was optional, if the students did not understand the handpicked video, or if they wanted to learn more.

All interviewees mentioned that practical exams are done through video recordings of physical exercises and photos of drawings, entrepreneurship creations, or scientific experiments. This will then be submitted either through *Google Drive* or *Google Classroom*. In the form of video recording, cloud-based storage, and class management application, an integration of digital culture and school culture through an introduction of disruptions, namely online school setting and health protocol can be seen.

All interviewees saw this as a negative change for two reasons. First, there is no hands-on experience. Students could not use laboratory equipment and experience in real time, for example, looking at bacteria under the microscope. Instead, they had to settle with a video or two. Second, there is no collaborative learning. Team exercises and laboratory experiments could not be done virtually. Therefore, students will miss the chance to learn with and from each other.

Report Card Distribution

Changes in report card distribution were inevitable in an online school setting. Originally, all three schools would conduct the distribution in school. Parents are the ones who will receive the student's report card. This was done in hopes that teachers could have a good communication with the parents regarding the student's performance in school. Due to the pandemic, however, this could not be done. The health protocol did not allow crowds.

Both SMA Negeri 1 Tabanan and SMA Negeri 2 Tabanan used an existing class group chat as their report card distribution medium. SMA Negeri 1 Tabanan gave each homeroom teacher links of students' report card previews. The interviewee mentioned that they do not consider this as report card distribution. They wanted students to have a physical version of the report card once things go back to normal. This shows the clear intention to avoid integration of digital culture (soft copy legal documents) into their school culture (report card distribution). On the other hand, SMA Negeri 2 Tabanan is more accommodating. Other than sending report cards through group chat, they also

allowed parents to come to school to get the physical copy of the report card with a shift system. This allowed parents to come to school and communicate with the teachers without crowding the school.

SMA Negeri 1 Kediri Tabanan used their school website as their report card distribution medium. Students can view and download their report card through the website. However, this posed a huge problem. Since many students accessed the website, the server got crowded and crashed. To combat this problem, they also send homeroom teachers their students' report cards. This way, students could ask their homeroom teacher for their report card when they could not access the school's website. We can see an integration of digital culture (soft copy legal documents and website) into SMA Negeri 1 Kediri Tabanan's school culture (report card distribution) due to a disruption (health protocol).

Annual Events
All interviewees mentioned that annual events were still held on the condition that it is moved online. As an example, student orientation was able to be conducted online, therefore it was moved to video conference services such as *Google Meet* and *Zoom*. Events such as sports competition or any competition which could result in direct and indirect contact or even crowding was not conducted.

SMA Negeri 1 Kediri Tabanan took this even further. They mentioned that when an annual event could not be held, they will find alternative online events. For example, student's internal sports competition during online settings. Instead of sports competition, they decided to switch it up to creative competition through *Instagram* and *TikTok*. Their initiative to find alternative events they could do reflected their future-oriented school culture well, something that the other schools do not have. This does not stop there. In fact, annual events could still be conducted on-site depending on students' needs. Student council inauguration, for example, was done on-site because the student council wanted to do that. These instances show their dedication to embrace digital culture in the forms of social media within their school culture in the forms of annual events. This reflected their student-oriented school culture perfectly.

Future Forward-looking Program
To gain an understanding of the high schools' future forward looking program to strengthen and sustain their digital school culture, the researcher questioned three (3) aspects:

Workshops and Trainings for Teachers
Unlike digital natives who were already well-acquainted with technologies throughout their childhood, digital immigrants needed to upscale in teaching using digital technologies and teaching in an online setting. All three schools understood the importance and had conducted several workshops and trainings for their teachers. There are two types of training and workshop that all three schools conducted. The first one is digital technologies usage where teachers are trained on the usage of video conference programs (*Google Meet* and *Zoom*), classroom management programs (*Google Classroom*), cloud-based storage (*Google Drive*), and other necessary digital technologies. The second one is teaching methods and strategies in an online school setting.
To top it off, SMA Negeri 1 Kediri Tabanan added another training and workshop on their agenda. They also trained their teachers on interactive teaching methods. They mentioned that most digital natives have a significantly shorter attention span than previous generations; therefore, they wanted to make sure their teachers can keep students' attention by making class sessions interactive and interesting. One of the examples is by utilizing an online quiz game called *Kahoot!* so students

would compete in getting the highest score by answering questions correctly and quickly. What makes SMA Negeri 1 Kediri Tabanan's response to online school setting different is their deeper understanding in digital culture. We can see the other schools' trainings and workshops are just to make the teachers, digital immigrants, more familiar with necessary digital technologies. In SMA Negeri 1 Kediri Tabanan's case, not only do they prepare digital immigrants with digital technologies, but they also prepare them to understand the perspective of digital natives.

New Innovations
Innovations include something they created for academic or administrative purposes. In this case, SMA Negeri 1 Tabanan has their own report card preview link. However, it is important to note that SMA Negeri 1 Tabanan has mentioned that they do not intend to keep this. In the preview sub-chapter, they mentioned that they will not acknowledge the report card preview as the real report card, and that students will need to receive the real one when the pandemic situation is over. This attitude shows that they have no intention of sustaining their current state of digitalization. While SMA Negeri 2 Tabanan had no innovation, as they felt that what the internet already provided was already effective, they did mention that they wanted to keep trying new things in terms of education and administration to keep up with the continuously changing era. This shows an intention to sustain and strengthen their digital school culture. SMA Negeri 1 Kediri Tabanan mentioned that they are currently making an online database system to make the school's administration process faster. They are also planning on making an online library system, so that it is accessible anywhere and anytime. This is the best course of action if they want to sustain and strengthen their digital school culture. On top of intention, they also acted upon it.

The Things They Will Keep from Recent Development
SMA Negeri 1 Tabanan chose to view these changes cautiously, as there are many factors that could decide whether they can keep some changes or not. This is mainly due to concerns regarding students' internet problems. They feel that this problem could hinder students' study progress. SMA Negeri 2 Tabanan believes that the usage of education applications is important even if offline school setting has returned. In their opinion, the education application helps students to study wherever and whenever. Of course, the usage will not be as intensive as the usage during online school setting. SMA Negeri 1 Kediri Tabanan mentioned that their students show a longing to be back in an offline school setting. However, the recent development has brought a lot of positive things for them too. Therefore, they believe that they will combine both sides. They will still use classroom management applications for additional tasks. Students will do their tests in school but online since they feel that paper-based tests are no longer necessary. They also want to continue using video learning on-site so that time is allocated for discussions and interactive learning. Their plans for an online database system and an online library system will also be used when it is finally implemented.

Overall, we can see a positive stance towards digital school culture from SMA Negeri 2 Tabanan and SMA Negeri 1 Kediri Tabanan. When school returned to an offline school setting, they decided to combine what they used to do with what they had learned from an online school setting. SMA Negeri 1 Tabanan had some degree of resistance towards digital school culture, considering the differences in socio-economic conditions of the many stakeholders (parents).

CONCLUSION

Digital school culture is a fluid culture based on the interaction of elements from both school culture and digital culture, as opposed to school culture through a digital medium. As such, integration of digital culture into an existing school culture is needed to achieve digital school culture. Since school culture is a cyclic culture, a disruption of this cycle is needed to introduce change. However, culture is defined as a social behavior and norms of a group of people. Therefore, efforts to normalize or maintain the changes made from ordinary school culture towards digital school culture are needed. Upon interaction with three (3) schools, the researcher found that SMA Negeri 1 Tabanan, SMA Negeri 2 Tabanan, and SMA Negeri 1 Kediri Tabanan had integrated digital technologies in their school culture to cope with an introduction of disruption in the form of online school setting and health protocol. However, out of all the three, SMA Negeri 1 Kediri Tabanan had shown a more promising attitude and action regarding digital school culture. SMA Negeri 1 Tabanan showed some resistance towards digitalization, while SMA Negeri 2 Tabanan showed interest, but did not act upon it. The researcher's suggestion for further research is a more in-depth research on one school's digital school culture, as opposed to this research's more general approach to three high schools.

REFERENCES

Chapco-Wade, C. (2018, October 21). *Digitization, digitalization, and digital transformation: What's the difference?* Medium. https://medium.com/@colleenchapco/digitization-digitalization-and-digital-transformation-whats-the-difference-eff1d002fbdf

Čut, M. (2017, November 16). *Digital natives and digital immigrants — How are they different*. Medium. https://medium.com/digital-reflections/digital-natives-and-digital-immigrants-how-are-they-different-e849b0a8a1d3

Evidence for Learning. *Collaborative learning*. Evidence for Learning. https://evidenceforlearning.org.au/the-toolkits/the-teaching-and-learning-toolkit/all-approaches/collaborative-learning/.

Hinde, Elizabeth. (2004). School culture and change: An examination of the effects of school culture on the process of change. 11.

Putsanra, D. V. (2019, June 19). *Memahami sistem zonasi sekolah di PPDB 2019*. tirto.id. https://tirto.id/memahami-sistem-zonasi-sekolah-di-ppdb-2019-ecEz.

Snider, J. (2019, April 25). Arizona state university: What is digital culture? [Video]. YouTube. https://www.youtube.com/watch?v=r07j_gxdzRY

Strauss, V. (2020, March 31). *Five concerns about the mass rush to online learning that shouldn't be ignored*. The Washington Post. https://www.washingtonpost.com/education/2020/03/30/five-concerns-about-mass-rush-online-learning-that-shouldnt-be-ignored/.

Tylor, E. B. (2018). *Primitive culture: Researches into the development of mythology, philosophy, religion, language, art, and custom* (Vol. 1). HardPress.