

STT KADESI'S Disrupting the Teaching and Learning Process during Covid-19

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Abstract—In this paper we report on a pilot study of the teaching and learning at Sekolah Tinggi Teologi KADESI (STTK), a tertiary theological institution in Yogyakarta, during the Covid-19 pandemic in 2020. Our methods for collecting data were to survey the 40 students and conduct one-to-one interviews with the 10 lecturers at STTK. The analysis of data drew on two theoretical constructs: Donald Schön's reflection-in-action and the notion of empowerment in an educational context. We found challenges and difficulties to do with the logistics of teaching and the barriers to communication between instructors and students. And on the positive side, we identified signs of a more collegial relationship between lecturers and between teachers and students, plus greater awareness by both parties for the students' pastoral and social needs in teaching and learning. **Research contribution:** The findings in this research provide the basis for further study on learning and teaching during disruption. They lay the foundation for a possible new pedagogy – combining new learning technologies within an egalitarian framework, to advance educational empowerment for all concerned.

Keywords—*covid-19 disruption; empowerment in education; flexible learning; online learning; online pedagogy*

I. INTRODUCTION

Education shifted from face-to-face to online teaching and learning during the Covid-19 pandemic [1], [2]. The disruption caused by the pandemic caught most higher education institutions unprepared for the social and technological challenges entailed in switching to online. Hall et al. [3]

defined disruption as an interruption in the ordinary course of life, or an event that stops a process in its tracks.

Several scholars, who have written about online learning and Covid-19 in developing countries, have focused on the contribution of social media [4]–[6]. Unsurprisingly, they have noticed both advantages and challenges to online learning. The advantages included: a more flexible learning environment, and a greater emphasis on student-centred learning; the challenges comprised a propensity for increased inequality, and a need for academics to retrain and change their pedagogy [5]–[7]. Whereas the complexity and variability of circumstances in each educational environment does not lend itself to generalisations, there is a common element: the pandemic required lecturers and students to face up to the challenges and devise new ways of doing teaching and learning [5], [6], [8].

In this paper we seek to investigate 'what happened' at SSTK during the Covid-19 pandemic in 2020. We begin by outlining the theoretical framework for the pilot study, followed by a brief description of the two constructs we adopted to guide our analysis of the data: Schön's 'reflection-in-action,' [9] and the notion of empowerment recommended by several authors [10]–[12]. After presenting the results of the survey and interview, we formulate 'lessons learned.' While we acknowledge that our study is a 'work in progress,' we contend that these lessons provide hopeful steps toward both coping with and gaining from a changing educational

environment. They support Broom's proposal [13], as to how education can be revived for the public good in schools.

II. METHOD

A. A pilot studies

This is an exploratory study of participants' perceptions of their Covid online teaching and learning experiences. It could serve as the pilot stage of an action research project, from which hypotheses could be formulated and further evaluation undertaken on a more in-depth and holistic scale. Since the main aim was to gather a better understanding of 'what happened', it is essentially a qualitative study; however, we have used quantification to identify patterns and trends for further investigation.

B. Reflection-in-action

Schön's [9] reflection-in-action was built on the realisation that the most effective learning is self-discovered. Schön's primary aim was to improve teachers'/lecturers' professionalism [9]; however, his stipulation that tertiary teachers' primary role was to coach, rather than instruct, implied that teachers and students (especially when they are adults) should be co-learners and co-teachers. In this study, we use Schön's theoretical notions to help us consider whether online education could be more egalitarian and collaborative, and whether the data collected in this study give any encouragement for such a possibility.

C. Empowerment research

We assume that educational institutions are unique sociocultural and political environments whose policies and practices have evolved over time according to local, national, and global circumstances [14]. For example, Western public schools were established in the 19th Century in accordance with policies and practices that were deemed 'efficient' [15] in preparing workers for the industrial revolution, rather than empowering them to take their place in a vigorous democracy [16]. Arguably, this approach was paternalistic, hierarchical, and somewhat dehumanising.

Regardless of its history, however, an educational institution's practices and operating principles are largely taken for granted; that is, their meaning and motivation are not fully conscious even to its participants [14]. In other words, much of the reasoning behind decisions such as what the syllabus should be, and how it should be taught, is tacit – 'seen but unnoticed'. Serendipitously, a major disturbance, such as a pandemic, serves to disrupt what is taken-for-granted and induce greater awareness of what constitutes 'normal' policies and practices.

To empower someone is to enhance their "level of choice, influence and control...in their lives," [17]. Empowerment is often equated with self-efficacy – the ability of individuals to take charge of their lives and make a positive contribution to society [10]. Self-efficacy is also related to one's identity and

how one shares a spirit of community-mindedness [11], [12]. According to Levinson [12], empowered individuals are independent thinkers who strive to affect democratic societies positively.

D. Data collection and analysis

STTK is an Indonesian-Government-accredited Christian theological institution located in Yogyakarta, Central Java. In the academic year 2020, STTK had 296 enrolled students from Bachelor to Doctoral levels. In early 2021, STTK surveyed a sample of 40 students with a focus on their online learning experiences during 2020. In conjunction with this enquiry, we conducted in-depth interviews with 10 lecturers about their online teaching during the lockdown period. As indicated above, the purpose of this study was to gain an understanding of students' and staff members' perceptions and reflections of 'what happened' with their online teaching/learning and related matters.

III. FINDINGS AND DISCUSSION

New technology and software acquired by STTK for its online teaching/learning during Covid-19 included an upgraded router to increase bandwidth and a generator to sustain power supply at the school during electrical outages (a frequent occurrence in Indonesia). Additionally, new platforms for live meetings, such as Zoom, Google Meets, and Microsoft Teams, were purchased and eCampuz portal – a learning management system – was installed at STTK. However, the participants were not asked to assess the efficacy of this technology in their respective surveys.

A. Student responses

All the students surveyed – from Papua in the East, Aceh in the West, and Kalimantan in the North – acknowledged that the practical and flexible aspects of online learning were beneficial. But what can a researcher make of this? Perhaps for students "practical" and "flexible" [18] meant a less constrained and more independent learning opportunity? Clearly this is a topic for further investigation.

Half of the respondents indicated that STTK lecturers had helped them improve their technological capabilities and skills during the Covid lockdown. Prior to lectures, instructors sent students emails with step-by-step instructions on how to use Zoom, the e-Campus portal, and other new educational technologies that STTK acquired. Also, time was taken during the lectures to ensure all students were coping with the technology. Several music and research students commended the new techniques and software, and one claimed that these additions helped to "overcome initial obstacles and bring education to a new level" [18].

Thirty per cent of students said online learning raised their levels of creativity or their presentation skills. One student said, "We searched the internet for sources both for knowledge and for creating more effective presentations" [18]. Another

commented: “For the first time, I embedded videos into my PowerPoint presentations. I saw how my peers were doing such exciting presentations, and I was motivated to go online to study how to make presentations come alive” [18]. Clearly, this challenge motivated students to be more creative, supported by suitable online applications. Fifteen per cent said they felt that the online courses via Zoom were like the face-to-face method in class, but with “more opportunities to ask questions...” [18].

On the challenging side: fifteen per cent of the students lamented the lack of face-to-face contact and opportunity to share concerns with fellow students, underscoring the importance of social needs in education (yet, surprisingly, there was little or no mention of their social contact with family members during lockdown). Thirty per cent said practicums posed a serious difficulty; for example, it was difficult for lecturers to assess their preaching skills in the Homiletics class. Unsurprisingly, 50 per cent stated that the main downside to their online learning was network problems, loss of signal, and electrical failures (at home). Other issues raised by students revealed that some students were affected by their family struggles, such as loss of jobs and family income, which in some instances posed a severe challenge to them.

B. Lecturer Responses

Seventy percent of lecturers mentioned that they had undergone training ranging from 2 to 10 hours; and several lecturers commented that their instruction on how to use Zoom and the eCampuz portal was effective. It was mentioned that the training included ways of encouraging students’ interaction with lecturers and each other while using Zoom’s share screen, chat, and other facilities; however, a future study or evaluation may examine this aspect more closely.

All lecturers noticed benefits associated with online teaching, such as ‘flexibility’ [the meaning of which requires further investigation] and access to students in far-off places, and they were also very conscious of its challenges. While theory subjects such as Theology, Citizenship, and Philosophy were deemed easy to deliver online, practical ones such as Homiletics, Music, Research Methodology and Greek posed more significant difficulties [19]. This evaluation motivated lecturers to be better prepared to think about learning models suitable for practicum and language [20].

Lecturers were explicit about steps they took to overcome these challenges; for example, small groups of lecturers decided to meet informally to discuss, mentor, and encourage one another. The Sage video also inspired some STTK lecturers to make their video recordings “simplifying the research processes for our students” [19]. Initially, only lecturers were involved in the video production, but later some students were incorporated into this activity, which gave both parties insights into each other’s perspectives on learning. Moreover, showing these 15-minute videos to students as a prelude to their discussions was well received by the student body [19]. Another example of innovative technology development by staff was when music lecturers made recordings in a makeshift studio at STTK to help music

students hear and practice independently before joining the online class [19]. And some students living near the Yogyakarta campus were invited to be involved in making some of these videos. More significantly, according to a lecturer: “before Covid, we were teaching the way we were taught in school...the teacher is the boss. During Covid, we began to see learning from the students’ point of view” [19]. Furthermore, several lecturers pointed out how their roles took on more pastoral responsibility during Covid-19. The shepherding of students must be a concern. Students need the motivation to learn in a new environment. Lecturers admitted that there were things “beyond their control,” such as the intermittent Internet connectivity experienced by various students, especially those living in outlying areas [19].

C. Lessons learned

It should be noted that the focus of ‘lessons learned’ is on what STTK lecturers gained from their work during 2020, and the insights they gained from the survey and interview responses. We start with instructors’ efforts to make their teaching more student centred, along the lines of examples given above from their interview responses. Due, in part, to the reality that in a pandemic there is a sense that ‘we are all in this together’, instructors have shown encouraging signs of their willingness to relinquish power and control of their teaching. No doubt more could be done in the way of involving students to their mutual advantage – for example, collaborating with students in the selection of software and equipment because the latter are often more knowledgeable about technological advances.

Learning challenges during this pandemic have forced lecturers and students to face speedy social changes from face-to-face learning to online learning [6], [8]. Mastery of digital technology becomes essential to overcome the difficulties of online learning [20], [21]. Lecturers must first improve themselves by training social competence in mastering online learning technology. There are opportunities in the challenges of online learning as lecturers and students learn and adapt to new changes. Creative ideas emerge from thinking critically and developing collaboration between lecturers and students in the online space [22]. In the survey/interview, both students and staff realized the importance of meeting social needs in their education, which should also be considered in future decisions about the best blend of face-to-face teaching and online learning [23].

Finally, STTK lecturers realized that an egalitarian teaching-learning model must be seriously considered for the empowerment of students and lecturers, as described by Schön [1] In an environment dedicated to adult education, the idea of continuous coaching offers the prospect of a more appropriate and hopeful teaching-learning relationship for the future.

D. The next steps

In addition to the possible philosophical development outlined above, the next stage is the setup of a media technology department to oversee and implement ongoing

changes and the offering of online education as part of its course content. STTK is also looking into music technology and exploring the use of BandLab – a cost-effective media technology platform – for its music students. STTK is intent on continuing online education in a blended way, post-Covid-19. Institutions need to develop online learning through campus digitization [24] and develop campus policies to improve digital technology capabilities for lecturers and students [25].

IV. CONCLUSION

This study seeks to counter the changing tide of our efforts to overcome and improvise with disrupted teaching/learning in STTK in 2020. Even though this was an exploratory study with a small sample of subjects, our findings give us confidence to tackle more sustained research in assessing the role of reflection-in learning and the empowering of students in educational environments. It has sown the seeds for the development of a pedagogy that uses new technology to embrace collaboration, reflection, and empowerment for the betterment of society.

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