



Fijian Students' Reactions to Required Fully Online Courses during Covid-19

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The recent outbreak of the global pandemic COVID-19 required Fiji National University offer fully online courses, which is a new form of pedagogy for many students. This new form of learning benefitted many students but created obstacles for others. The purpose of this study was to investigate student perceptions of the advantages and disadvantages of fully online courses due to the COVID-19 pandemic. An online survey in the form of a semi-structured questionnaire was used to gather data from 138 students. Data were analysed using thematic analysis. The study found that fully online learning suits students during pandemics, natural disasters (flooding, cyclones), and political upheavals. Fully online learning also helps students who have permanent employment and have difficulty getting time off to attend face-to-face classes. It also helps maritime or remote students who have limited access to the main centre or helps lecturer/facilitator deliver instructions when he/she is out of a country or is far away. The study also confirmed that fully online learning requires robust internet connectivity and a sustainable power supply allowing students to assess course materials from the comfort of their homes at their own pace. The student's safety in terms of travel and transmission of diseases are maintained. Fully online learning classes also assist students in saving fuel costs and rushing to the classes.

Keywords: fully online learning, global pandemic, covid-19, traditional face-to-face, Fiji

INTRODUCTION

The Republic of the Fiji Islands, comprising around 880,000 people, is an archipelagic nation in the heart of the Pacific Ocean between the equator and the South Pole. It comprises around three hundred and thirty islands, of which about one-third are inhabited (Briney, 2016). Fiji's total land area spans approximately 18,333 square kilometres. There are two main islands; the island of Viti Levu, which is 10,429 square

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kilometres, and the island of Vanua Levu, which is 5,556 square kilometres. Other key islands in Fiji include Taveuni (470 sq. km), Kadavu (411 sq. km), Gau (140 sq. km) and Koro (104 sq. km). Most Fijians live on the largest island of Viti Levu. The geographical features, coupled with the isolated position in the Pacific, make its location a significant challenge in delivering education to its children and people (Tikoisuva, 2000).

The country has a well-developed education system comprising eight years of compulsory primary schooling from Years 1 – 8 and five years of secondary schooling from Years 9 – 13. Upon completing secondary education and depending on their choices and meeting the minimum entry requirements, the students enter tertiary institutions. One of the major tertiary institutions in Fiji is the Fiji National University, with its campuses spread in different towns/centres in Fiji. The major centre is at Nasinu, and the teacher training is mainly offered at the Natabua campus in Lautoka. During pre-COVID-19, most courses were mainly offered face-to-face, with few courses offered through blended mode.

The recent global pandemic COVID-19 required Fiji National University (FNU) to offer all its courses entirely online. This was despite the Fijian population being geographically isolated, with accessibility challenges in remote and rural villages. The last official data for Fiji on internet access, published in July 2016, stated that only 46.5% of Fijians have access to the internet (CIA World Factbook, 2018). Since 2016, internet providers have made tremendous improvements to extend their services to more significant areas within the nation. However, the current official internet penetration rate in Fiji was not available during this study. Fully online learning (FOL) meant moving from traditional face-to-face learning to a new form of learning. In the second half of Semester 1 2020, the staunch lecture-loving teachers suddenly learned to teach online to enable the students to complete their courses. This was through the use of available online learning tools through the Moodle platform. Activities and resources such as recorded lectures, forum discussions, audio-video presentations, zoom classes, quiz, feedback, and chat were used. Consecutively, face-to-face exams for most courses were converted to one hundred percent online assessments, while few courses opted for fully online exams. Through the transition, some training and assistance were provided to the staff by the Centre for Flexible and E-Learning (CFEL) personnel with expertise in learning design, learning technologies application and multimedia development.

It was evident that due to numerous disabling factors, students had different reactions. The disabling factors included lack of gadgets like laptops and smartphones; access and connectivity issues due to geographical locations and unavailability of the internet; financial constraints in securing internet connectivity; inability to use recommended learning tools by students and dealing with lack of family support and understanding the change in studying online from home during the crisis. Despite these impediments, the students were left independently to complete their courses entirely online during the second half of the semester. Given the circumstances the students were placed into, this study investigated the obstacles and the milestones achieved when suddenly, the

students had to switch from traditional face-to-face to FOL during the COVID-19 pandemic.

Modes of Learning

There are three modes of delivering the learning outcome to the students. These include the traditional face to face class, online blended learning and fully online learning. The traditional face to face class refers to the students taught in the classroom setting with the lecturer physically present and following a fixed schedule of timetabled classes (Berger & Topol, 2001). Online-blended learning (OBL), which is also known as the 'hybrid' approach (Young, 2002) is defined as any combination of instructor-led instruction with the mix of traditional and interactive-rich forms of classroom training with any of the innovative technologies such as multimedia, CD-ROM, video streaming, virtual classroom, email, conference calls, online animation and/or video streaming technology (Bielawski & Metcalf, 2003). Fully online learning (FOL) refers to an emerging approach to learning where students learn at their premise through advanced information-communication technologies such as Moodle, YouTube, and Videoconferencing (Yang & Kang, 2020). In FOL, the instruction is mediated via the internet. The instruction may be synchronous (students need to be online simultaneously) or asynchronous (students are required to be online consecutively), and various technologies are used to mediate the process (Dabbagh & Bannan-Ritland, 2005). In higher education institutions, education has been virtualised and includes digital practices in the classroom (Hali et al., 2021).

FOL requires a pedagogical shift in how teachers teach and students learn. There is a move away from top-down lecturing and passive students to a more interactive and collaborative approach in which students and instructors co-create the learning process (Adam et al., 2017). The teacher's role changed from sage on the stage to a guide on the side (Saulnier, 2008) as this was clear because of the lockdown under which the campuses were closed, and face-to-face classes were not permitted. The instructors and students were forced to rely heavily on the online learning platform to complete the course requirements for semester one. During FOL, the contents and assessments were delivered and monitored primarily through the moodle using recorded lectures, discussion forums, assignment dropbox, quizzes, zoom, tutorial, and discussion forums. FOL provided an opportunity for the students to take part in learning regardless of distance and time limitations.

Online learning

Recent research has shown a rapid transition to digital and related initiatives to prepare the teachers for successful design, production, and OBL instruction (Ferdig et al., 2020; Hartshorne et al., 2020; Reynolds & Chu, 2020). Keengwe and Kidd (2010) stated that many universities were transitioning face-to-face classes into FOL to make the lessons more accessible to many students. Several factors lead to FOL. For example, from 2015 to 2017 in South Africa, students were forced to FOL because of student protests and university shutdowns (Czerniewicz et al., 2019). Similarly, COVID-19 required social

distancing and needed the universities to offer FOL safely in order not to deprive students of their studies (Andarwulan et al., 2021).

Several differences exist between traditional face to face and FOL. Dabbagh and Bannan-Ritland (2005) examined the differences between traditional and FOL environments and argued that traditional learning environments are (i) bound by location and presence of instructor and student, (ii) presented in real-time, (iii) controlled by an instructor, determining the pedagogy and (iv) are linear in teaching methods. FOL environments include diverse pedagogical practices and are often characterised by active learning student-centred pedagogical techniques (Baker, 2003; Browne, 2005). Divergent to face-to-face classes, FOL allows for seamless streaming of video lectures and provides students with online resources for the course content. It allows for self-paced learning and the flexibility of the schedule. Students can also attend the courses from anywhere outside the traditional classroom (Bir, 2019).

Active FOL demands that the learners have robust hi-tech knowledge. These competent online learners have a strong academic self-concept; are skilled in using communication and collaborative technologies; understand, value, and engage in social interaction and collaborative learning; possess strong interpersonal and communication skills, and are self-directed (Dabbagh, 2007). In order to support and promote these characteristics and skills more effectively, the teacher should focus on designing FOL environments that support exploratory and dialogical learning environments which engage learners in FOL activities requiring collaboration, communication, social interaction, reflection, evaluation, and self-directed learning (Hazaymeh, 2021).

Challenges in online learning

COVID-19 pandemic exposed that the education system is vulnerable to peripheral and unpredicted obstacles (Bozkurt & Sharma, 2020). Many technical and logistical complexities, together with attitudinal changes, are required for using digital technology for instructional delivery (Ribeiro, 2020). Students from low socio-economic backgrounds lack gadgets like laptops and smartphones; students lack digital competence to use recommended learning tools; technological access and connectivity issues because of geographical locations and unavailability of internet and; dealing with lack of family support in understanding the shift in online learning from home during the crisis are the significant challenges in FOL (Ibid). Hazaymeh (2021) suggests that FOL encounters drawbacks such as technical problems, poor or slow internet connections, and a lack of physical social interactions, leading to social isolation. In some cases, students were also required to engage in FOL with no prior experience or online training (Alomyan, 2021).

Theoretical Framework

Constructivist Theory

In the past decennia, many alternative teaching methods have been adapted in much-developed nations like Australia, New Zealand, Canada, and the United States. However, educational practices in Fiji, India, and many Pacific nations have changed

very little. The theory of constructivist learning has influenced all these changes, either major or minor. Constructivist learning is defined as an "active process in which learners are active sense-makers seeking to build coherent and organised knowledge" (Mayer, 2004, p. 14). This constructivist learning theory acts as a foundation for the establishment of student-centred approaches (Hannafin et al., 1997), which are described as "ways of thinking about teaching and learning that emphasise student responsibility and activity in learning rather than content or what the teachers are doing" (Cannon & Newble, 2000, pp. 16-17).

Constructivism examines how learners make meaning from experience (Olson & Maurath, 2020). This approach focuses on how the learner interprets the world based on their experiences and their interactions with the world. The learner is a constructor of knowledge who autonomically controls his/her learning processes in a learning context. Constructivist approaches argue that learning should be robust, transferable and self-regulated (Di Vesta, 1987). Mechanisms such as interactivity or active learning must be in place to engage interest and facilitate the more profound understanding necessary for students learning to occur (Biggs, 1999). While constructivism is applied to face-to-face and blended learning classes, this is also useful in fully online learning environments (Bryceson, 2001; McMahon, 1997; Neo & Neo, 2001).

Significance of the Study

In a broad sense, this study investigated the benefits and obstacles students face in FOL, especially during the COVID-19 pandemic. With a sudden shift from traditional face-to-face to FOL, it is necessary to evaluate the students' experiences to improve online delivery in the future. This study would provide valuable information to the teacher training institutions and other similar context-bound institutions that offer FOL.

Purpose of the Study

This study explored the impediments and milestones achieved when suddenly, the students had to switch from traditional face-to-face to FOL during the COVID-19 pandemic.

Research Questions

The following research questions guided the study:

1. What were the significant advantages to students in fully online learning during the COVID-19 pandemic?
2. What were the major obstacles faced by students when directed to complete their remaining courses entirely online during the COVID-19 pandemic?

METHOD

The semi-structured questionnaire, primarily qualitative than quantitative, was designed and piloted on three students before sharing it with students as an online survey through a link. The piloting enabled us to modify the questionnaire so that important details were not omitted. One hundred and thirty-eight students that were enrolled in teacher training programmes at the Fiji National University responded to the survey within a four-week

time frame provided at the end of semester one. The respondents were spread at different locations within Fiji and included anyone who could access the internet and respond to our survey.

The demographic characteristics of the sample comprised 64% females and 36% males. The majority (75%) of the students who responded to the questionnaire were undergraduate students, while a minority (25%) were postgraduate students. The average age of the sample was 23 years.

FINDINGS

In this study, the semi-structured questionnaire, which comprised more open-ended questions, was provided to the students through an online survey. All questions required written responses. In order to gain a meaningful understanding of participant perspectives, thematic analysis was used (Braun & Clarke, 2006). The thematic analysis involves six steps: (i) familiarising oneself with the data, (ii) generating initial themes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes and (vi) producing the report.

The data analysis resulted in findings to explain the benefits and the difficulties encountered by students in completing the courses fully online during the global pandemic COVID-19. Five major themes emerged. These included: Engagement/Connectivity in Learning; Affordability and electricity supply; Lecturer feedback, help and resourcefulness; Students learning preferences and safety enhancement; and learning through experiences.

Engagement/Connectivity in Learning

Earlier studies (Andarwulan et al., 2021; Keengwe & Kidd, 2010), found that many universities were transitioning face-to-face classes into fully online classes to make the lessons more accessible to many students, while Czerniewicz et al., (2019) found that students were forced to FOL and delivery because of student protests and university shutdowns. In this study, the students unanimously agreed that FOL was the best option during the COVID-19 pandemic. The participants believed that apart from periods of pandemics, FOL can be offered during the times of natural disasters (flooding, cyclones), in times of political upheavals, for those who have permanent employment and have difficulty getting time off to attend classes, during times of practicum/school attachments when a student has other courses to be completed simultaneously, during regular times where students live in maritime or remote areas and has limited access to the major centres or when the lecturer/facilitator is out of a country or far away. The difference in the findings could be attributed to both the context and the experiences the students encounter. The population of Fiji is spread within its islands. However, the University Campuses and University Centres are located in urban areas. This peripheral location of the students pauses a challenge to FOL.

Affordability and electricity supply

This study produced results that corroborate with the findings of Daniel (2009) and Mulenburg and Berge (2000), which shows that affordability, robust internet

connectivity, and sustainable power supply are essential for effective FOL. About two-thirds of the students (n = 93) easily met the cost associated with FOL, while a third (n = 46) faced difficulty in meeting the cost of FOL. The students were also disadvantaged in terms of power supply in the area where they lived. While 44% (n = 61) had an excellent power supply, 54% percent stated they experienced interruptions in the power supply. Two percent of the participants showed that the power supply in the area where they lived was irregular or depended on power supply through generators for short periods. The internet accessibility, as described by the participants, ranged from excellent to low. 26% (n= 36) stated that they had excellent access to the internet, 62% (n= 85) had reasonable access while 12% (n= 17) had poor, intermittent to no access to the internet. For example, one respondent indicated:

The thing that mattered most was the cost. It cost money to get data and remain connected. We had poor internet connectivity, and we could not take part in online forums and discussions. All in one, the connectivity disruptions made FOL very difficult (Participant 17).

While the geographical connection of the students contributed to the connectivity problem, it was also apparent that students in urban centres faced connectivity issues. This could be attributed to the fact that too many users were online simultaneously, which disrupted their connections.

Support towards online instruction

Student learning augurs well if it is supported with adequate guidance and regular feedback from the teachers. This study found that students expected lecturers to be helpful towards their studies and provide feedback regularly. The finding is consistent with that of Northrup et al. (2002); Robyler and Wiencke (2003); and Swan (2001), which found that regular feedback of the instructor is vital and the lack of it results in the student's dissatisfaction of a course. The assistance provided by the lecturers to the students ranged from being very helpful to not being helpful at all. A majority (83%) of the students felt the lecturers were very helpful towards their FOL, while 17% felt that lecturers were moderately helpful. None of the students mentioned that the lecturers were not helpful at all.

The lecturers were expected to share the learning resources on the student management system through recorded lectures, reading materials, web links, videos and other resources they felt appropriate as per their course outline. 75% of the participants felt that the lecturer judiciously and promptly shared the resources on the student learning platform. In comparison, 24% of participants felt the lecturer did not share the resources on time. A minority (1%) thought that the resources shared by the lecturer were not so appropriate to the learning outcome.

In terms of the student feedback and seeking clarifications on their assessments, 80% of the respondents stated they received immediate feedback, and 18% (n= 25) revealed that the lecturers were irregular in providing the feedback. In comparison, 1% (n= 2) reported no feedback was delivered when they tried to seek clarifications in their assignments. Lack of proper training for the teachers to deliver FOL may have

contributed to the delays in feedback as the teachers may not have been aware of the importance of regular feedback to students.

Students learning preferences and safety enhancement

Previous studies have shown that FOL allows for seamless streaming of video lectures, allows for self-paced learning and the flexibility of the schedule, and can also be attended to from anywhere outside the traditional classroom (Bir, 2019). In the present study, the majority (87%) of the respondents agreed that FOL enabled them to spend more time on computer enhancing their ICT skills, and they learnt to become independent learners. The respondents also mentioned that they learned to produce videos, do video presentations, and repeatedly viewed the videos to clarify course contents. In either way, independence in the learners was enhanced.

Our study showed that students were ripped out of their regular face-to-face classes and forced to join fully online classes even though they had limited access to computers, the internet, and electricity. The students were taught by untrained online teachers who were unfamiliar with online teaching, lacked training in student-centred online teaching practices, were unfamiliar with synchronous online teaching, had an attitude that students be seen but not heard, and had an academic preference for the lecture. However, with the present impediments, the study presented some surprising results. It showed that many students were satisfied with the sudden change in FOL. One of the significant responses was the amount of time FOL permitted students to spend with their families. The majority (87%) of those surveyed showed that they accessed course materials from the comfort of their homes at their own pace, in their own time, and their safety in terms of travel and disease transmission were well-maintained. They further agreed that fuel cost was saved, and rush to classes was avoided. One respondent stated:

Online learning helps us become independent learners, saves our time, feels safer studying from home, and helps us learn at our own rate (Participant 116).

Another respondent commented:

Online learning is easy, convenient, time-saving and saves our money too. You do not need to rush to attend classes. It can be done in our time as long as deadlines are met (Participant 23).

However, those students who preferred face-to-face classes agreed that traditional classes provided easy student-student and teacher-student collaboration. About a third of the participants felt FOL does not always allow students to create an environment conducive to learning. There were many distractions at home with expectations by family members to contribute towards household chores and taking care of family members. This was clear when one respondent expressed:

Well...since we are at home at all times, we are forced to do household chores and take care of the family...instead of studying (Participant 33).

As the pandemic required social distancing, the participants preferred to use emails, mobiles, viber, facebook and messenger. The majority (67%) of the respondents stated they used two or more forms of communication. These communication tools were seen as an easy escape from the COVID-19 virus, where social distancing was vital.

Learning through collaboration/experiences

Earlier studies showed students learn better through collaboration (Hannafin et al., 1997) when they take responsibility for their learning (Cannon & Newble, 2000) and make meaning from experience and interactions with the world (Olson & Maurath, 2020). Hogan, (2020) and Hogan and Devi (2019) posited that students need to collaborate between themselves and their lecturers to develop satisfaction and success, as well as analytical thinking, leadership and other skills needed by industry. The present study showed that while some opportunities were provided for student collaboration and students guided well in the way the activities were administered, at times students felt that they were not supported enough in their learning. This is reflected in the below comment:

While I needed to collaborate with other students, especially my section mates who were well known to me, unfortunately, they did not come online when I assessed the materials on the moodle (Participant 34).

Perhaps, the way students collaborated could be attributed to the way FOL was implemented. Students were ripped out of classes and forced to join online classrooms as they had no online training. Untrained online teachers taught them who may not be fully aware of enhancing students' collaboration towards FOL.

CONCLUSION

The emergence of the global pandemic COVID-19 ripped the students out of their classes and forced them to join fully online classes even though they had limited access to computers, the internet, and electricity. The students were taught by untrained online teachers who were unfamiliar with online teaching, lacked training in student-centred online teaching practices, were unfamiliar with synchronous online teaching, had an attitude that students be seen but not heard and had an academic preference for the lecture. However, with the varying impediments, the study presented some surprising results. It showed that many students were satisfied with the sudden change to FOL. One of the significant benefits was the extra time FOL permitted students to spend with their families. FOL allows students to assess course materials from the comfort of their homes at their own pace, and their safety in terms of travel and transmission of diseases was maintained. FOL classes also meant savings on fuel cost, and the rush to classes was avoided.

Apart from pandemics, FOL is advantageous in other situations as well. This includes during natural disasters (flooding, cyclones), political upheavals, practicum/school attachments when a student has other courses to be completed simultaneously, and when the lecturer/facilitator is out of a country or far away. It also benefits those who have permanent employment and have difficulty getting time off to complete their studies,

and when students live in maritime or remote areas and have irregular access to the major centres.

In FOL, the lecturers share the learning resources on the student management system as recorded lectures, reading materials, web links, videos and other resources they feel appropriate as per their course outline. However, a significant limitation of the online pedagogy is the absence of student-centred activities and live interaction that promotes student satisfaction and success and analytical thinking, leadership, and other skills needed by industry (Hogan, 2020; Hogan & Devi, 2019). Students found online learning to be of such value that they would overlook all the limitations they face. These included old computers, high-speed internet, limited access to IT technical support, limited access to online student services and the student's inability to speak with the teacher.

The current study also found that students familiarise themselves with ICT skills while studying online and learn to become independent learners. The students learn to produce videos, do video presentations, and repeatedly view the videos to clarify course contents. Living in an island nation with lots of rain that create muddy roads, irregular transportation, and limited access to campuses can be problematic. While some impediments to FOL are unavoidable, FOL provides opportunities for students to access course materials in the comfort of their homes at their own pace, in their own time, and the personal safety of the students in terms of travel is maintained. The fuel cost is also saved, and the rush to classes is avoided. Online also enables students to continue working while earning a certificate, diplomas, or degrees.

LIMITATIONS AND FUTURE STUDIES

The study carried out is susceptible to several limitations. First, the questionnaire was shared with all active online students during the semester break after the study period. Those inactive students or those that may have returned to their villages and islands where they had no access to the internet may have missed out on completing the survey.

Second, the study was conducted immediately after the students' first experiences who had to switch to FOL from their traditional face-to-face classes only for a short period. This could have hindered the students from fully understanding FOL and reporting accurately. Perhaps a similar study after the students have experienced FOL for a more extended period would reveal different results.

While this study only focuses on the students and lecturers being the key personnel in organising the learning resources, it may be appropriate to investigate the lecturer's experiences in FOL.

REFERENCES

Adam, N. L., Alzahri, F. B., Soh, S. C., Bakar, N. A., & Kamal, N. A. M. (2017, November). Self-regulated learning and online learning: a systematic review. In *International Visual Informatics Conference* (pp. 143-154). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-319-70010-6_14

- Alomyan, H. (2021). The impact of distance learning on the psychology and learning of university students during the covid-19 pandemic. *International Journal of Instruction*, 14(4), 585 - 606. <https://doi.org/10.29333/iji.2021.14434a>
- Andarwulan, T., Al Fajri, T. A., & Damayanti, G. (2021). Elementary Teachers' Readiness toward the Online Learning Policy in the New Normal Era during Covid-19. *International Journal of Instruction*, 14(3), 771-786. http://www.e-iji.net/dosyalar/iji_2021_3_45.pdf
- Baker, A. (2003). Faculty development for teaching online: Educational and technological issues. *The Journal of Continuing Education in Nursing*, 34(6), 273-278. https://digitalcommons.sacredheart.edu/cgi/viewcontent.cgi?article=1016&context=nurs_fac
- Berger, K. A., & Topol, M. T. (2001). Technology to enhance learning: Use of a website platform in traditional classes and distance learning. *Marketing Education Review*, 11, (3),15-26.
- Bielawski, L., & Metcalf, D. S. (2003). *Blended e-learning: Integrating knowledge, performance, support, and online learning*. HRD Press.
- Biggs, J. (1999). What the student does: Teaching for enhanced learning. *Higher Education Research & Development*, 18(1), 57-75. <https://www.tandfonline.com/doi/pdf/10.1080/0729436990180105>
- Bir, D. D. (2019). Comparison of Academic Performance of Students in Online vs Traditional Engineering Course. *European Journal of Open, Distance and E-learning*, 22(1), 1-13. <https://www.ceeol.com/search/article-detail?id=846832>
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona Virus pandemic. *Asian Journal of Distance Education*, 15 (1), i – iv. <https://zenodo.org/record/3778083#.YPfWfegzZPY>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Braun+%26+Clarke%2C+2006&btnG
- Briney, A. (2016). *Geography of Fiji. Learn Geographic Facts About the South Pacific Country of Fiji*. <https://www.thoughtco.com/geography-of-fiji-1434590>
- Browne, E. (2005). Structural and pedagogic change in further and higher education: A case study approach. *Journal of Further and Higher Education*, 29(1), 49-59.
- Bryceson, K. P. (2001). Thoughts of a first-time online course developer: issues and resolutions. *Teaching & Education News*, 11(1).
- Cannon, R. A., & Newble, D. (2000). *A Handbook for Teachers in Universities & Colleges*. London: Kogan Pagens.

CIA World Factbook (2018). International Rankings of Fiji – 2018: Communications. https://theodora.com/wfbcurrent/fiji/fiji_international_rankings_2018.html

Czerniewicz, L., Trotter, H., & Haupt, G. (2019). Online teaching in response to student protests and campus shutdowns: academics' perspectives. *International Journal of Educational Technology in Higher Education*, 16(1), 43. <https://link.springer.com/article/10.1186/s41239-019-0170-1>

Dabbagh, N. (2007). The online learner: Characteristics and pedagogical implications. *Contemporary Issues in Technology and Teacher Education*, 7(3), 217-226.

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=The+online+learner%3A+Characteristics+and+pedagogical+implications&btnG=

Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application* (pp. 68-107). Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.

Daniel, J. (2009). eLearning for development: using information and communications technologies to bridge the digital divide. http://oasis.col.org/bitstream/handle/11599/1441/2009_DanielJ_eLearningforDev_Transcript.pdf?sequence=1&isAllowed=y

Di Vesta, F. J. (1987). The cognitive movement and education. In *Historical foundations of educational psychology* (pp. 203-233). New York: Springer.

Ferdig, R.E., Baumgartner, E., Hartshorne, R., Kaplan-Rakowski, R. & Mouza, C. (2020). Teaching, Technology, and Teacher Education during the COVID-19 Pandemic: Stories from the Field. Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/p/216903/>.

Hali, A. U., Zhang, B., Al-Qadri, A. H., & Aslam, S. (2021). A collaborative teacher training approach in different cultures in the era of technology. *International Journal of Instruction*, 14(4), 21- 32. <https://doi.org/10.29333/iji.2021.1442a>

Hartshorne, R., Baumgartner, E., Kaplan-Rakowski, R., Mouza, C., & Ferdig, R. E. (2020). Special issue editorial: Preservice and in-service professional development during the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28 (2), 137-147.

Hazaymeh, W. A. (2021). EFL Students' Perceptions of Online Distance Learning for Enhancing English Language Learning During Covid-19 Pandemic. *International Journal of Instruction*, 14(3), 501-518. http://www.eiji.net/dosyalar/iji_2021_3_29.pdf

Garcia, A., Abrego, J., & Calvillo, M. (2014). Study of the of hybrid instructional delivery for graduate students in an educational leadership course. *International Journal of E-Learning & Distance Education*, 29(1), 1-15. Retrieved from <http://ijede.ca/index.php/jde/article/view/864/1534>

Grady, J. R. (2013). Improving student satisfaction with large-scale, compressed timeline online courses. *The Quarterly Review of Distance Education*, 14(4), 195-208.

- Hannafin, M. J., Hill, J. R., & Land, S. M. (1997). Student-centered learning and interactive multimedia: Status, issues, and implication. *Contemporary Education*, 68(2), 94-99. <https://search.proquest.com/docview/233037032?pq-origsite=gscholar&fromopenview=true>
- Hogan R. (2020). Global demand for borderless online degrees. IGI-Global. <http://doi:10.4018/978-1-5225-8912-9>
- Hogan, R. P., & Devi, M. (2019). A synchronous pedagogy to improve online student success. *International Journal of Online Pedagogy and Course Design*, 9(3), 61-77. <http://doi:10.4018/IJOPCD.2019070105>
- Keengwe, J., & Kidd, T. T. (2010). Towards best practices in online learning and teaching in higher education. *MERLOT Journal of Online Learning and Teaching*, 6(2), 533-541. https://jolt.merlot.org/vol6no2/keengwe_0610.pdf
- Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning?. *American Psychologist*, 59(1), 14 - 19. <http://doi:10.1037/0003-066X.59.1.14>
- McMahon, M. (1997). "Social constructivism and the World Wide Web-A paradigm for learning." In Ascilite conference. Perth, Australia (vol. 327). <https://ascilite.org/conferences/perth97/papers/Mcmahon/Mcmahon.html>
- Muilenburg, L., & Berge, Z. L. (2000). A framework for designing questions for online learning. *The American Journal of Distance Education (AJDE)*, 10(2), 1-10.
- Neo, M., & Neo, K. T. (2001). Innovative teaching: Using multimedia in a problem-based learning environment. *Journal of Educational Technology & Society*, 4(4), 19-31.
- Northrup, P., Lee, R., & Burgess, V. (2002). Learner perceptions of online interaction. In P. Barker, & S. Rebelsky (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia, and Telecommunications 2002* (pp. 1462-1467). Chesapeake, VA: AACE. <https://files.eric.ed.gov/fulltext/ED477075.pdf>
- Olson, M., & Maurath, K. (2020). Evaluating the Learning Experience. *Teaching with Digital Tools and Apps*. <https://edtechbooks.org/digitaltoolsapps/evaluatinglearningexperience/simple>
- Reynolds, R., & Chu, S. K. W. (2020). Guest editorial. *Information and Learning Sciences*. 121 (5/6), 233 – 239. <https://doi.org/10.1108/ILS-05-2020-144>
- Ribeiro, R. (2020). How university faculty embraced the remote learning shift. *EdTech Magazine*. <https://edtechmagazine.com/higher/article/2020/04/how-university-faculty-embraced-remote-learning-shift>
- Roblyer, M. D., & Wiencke, W. R. (2003). Design and use of a rubric to assess and encourage interactive qualities in distance courses. *American Journal of Distance Education*, 17(2), 77-98. http://dx.doi.org/10.1207/s15389286ajde1702_2

Rovai, A. P. (2008). *Distance learning in higher education a programmatic approach to planning, design, instruction, evaluation, and accreditation*. New York, NY: Teachers College Press.

Rovai, A. P., & Downey, J. R. (2010). Why some distance education programs fail while others succeed in a global environment. *Internet and Higher Education*, 13(3), 141-147. <http://dx.doi.org/10.1016/j.iheduc.2009.07.001>

Saulnier, B. M. (2008). From “sage on the stage” to “guide on the side” revisited:(un) covering the content in the learner-centred information systems course. *Information Systems Education Journal*, 7(60), 1-10.

Swan, K. (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous online courses. *Distance Education*, 22(2), 306-331. <http://dx.doi.org/10.1080/0158791010220208>

Tikoisuva, P. B. (2000). *Fiji Today: 2000*. Suva, Fiji: Government Printer.

Willett, H. G. (2002). Not one or the other but both: Hybrid course delivery using WebCT. *The Electronic Library*. <https://www.emerald.com/insiwillett/content/doi/10.1108/02640470210447847/full/html>

Yang, K. C., & Kang, Y. (2020). What Can College Teachers Learn from Students' Experiential Narratives in Hybrid Courses? A Text Mining Method of Longitudinal Data.” In *Theoretical and Practical Approaches to Innovation in Higher Education* (pp. 91-112). IGI Global 2020. <https://www.igi-global.com/chapter/what-can-college-teachers-learn-from-students-experiential-narratives-in-hybrid-courses/243330>

Young, J. (2002). *Hybrid teaching seeks to end the divide between traditional and online instruction: By blending approaches, colleges hope to save money and meet students' needs*. <http://chronicle.com/free/v48/i28/28a03301.htm>