

Micronesian Educator

A Journal of Research & Practice on Education in Guam and Micronesia

Volume 30, 2021

A Publication of the School of Education, University of Guam

Micronesian Educator #30

FAÑOMNĀKAN 2021

A Journal of Research, Theory, and Practice in Guam and Micronesia

Editors:

Yukiko Inoue-Smith
Christopher Schreiner

Yukiko Inoue-Smith:

Research papers, literature reviews, and student project papers

Christopher Schreiner:

Critical Essays and book reviews

Editorial Board:

David Gugin
Mary Jane Miller
Donald Rubenstein
Michelle Santos

Production Assistant:

Matthew Raymundo

Design and Layout:

Pascual Olivares

Published by:

School of Education, University of Guam

Editors' Introduction

Welcome to the 30th volume of the *Micronesian Educator*, published through the School of Education at the University of Guam. We are delighted to provide you with many interesting and insightful articles. This volume consists of three sections: (i) feature articles; (ii) critical essays; and (iii) book reviews.

Section One: Feature Articles

Section One contains six articles.

The first article, by Greg Burnett, Mereseini Tikoduadua, and Govinda Lingam, is "Fijian Teachers Working Across Pacific Borders: Identities, Pedagogies, and Sense of Differences." According to the authors, there has been an increasing number of Fijian teachers employed to teach in various parts of the Pacific. This paper reviews research on the experiences of Fijian teachers working elsewhere in the Pacific and focuses on understanding sources of Fijian teachers' identities; relevant differences among Pacific cultures; and the pedagogies Fijian teachers bring to their work. The findings contribute to wider debates concerning what constitutes quality teaching in the Pacific, and ways of optimizing cross-cultural teaching.

The second article, by Ihmar Aldana, is "The Effects of Review Games Using Kahoot! on Students' Quiz Scores." Kahoot! is a free game-based learning platform increasingly used as educational technology in schools. This study examined the effects of using the game Kahoot! to review course material, as evidenced in students' quiz scores, as well as in student engagement. The study was conducted in a high school geometry classroom in Guam, with a sample of 42 students in the 10th through 12th grades. The use of Kahoot! during review produced reliably higher quiz averages, and more observable student engagement, when compared to the outcomes of a traditional teacher-led review. The paper further discusses limitations, along with recommendations for future research.

The third article, by John Arby G. Pacheco, is "SolarSPELL and Its Effects of Student Engagement and Test Scores." SolarSPELL—a solar powered educational learning library—serves students and teachers in low-resource locations and supports student-centered learning environments. This study focuses on ways of promoting student engagement in a high school biology class. The author emphasizes the potential of SolarSPELL as a tool that applies contemporary students' technological competencies and provides a safe environment that is structured and monitored by the teacher. Future studies should assess the effectiveness of SolarSPELL in increasing test scores and decreasing off-task behaviors, in other subjects.

The fourth article, by Alyxandra Borja Reyes, is "The Effects of Choral Reading and Peer Discussion in Small Groups on Reading Fluency and Comprehension in a Third Grade Classroom." The author emphasizes that in third grade, students are expected to make an important transition: from learning to read, to reading to learn. In this study, a choral reading intervention sought to increase reading fluency in the study, whereas peer discussions in small reading groups sought to increase reading comprehension through the strategy of thinking out loud. Based on the results of the study, encouraging students to read aloud in small groups of peers increased comprehension among students who were nearing proficiency in reading.

The fifth article, by Deborah Ellen, is "Education for Sustainable Development: Education as If Our Islands Matter." Environmentalists began sounding the alarm in the 1960s and early 1970s, with efforts that included the publishing of Rachel Carson's *Silent Spring* and establishing Earth Day in 1970; followed by the founding of groups such as Greenpeace in 1971. The author emphasizes that, given that more than 50 years have passed, we can ask now, "Has our planet benefited from such efforts?" Focusing on systems thinking, living values education, and emergent teaching, this article explores Education for Sustainable Development as a way forward.

The sixth article, by Yukiko Inoue-Smith, is "Formative Assessments as Feedback: The Case of Blended Assessment." It is generally understood that formative assessments can monitor students' progress and suggest ways of optimizing it. Following a brief overview of formative and summative assessments, this paper focuses on how formative

assessments provide feedback on effectiveness in the teaching and learning process. The paper describes the case of blended formative and summative assessments in a two-stage core assignment. The paper highlights advantages of making formative assessments an essential part of teachers' work with students, in joint fulfillment of learning objectives.

Section Two: Critical Essays

Section Two contains five critical essays.

The first essay, by Stephen Fox, is "Optimal Class Size for Online Education in Pasifika Contexts." This study reviews scholarship on optimal class size for online education in Pasifika contexts. It presupposes that "The Western system is particularly less effective for members of cultures that differ greatly from European norms, including Pasifika cultures." The author concludes that "frequent student-student and student-teacher interaction, in a class of around 20 students, is most likely to result in sufficient social support to facilitate positive outcomes."

The second essay, by the UOG graduate student, Nikko Capati, is "Complicating the Mother(land) in Mia Alvar's *In the Country: A Critique of Power and Performance in the Filipino Household*." Capati finds that Alvar's stories deconstruct many culturally normative notions and behaviors associated with Filipino women as represented in televisual media. Alvar's stories depict personal characteristics and power relations that deviate from the feminine standards simplistically reified not just in popular melodramas and romances, but also in everyday cultural expectations.

The third essay, by David Gugin, is "God's Song: G.M. Hopkins and the Poem as Prayer." Gugin's close reading of a poem by G. M. Hopkins reveals aesthetic and non-linear associations that contrast with contemporary instrumental thinking common to data-driven business and the empirical sciences. Gugin welcomes the poetic diversification of thought and language as a sort of ecological ingression to a spiritual inscape at a time when thinking is urgently channeled into solving the pandemic, and language serves as fuel for antagonistic politicians.

The fourth essay, by Joff P. N. Bradley, is "Woe Betide You the Truth Be Told: Linguistic Corruption as Pedagogical Tool." In this essay, which was first presented as a lecture in South Korea, Bradley draws on resources from literature and philosophy to think about corruption as a pedagogical tool. He considers this issue in the sense of "undermining one's own position or right precisely through the undermining of one's own language," and asks: Is English the right language to reach truth and reconciliation? Bradley draws on Nobel Laureate and British playwright Harold Pinter to understand "the corruption and the rot of words," and asks a range of questions: What does it mean to speak the master's dominant narrative? What is the nature of the complicity with this tactic?"

The fifth essay, by C. S. Schreiner, is "Underhill Academy: An Anecdotal History of the Future." After holding social media and American education culpable for the reversion to barbarism that resulted in the 2016 presidential election and its toxic aftermath, the author conjures the imaginary Underhill Academy as one possible *pharmakon* or cure for what ails education. This mountainside *attentional ecosphere* develops student powers of critique and advanced literacy within the interdisciplinary framework of general ecology. It presupposes a philosophical concept of *world* as the *horizon of all horizons* which unites students as they distinguish the ecological grounds of their separate modes of scholarly endeavor.

Section Three: Book Reviews

Section Three contains five book reviews.

The first book review, by Paulette Coulter, critiques two recent guides for the effective use of Zoom in an educational setting: Aaron Johnson's *Online Teaching with Zoom: A Guide for Teaching and Learning with Videoconference Platforms*; and Doug Lemov's *Teach Like a Champion Team*. Coulter, who shows in painstaking detail how the

Micronesian Educator #30

authors explain and clarify the many technical and pedagogical aspects of operating Zoom, finds both publications selectively useful for teachers suffering from Zoom fatigue during the pandemic.

The second book review, by David Harrington, former Dean of Front Range Community College in Colorado, conducts a philosophical analysis of Charles Taylor's *The Malaise of Modernity*. First presented as The Massy Lectures in Canada, Taylor's study identifies three fundamental forms of malaise: contemporary individualism devoid of meaning and moral horizons; the ubiquity of instrumental reason, whose metric of techno-economic efficiency instills a sense of fatalism in our lives; and powerlessness and loss of political liberty.

The third book review, by Heidi San Nicolas, takes a close look at *Unsustainable Empire: Alternative Histories of Hawai'i*, by Dean Itsuji Saranillio. The reviewer finds that this text "offers a counter hegemonic history to the establishment of the Hawaiian state by articulating that the United States empire was not an almighty and all-powerful entity at the inception of overseas expansion," but was becoming ever more imperialist in its overseas misadventures designed to sustain its faltering mode of capitalist production.

The fourth book review is written by James Seymour, who teaches College Writing and Film at the University of Maine-Augusta. Seymour provides an appreciative critical commentary on the famous jazz critic Stanley Crouch's only novel, *Don't the Moon Look Lonesome: A Novel in Blues and Swing*. Seymour calls our attention to what is intellectually and artistically valuable in Crouch's novel while also assessing its reception history by the critical establishment.

The fifth book review, by C. S. Schreiner, evaluates *A Synthesizing Mind*, the recently published autobiography of Howard Gardner, the educational psychologist who created the theory of multiple intelligences. While Gardner's book tracks the many distinguished accomplishments of his long career at Harvard since his student days, it does so in a consistently self-congratulatory delivery that seems strangely aloof from the cultural and educational disasters filling today's headlines. In this regard it reiterates one of the enduring stereotypes of the Ivory Tower mindset.

Yukiko Inoue-Smith, PhD, Professor of Educational Psychology and Research

Christopher Schreiner, PhD, Professor of English

TABLE OF CONTENTS

- 3 [Editors' Introduction](#)
Yukiko Inoue-Smith and Christopher Schreiner
- 9 [Fijian Teachers Working Across Pacific Borders: Identities, Pedagogies, and Sense of Differences](#)
Greg Burnett, Mereseini Tikoduadua, and Govinda I. Lingam
- 17 [The Effects of Review Games Using Kahoot! on Students' Quiz Scores](#)
Ihmar L. Aldana
- 25 [SolarSPELL and Its Effects of Student Engagement and Test Scores](#)
John Arby G. Pacheco
- 39 [The Effects of Choral Reading and Peer Discussion in Small Groups on Reading Fluency and Comprehension in a Third Grade Classroom](#)
Alyxandra Borja Reyes
- 49 [Education for Sustainable Development: Education as If Our Islands Matter](#)
Deborah Ellen
- 61 [Formative Assessments as Feedback: The Case of Blended Assessment](#)
Yukiko Inoue-Smith
- 69 [Optimal Class Size for Online Education in Pasifika Contexts](#)
Stephen Fox
- 74 [Complicating the Mother\(land\) in Mia Alvar's *In the Country*: A Critique of Power and Performance in the Filipino Household](#)
Nikko Capati
- 80 [God's Song: G.M. Hopkins and the Poem as Prayer](#)
David Gugin
- 84 [Woe Betide You the Truth Be Told: Linguistic Corruption as Pedagogical Tool](#)
Joff P. N. Bradley
- 93 [Underhill Academy: An Anecdotal History of the Future](#)
C. S. Schreiner
- 109 [Review of Aaron Johnson, *Online Teaching with Zoom: A Guide for Teaching and Learning with Videoconference Platforms*, and Doug Lemov, *Teach Like a Champion Team. Teaching in the Online Classroom: Surviving and Thriving in the New Normal*](#)
Paulette Coulter
- 116 [Review of Charles Taylor's *The Malaise of Modernity*](#)
David Harrington
- 121 [Review of Dean Itsuji Saranillio's *Unsustainable Empire: Alternative Histories of Hawai'i*](#)
Heidi San Nicolas

Micronesian Educator #30

123 [Review of Stanley Crouch's Don't the Moon Look Lonesome: A Novel in Blues and Swing](#)
James Seymour

126 [Review of Howard Gardner's A Synthesizing Mind](#)
C. S. Schreiner

Section One



Feature Articles

Fijian Teachers Working Across Pacific Borders: Identities, Pedagogies, and Sense of Differences

Greg Burnett, James Cook University, Australia
Mereseini Tikoduadua, University of the South Pacific, Fiji
Govinda I. Lingam, University of the South Pacific, Fiji

Increasing numbers of Fijian teachers working elsewhere in the Pacific contrast the many agencies and development personnel in Pacific Education from countries such as Australia and New Zealand. These agencies have long been critiqued for their cultural incongruence with the Pacific region and their need to satisfy donor nation interests. This paper reports on research investigating the work of experienced Fijian teachers working elsewhere in the Pacific. Drawing on elements of post-structural theory, this study highlights the ways in which these teachers constitute themselves as Fijian educators working across Pacific cultural and national borders. The identified sense of the Fijian teacher self contributes to wider debates concerning what constitutes quality teaching in the Pacific region and who might legitimately engage in cross Pacific border teaching.

Keywords: Pacific culture, Fijian teacher, teaching pedagogy, post-structural theory, personal self

Fijian Teachers Across Pacific Borders

Over the past six years, there has been an increasing number of Fijian teachers employed to teach in various parts of the Pacific. Most of these teachers have worked officially under the Fiji Volunteer Service Scheme (FVSS), a Fiji government sponsored arrangement with other Pacific regional governments (Government of Fiji, 2012). By mid-2018, there were the FVSS teachers in: the Marshall Islands; Kiribati; Tuvalu; Nauru; and Vanuatu. Along with the official Fiji government supported teachers are a similar number of other Fijian teachers who have entered into their own contractual agreements with the same Pacific governments. Of the latter group some are former FVSS teachers who have opted out of the scheme after their first contract and others who are working independently of the scheme. All the FVSS teachers are experienced senior educators and include former Principals, who after the lowering of the retirement age in 2009 (ESCAP, 2016) found themselves out of work but still eager to teach and contribute. The independent contractor group also consists of experienced retired teachers but includes some younger teachers who, for various reasons, have left the Fiji Civil Service. Based on their shared seniority, experience, and working conditions, the research reported in the current paper does not differentiate between official FVSS teachers and those teachers who have negotiated independent contracts.

The FVSS contrasts the many agencies and development assistance programs in Pacific regional education that are staffed by non-Pacific personnel mostly from Australia and New Zealand. These agencies have been strongly critiqued (Sanga & Taufe'ulungaki, 2005) for their cultural incongruence with the Pacific and their need to also satisfy donor nation interests and concerns (DFAT, 2016; Ware, 2015). Despite recent shifts in Western dominated *north-south* development aid rhetoric toward development “partnerships,” little has been done to dismantle longstanding hierarchies of donor and recipient (Mawdsley, 2017): many development analysts observe “the South [still] as disciplinary subject and the North as active benevolent provider of knowledge and material assistance” (p. 108). However, one significant shift with far more potential for change in development is the emergence of *south-south* assistance (Kohona, 2015) of which the FVSS is a Pacific example. Certainly, the Fiji government sees its role in this way; that is, it believes that it has a duty to build capacity in smaller island states in the region in terms of development co-operation (Kumar, 2017) through an initiative like the FVSS. For these reasons, the FVSS, and the independent contractor role that shadows the scheme, is worthy of investigation.

Framing the Fijian Teacher Role

A specific research focus has been created around the way Fijian teachers—both official volunteers and independent contractors—constitute themselves, their teaching and Fiji as a contributor to south-south, or Pacific-Pacific development. In other words, how do the Fijian teachers themselves see their role and purpose in their teaching work outside of Fiji? In what ways are the discourses that they themselves take up different to the official discourses

of the Fiji government that send them and the host governments that receive them. In what ways are the discourses taken up by the teachers different from those of non-Pacific education donors and consultants that have long dominated the Pacific cross border education sector (e.g., Sanga & Taufe'ulungaki, 2005, for at least one critical account). Discourse is used here in a post-structural sense, meaning that language choices contain "the taken-for-granted, and most often, hidden, frameworks of ideas that structure both knowledge and social practice" (Berg, 2009, p. 215). In terms of this study, the language choices used by the socially dominant government bodies that send and receive Fijian teachers position and regulate these teachers, their professional worth, and their pedagogies in particularly narrow ways. This is often done at the exclusion of the ways in which the Fijian teachers use language to position themselves and the purposes of education in a Pacific cross-border context. A simple analysis of the scant official Fijian language choices in documentation surrounding the FVSS initiative constitutes the Fijian teachers as: volunteers; to reduce skills shortages (Government of Fiji, 2012); to contribute to our [regional] communities (Government of Fiji, 2013); and to make good use of their knowledge and skills (Kumar, 2017). Host country framings appear similar, for example, in Vanuatu the Fijian teachers are considered "as human resources needed in their education field" (Lanyon, 2016). All these official dominant discourses are relatively un-nuanced and constitute teachers' work in very matter-of-fact ways that deny any complexity. How should Fijian teachers contribute? What actual host country skill shortages are there? What exactly is the knowledge and skill that Fijian teachers possess?

To shed light on these fundamental questions concerning the volunteer experience, the Fijian community in the host country was approached by an in-country member of the research team concerning the aims of the research. A general invitation was issued to all Fijian teachers in the host country to share their life and work experiences. As a result, fourteen Fijian teachers (T1–T14) agreed to participate in *talanoa* about their work and life experiences working in that country. All teachers at the time of the *talanoa* had been working in the host country between twelve months and five years. The principles of indigenous Fijian *talanoa* (Vaiotei, 2006) were adhered to as much as possible to ensure a personal narrative of teaching and life experience emerged. Fijian *talanoa* involves a form of interview but is conducted in a naturalistic way to ensure "a personal encounter where people story their issues, their realities and aspirations" (Vaiotei, 2006, p. 21). Each *talanoa* was approximately 30 minutes in length. A critical discourse analysis was then conducted using the 14 transcribed *talanoa* texts. The language choices made in each *talanoa* were analyzed at the level of broad narrative meaning to determine the ways in which the Fijian teachers constituted themselves, their teaching and the role Fiji plays in the host country. Following Berg (2009) the identified discourses reveal the hidden structures that frame the Fijian teachers' knowledge and practice and ultimately legitimize their presence and role in the host country. These discourses differ from those of the FVSS that send them and the host country that receives them. Identifying the Fijian teachers' views of themselves and their role adds necessary nuance to debates concerning the efficacy of the FVSS as a form of south-south development assistance in the wider Pacific region. In addition, the researchers work in Pacific regional teacher education and therefore have a professional interest in what constitutes quality teaching in both Fiji and the host countries mentioned previously. As well as providing insights into a south-south development project this research also assists the researchers in their delivery of quality teacher education in the Pacific region.

Constituting the Personal Self

This section sheds light on why they left Fiji to teach elsewhere in the Pacific and gives insight into their personal lives and that of their families. Their sense of self is particularly significant in the light of official discourses of redundancy in the sudden lowering of the retirement age for civil servants to 55 years. For many teachers, their actual 55th birthday was their last day working within the Fijian government education system. Suddenly imposed redundancy such as this, especially in the initial period was felt to be very dehumanizing for teachers who had devoted their working lives to teaching in Fijian communities up until that point. T4 described it as, "Once we reached our birth date, we were told you have to vacate your seat and out you go. I was one of them. I stayed home. It was very bad for us; we didn't have a choice." Straight after her 55th birthday and retirement T3 simply, "burned all [her] school stuff to make packing easier. My husband died a few years earlier so there was just me and my kids. We had so much to take back to [my village] where my home is. I just took the necessary stuff and then I stayed home." The same teacher also went on to state that: "I had a friend who collapsed and died during that big change in 2009 when all those over 55 had to stop."

Micronesian Educator #30

Self-Worth, Family Obligations, and Service

For many of the FVSS teachers, the reason for working in the host country was clearly a form of resistance to being framed as redundant by the Fiji system. Many teachers expressed a strong sense of self-worth and that their working life was not yet over. T2 put it: "I knew that I could still move around with the experiences that I have had, and I could teach somewhere." T7 "had such a passion for other countries. I wanted to be of some use" and stated she knew of "a lot of good teachers who have retired who have nothing to do who are well trained. I'd rather they come and spend a few years here. They have the patience to do it well." Linked, however, to the expressed personal need to work was the incentive of salary, which in the host country was considerably more than what they earned in Fiji. T7 put it: "To get a better means of financial benefit for my family. We were going through many problems in Fiji and I was the only one working. Here it is two times the money." Many freely cited salaries as a key reason for coming. However, mixed with the financial incentive was a common feeling that they had been called by God to the role. T7 added: "But once I got here, I learned that there was a bigger calling to come and teach." A fundamental Christian faith underpinned the way many described their experience generally, that is, their role is defined by a desire to "volunteer" but also to evangelize. Prayer, Bible reading, and devotions were key parts of many teachers' classroom routines. The teachers on independent contracts tended to describe their reason for coming in less altruistic terms, either in terms of financial benefits or as part of a plan to teach somewhere differently and live and work in a different culture. For example, T7 stated: "It's not because of money but it's my passion for teaching and to travel and to teach in a country apart from my own." For several of these teachers the host country was not the first time they had taught outside of Fiji, for example, some in Vanuatu, China or a different FVSS country. Yet, both sets of teachers constituted themselves highly in terms of self-worth, capacity and service as opposed to the official Fiji government discourses of redundancy and retirement.

Faith, Mission, and Deficit Theorizing

It was common among teachers to mention at least something of the spiritual reasons motivating them. They saw God drawing them to teach, opening the door to allow them to go, and for sustaining them when the challenges of teaching became too much. As T1 stated, "I see myself as a teacher and a missionary and spread the word of God. That is one of the callings. God wants me. That's what I do." All teachers in the host country were Indigenous Fijians and had strong connections with one of Fiji's many evangelical Christian church communities. The spiritual sense also extended beyond teaching to their life in the community in which they lived. Many involved themselves in local churches as well as meeting with Fijian church communities. T9 believed that since the host country was also Christian then there was further justification for taking an overt Christian approach to teaching and living in that place. The approach was not just limited to teaching children but extended to the professional development support many felt obligated to provide host country colleagues and school leadership. T5 shared his thoughts on school problems with his Principal, basically "I told him you have to give the Word of God every day. You have an assembly everyday so God can speak everyday then all this trouble that crops up in the system will eventually go out. It worked for me in Fiji."

Coupled with each individual teacher's statement suggesting a divine authority to be present in the host country was a corresponding statement describing an acute sense of local need, nearly always expressed in deficit terms. Children are believed to be uncared for (T3, T6); not fed properly (T9); whose parents and the community do not value education (T11); and the community marked by a widespread inability to comprehend English language (T1, T4, T5). Some put this down to earlier colonial experiences whereas others more directly to small island culture. As T3 states: "These people are really behind us [Fijians]...because they are like this that is why God has sent us here." At this point, many of the Fijian teachers took up discourses very similar to early European missionaries to the Pacific to justify their reasons for being there, that is, a coupling of Christian faith and service with a corresponding perception that host country deficits needed to be addressed (Burnett, 2004). It is at this point that the Fijian teachers go beyond the official discourses that frame them as human resources with skills and knowledge to share.

Yaqona, Cassava, Bele, and Community

Many of the teachers lived alone in the host country. The spouses of several female teachers died in the years leading up to their retirement and joining the FVSS. Several of the male teachers had come by themselves as the contracts they had signed did not cover the travel expenses of their spouses and family. To offset a recognized loneliness many sought to re-create a life as similar as possible to what they had known at home in Fiji. The re-creation of the familiar

Micronesian Educator #30

invariably involved socializing with Fijian colleagues around the *yaqona* bowl. T7 stated, “For many of us, our wife and family are back in Fiji so there is nothing else to do but just sit down and mix kava.” Many had found an interest in gardening so as to eat familiar foods. Teachers shared with one another how they had successfully grown *cassava* and *bele* leaf in the host country’s poor soil. T9 has “a small space for gardening cassava and other vegetables. I even sell some of these vegetables and some I use at home. I do it with other teachers.” It was clear from the common responses during *talanoa* that the teachers talk regularly with one another and share the daily struggles of living and teaching away from home.

Constituting the Professional Self

Following on from the personal sense of self is the identification of the ways in which the Fijians constituted themselves as teachers and by extension the Fijian education system where they had spent their prior working lives. In the *talanoa* the teachers often talked about the challenges they faced in teaching, their successes, the responses of the local students, and their relationships with local colleagues. The official discourses of human resourcing and sharing of skills and knowledge also emerge as simplistic and inadequate in the way the Fijian teachers and their role is constituted. It is also important to note Fijian teachers did not take up the anti-colonial or re-indigenizing discourses common in the rhetoric of many Pacific education theorists as necessary to counter typical north-south educational aid in the Pacific (e.g., Sanga & Taufe’ulungaki, 2005).

Behaviorism, Conservatism, and Teaching

All teachers expressed a sense of frustration with the classroom behavior of the local students. For many this initially came as a shock after just arriving from Fiji. Behaviors referred to included: shouting; inattention; students wearing caps in the classroom; feet on tables; and spitting in the doorway. T7 noted: “One day I was teaching at the board and I looked back and there in my seat was a student sitting there with both legs on top of my table. I said you cannot do that my son as that is abnormal to me [laughs loud]. The Fijian teachers that came here before us said that we have to be patient.” There was common concern about students’ unwillingness to communicate in English. In most cases, the general manner, in which the students presented themselves provoked instant comparisons with Fijian students whose behavior and English-speaking capacity was considered better. These perceived deficits became further justification about the role of the Fijian teachers, that is, one that imparts a clear set of values and behaviors which are more important than the teaching of knowledge and skills whether that be literacy, numeracy, geography and so on. However, the approaches many teachers used in Fiji when classes became unruly did not work in the host country. Some teachers learned the hard way and faced repercussions, when, for example, corporal punishment was used. T8 said: “Don't ever do something silly like you might do in Fiji. In Fiji, I use this [unclear] but don't do it here.” Some who had served longer found that if they changed their pedagogy then classroom learning environments began to become more conducive to learning. Many, however, adhered to a set of teaching principles grounded in their earlier Fijian teaching experiences—experiences based on deficit views of the child and family (White, 2014).

The pedagogies that many of the Fijian volunteers arrived with and attempted to implement are best described as pedagogies of morality—deeply conservative and teacher centered, believed to address the deficits identified in the local learners and their communities. There is a strong belief among many Fijian teachers that learning cannot possibly happen until a certain set of respectful learner behaviors are in place. T5 described: “The first time I came they were reluctant to accept my ways, but I had to be firm. I told them this is the only way you will ever become somebody. You have to learn how to behave in the classroom.” T3 described his approach to teaching as thus: “I get them and tell them these are the things you should do in the classroom, no shouting, take off your hat, sit quietly, respect the teacher. I tell them this, we have devotion, I pray for them.” Teachers linked classroom behaviors to poor parenting and wider social conditions in the host country. This then became further justification for Fijian teacher roles played out in both the classroom and outside of school in the host country communities in which the teachers lived. During most *talanoa*, the researchers found it very difficult to initiate discussion about teaching and learning to a level beyond student behaviour and a set of norms the Fijian teachers insisted upon.

Positioning Fiji Education

Fijian educational and social systems were constituted by many teachers as superior and unashamedly worth emulating by the host country. Several teachers suggested volunteers should also teach at the primary school level

to help bring about change earlier in the host country students' lives (T6, T3). One teacher suggested volunteers need to work at the Ministry level (T9) to effect change on a much wider scale than is currently possible. Consistent with overall deficit discourses taken up by many teachers, the social dynamics of their relationship with host country learners, parents, and wider community was often framed as "up" and "down" or "high" and "low." This differential relationship is consistent with general behaviorist discourses that position teachers in more powerful ways than the passive students that they teach. T13 compared her host country experience with her previous Fijian school in saying, "I cant use the discipline I would exercise back at [Fiji school] so I just have to fit in. Even though I cant bring myself lower, I go down and down and down. That's a challenge but now I fit in a little bit better." T11, perhaps with a degree of greater self-awareness expressed the same idea: "Im not saying this because I am Fijian, but Fiji is well organized with everything. The students when they come in, they know what to do, they have manners, they know how to speak to the teacher, they behave. But here its very hard. I have to realize that the standards of Fiji students are just so much higher than in this place and I have to come down to their level and work with them." Conversely, T8 saw his role to bring the locals "up" to the level possessed by Fiji, "Lets do our best because one day they will see that they are advancing, and they will know what to do. Maybe in another ten years' time they wont want us Fijians. They wont need us and it will be time for us to go home. Its what we are here for - to develop them." This relative social positioning by the Fijian teachers closely resembles Blaut's (1993) colonial sense of *self* and *other* that he argues underpinned much of Empire, including its Pacific and Fijian elements. Further to this T9, using a gendered twist on the well documented paternalism inherent in the Pacific colonial past, described the Fijian teachers: "We are all grandmothers and mothers, we know what to do."

Struggles with Liberalism and Equity

When challenged on reasons why things were the way they were very few could articulate reasons why apart from repeating references to poor parenting and a more deep-seated social malaise brought about by the unique historical circumstances of the host country. One teacher, however, gave an insightful account of local student behavior and why the Fijian teachers found that behavior challenging. This teacher had been tasked from arrival in-country to teach governance and politics at the senior secondary level. She admitted feeling ill equipped at the start but began to enjoy learning the local system of governance; the constitution; and what she termed the "bill of rights." She considered that the wider community social deficit, and in turn individual student behavior, was a direct result of liberal democratic beliefs underpinning local social and political systems. The "bill of rights," which she was ironically tasked with teaching, was considered the core of the problem. She believed local youth had too many rights and were unaware of the responsibilities that go with them. In her own words, T6 said: "I am teaching Government, it is an *Introduction to Politics*. I teach about the government of [this country], the Constitution and help them to understand their system of government. I have become familiar with [this country's] government as if I am the expert [laughs]. I think I know more than the locals." This teacher believed that the host country's political and social structures and their reflection in curriculum and practices of schooling generally have become the host country's own undoing. This statement is consistent with an overall set of domestic Fijian political and social structures that have not adhered well to basic democratic ideals (e.g., Ratuva, 2014). T6 further stated that: "The bill of rights here is a laxity. They don't seem to understand that this is serious. They are not used to guidelines and timelines. Us we are very strict."

Fijian teacher beliefs about host country student behavior and by extension parent and community behavior, is possibly symptomatic of lingering colonial discourse. The challenges expressed by the Fijian teachers may well just be a natural response that comes in a shift from teaching within a socially and politically conservative Fiji to a more liberal democratic host country. Certainly, the host country has followed a very different political, social, and cultural trajectory in recent decades compared to Fiji. It is a clash at this level that gets played out in Fijian teachers' host country classrooms. The challenges Fijian teachers face due to this social and political shift are also evident in the host country's more liberal view of inclusion and learners with special needs. Consider T5's reaction: "In some of the classes you have special education students. Last semester I had a blind student in my class as well as deaf students. All these students they do the same classes and when I teach, the special ed teachers sit at the back. Last year I had three of them including the blind teacher. I teach and then they come and teach the students. They deal with the disability, the blind etc. It must be the [foreign] way of education—*everyone has to be equal* (emphasis added)." There is further evidence here that the Fijian teachers' have frustrations with the host country's liberal democratic social and political order where "everyone has to be equal."

“Coming Down” to Social Constructivism

To this point, in most *talanoa* sessions, teaching was constituted as a war of attrition between Fijian teachers and their host country students. An expressed patience and a willingness to stick at it based on their years of experience and a genuine, if not sometimes misplaced desire, to change local attitudes kept teachers going. When pressed further, however, about actual teaching practices and what they found worked and did not work, long cherished strategies were given up in favour of others. Consider the at length response of T2 who said: “Its different in Fiji, we do a lot of paperwork on our side. But here its *hands on* by the students. You just have to *guide them* along, always *hands on* and *we guide them* along. But in Fiji we have to do a lot of talking and a few minutes at the end of the lesson we have some hands on. But here you have to make them *engaged all the time* so that they can be *interested in what they do*. Its because of the education system.” Consider also T10’s response when pressed for pedagogies that she found successful, “I divide them into *groups* and if they can do their *own research* all of them take part and they *create* posters like this [points to walls]. They *communicate in their own language* then put down the points and do presentations. It makes it easier for them to understand.” These sorts of shifts in pedagogy are described by the teachers as necessary responses to the challenging behaviors described earlier. The shifts are invariably considered as “coming down” to their level and therefore a betrayal of long cherished ideals about what it means to teach well from a Fijian perspective. The actual shift in teaching strategies, however, is a shift from the conservative behaviorism emphasized in many *talanoa* to a more socially constructivist approach to teaching. The very language choices made by T3 and T10 to describe their different approaches are the common language choices used in a lot of literature to describe socially constructivist approaches to teaching. Consider, for example, “hands on”; “guide them along”; “make them engaged”; “interested in what they do”; “divide into groups”; “own research”; and “presentations.” Consider also the relaxing of the demand for English language and allowing “their own language” and thus the shift toward a bilingual classroom (Baker, 2012). What has happened in the teaching repertoires of many Fijian volunteers has been a pedagogical shift to match the more social democratic nature of the host country away from “the formal way of teaching in Fiji [which] is keeping them quiet and using the board” (T6). It must be noted that “social constructivism” is a “key guiding principle” for teaching in Fiji as stated in two successive *National Curriculum Frameworks* (Government of Fiji, 2008 & 2013). Yet, it is beyond the scope of this research to examine the slippage between such liberal democratic policy rhetoric in Fiji and the conservative behaviorism of many senior Fijian educators such as those participating in this research.

Summary and Conclusion

The results of the discourse analysis indicate a lack of explanatory power in the official framing of the FVSS as merely a means of sharing Fiji’s human resources, skills, and knowledge with other countries in the Pacific. The analysis has not identified in any overt sense discourses of cultural difference considered a key criticism of north-south development assistance in the Pacific region (Sanga & Taufe’ulungaki, 2005). Many of the Fijian teachers have adopted a deficit view of host country learners and by extension families and the wider community in the host country. These views are very similar to the views that provided a basis for earlier colonial relationships in the British administered Pacific. Similarly, the FVSS presence in at least this one host country does mirror to a degree old hierarchy of donor and recipient with the host country perceived as disciplinary subject as in longstanding north-south development relationships (Mawdsley, 2017). Regardless of their origins, deficit views such as these have been shown to be detrimental in other national contexts particularly when it comes to the learning problems faced by Pacific minorities in majority systems, for example, New Zealand. Indicators from New Zealand clearly show that Pasifika and Maori children who struggle within mainstream education do so as a direct result of deficit positioning of students by teachers. The development of respectful, positive teaching and learning relationships such as those defined by *kotahitanga* (Bishop & Berryman, 2010) that are beginning to have a positive impact on Pasifika learners in New Zealand provide a basis for Fijian teachers working in cross border Pacific settings.

The findings affirm longstanding beliefs that quality teaching is entirely contingent on the social context within which teaching takes place (Lingard, 2011). The Fijian teachers indicate that what they find works in Fiji does not work well across the host country border. Conservative behaviorist approaches to teaching seem to have served the teachers well in their previous teaching positions, although further investigations would be needed to determine just how well these approaches have served Fijian learners given the mismatch between curriculum priorities and actual

classroom practices. The shift in many teachers' repertoire toward social constructivism indicates that the host country social systems are very different to that of Fiji. This has many implications, including the reductive nature of the search for a Pacific pedagogy in the face of decades of Western colonial influence on Pacific schooling. The identified discourses also unsettle the assumption made in the cross-border educational aid and consultancy situations, including the FVSS, that if quality teachers can merely be provided then host country "skill shortages will be reduced" (Government of Fiji, 2012) through "contributing" (Government of Fiji, 2013) "knowledge and skills" (Kumar, 2017). Often very little nuance is allowed in terms of what constitutes quality.

At best distinctions are made between broad child-centered and teacher-centered approaches. The comparative education literature points toward a "learning centered approach" (Schweisfurth, 2013), as opposed to a "learner-centered approach" to teaching where teachers choose wisely from a repertoire of teaching approaches, philosophies and paradigms depending on the context in which they teach. Although in some FVSS cases it might be inadvertent, or at worst perceived as an act of "coming down" or lowering of individual professional standards, many Fijian teachers have found themselves taking such an approach. The FVSS teachers and their independent contractor colleagues are at the end of their teaching careers. Once they return to Fiji to final retirement their understandings will be lost to the systems of both countries. This is unfortunate as the numerous lessons learned about teaching in cross cultural Pacific settings could be shared with others, particularly those working in Pacific teacher education, that is, making both Fiji's domestic education system and the FVSS more responsive to change.

Directions for Further Research

Given the findings discussed above, several directions could be taken for further investigation into the role of the FVSS teachers and the independently contracted Fijian teachers who work alongside of them. Firstly, there needs to be a broadening of the research scope to include the work done by Fijian teachers in the other Pacific host countries where social, political, and cultural conditions may or may not be similar. Research should be conducted to determine the degree of alignment or otherwise between other host country views on quality teaching and learning and those of the Fijian teachers. Findings of this wider research would usefully contribute to any re-framing of the FVSS at a policy level and a more nuanced approach to preparing the Fijian teachers before they take up their roles in their assigned host country. Secondly, future research is the need to investigate ways of capturing the experiences and expertise of retiring and returning Fijian teachers. Findings in this paper point to a significant shift in approaches to teaching in the host country by the Fijian teachers over time. There needs to be a means by which retiring and returning Fijian teachers can debrief and share new understandings about quality teaching and learning. These understandings can then not only help inform the work that future FVSS teachers will do but also contribute to region wide debates in the Pacific about culturally and socially congruent approaches to teaching and learning across the region. Finally, this research was conducted in pre-COVID 19 times where movement of people in and around the Pacific region was reasonably unrestricted. Restrictions are now in place limiting not only the return of Fijian teachers to Fiji from their host countries but also the outward-bound travel of new FVSS teachers from Fiji to elsewhere in the region. The findings reported here indicate that FVSS teachers and others have strong familial and financial links with family and community at home in Fiji.

REFERENCES

- Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Bristol: Multilingual Matters.
- Berg, L. (2009). Discourse analysis. In R. Kitchin & N. Thrift (Eds), *The international encyclopaedia of human geography* (pp. 215–221). London, UK: Elsevier.
- Bishop, R., & Berryman, M. (2010). The Kotahitanga: Culturally responsive professional development for teachers. *Teacher Development*, 14(2), 173–187.
- Blaut, J. M. (1993). *Colonizer's model of the world: Geographical diffusionism and Eurocentric history*. New York: Guilford Press.
- Burnett, G. (2004). I-Matang, I-Matang Ko na aera? Colonial discourse in Kiribati education. In P. Ninnes & S. Mehta (Eds.). *Re-Imagining Comparative Education: Postfoundational Ideas and Applications for Critical Times* (pp. 63–84). New York: Routledge.
- Department of Foreign Affairs and Trade [DFAT]. (2016). *Australia's Aid Program*. <http://dfat.gov.au/aid/Pages/australias-aid-program.aspx>

Micronesian Educator #30

- ESCAP. (2016). *Income Security for Older Persons in Fiji*, SDD-SPPS Project Working Papers Series, Social Development Division, Bangkok, Thailand.
- Government of Fiji, (2008). *Draft peoples charter for change, peace and progress and the state of the nation and economy report*.
- Government of Fiji, (2012). Fiji volunteer scheme registration, *Fiji government online portal*. <http://www.fiji.gov.fj/Media-Center/Press-Releases/FIJI-VO>
- Government of Fiji, (2013). Retirement planning expo to provide more information to retirees, *Fiji Government Online Portal*. <http://www.fiji.gov.fj/Media-Center/Press-Releases/RETIREME>
- Kohona, P. (2015). South-south cooperation: An increasingly vital element of sustainable development. *Environmental Policy and Law*, 45(3-4), 128-130.
- Kumar, V. (2017, April 23). Marshall Islands, Fiji sign deal, *Fiji Times Online*. <http://www.fijitimes.com/story.aspx?id=397832>.
- Lanyon, C. (2016, May 10). Fiji and Vanuatu sign retired teacher deal, *Fiji Times Online*. <http://www.fijitimes.com/story.aspx?id=353154>
- Lingard, B. (2011). Changing teachers' work in Australia. In N. Monkler & J. Sachs (Eds.), *Rethinking educational practice through reflexive inquiry* (pp. 229-350). New York: Springer.
- Mawdsley, E. (2017). Development geography 1: Cooperation, competition, and convergence between 'North' and 'South,' *Progress in Human Geography*, 41(1),108-117.
- Ratuva, S. (2014). The interface between affirmative action and neoliberalism: The case of Fiji. *Cultural Dynamics*, 27(1), 135-154.
- Sanga, K, and Taufe'ulungaki, A. (Eds.) (2005). *International aid impacts on Pacific education*. Institute for Research and Development in Maori and Pacific Education, Victoria University of Wellington.
- Schweisfurth, M. (2013). Learner-centered education in developing country contexts: From solution to problem? *International Journal of Educational Development* 31, 425-432.
- Vaioleti, T. (2006). Talanoa research methodology: A developing position on Pacific research. *Waikato Journal of Education*, 12, 21-34.
- Ware, H. (2015). Cosmopolitanism, national interest, selfishness, and Australian aid. *Social Alternatives*, 34(1), 51-57.
- White, C. (2014). Deficit thinking redux: Cultural deficit discourse and an urban community and school in Fiji. *Social Identities*, 20(2-3), 155-170.

The Effects of Review Games Using Kahoot! on Students' Quiz Scores

Ihmar L. Aldana, University of Guam

This study examined the effects of review games using Kahoot! on students' quiz scores and student engagement. It was conducted in a high school geometry classroom in Guam, with 42 participants in the 10th through 12th grade. The data collected during the six-week period of the study included students' quiz scores and number of off-task students for both the experimental group and the control group. The quiz scores and number of off-task students from the class that participated in review games using Kahoot! were compared to the class that received a teacher-led review. As a result, the use of Kahoot! during review games produced higher overall quiz averages and more observable student engagement when compared to the outcomes of a traditional teacher-led review.

Keywords: review game, Kahoot!, competition, game-based learning, geometry classroom

This study was designed to increase student engagement in a high school geometry class by playing review games using Kahoot! before taking a quiz. The experimental group was a geometry class participating in review games using Kahoot! and the control group was a class with similar student diversity and learning ability that receives a traditional teacher-led review. The effects of increasing student engagement using Kahoot! on students' quiz scores were calculated by comparing the assessment results of the experimental group with those of the control group. The study took place in a geometry classroom at Tiyan High School in Guam. The research involved a total of 42 students from two morning classes with 21 students in each class. There was a total of 20 girls and 22 boys. The experimental group was made up of 12 girls and 9 boys, while the control group was made up of 8 girls and 13 boys. All students were between 15-18 years old and 10th, 11th, and 12th graders.

It is crucial for the educator to know strategies that would help students recall previously learned concepts to prepare them to demonstrate knowledge through given assessments. These strategies, however, should ensure that there is sufficient student engagement in the process of reviewing to achieve expected quiz scores. Since the presence of low student engagement often contributed to students' inability to achieve a grade of B or better on their quiz scores, the teacher needs to implement highly engaging activities such as review games. With this, they become a part of the learning experience. This study would determine whether playing review games using Kahoot! is more effective than a traditional teacher-led review in helping students achieve desirable quiz scores.

While disruptive behaviors in the classroom were not a significant problem in either of the geometry classes, it was also evident that, at times, student interest began to wane, and attention became difficult to maintain. The instruction was designed in incremental steps, gradually increasing in difficulty to give students time and practice in order to succeed in understanding course content. However, once student engagement diminishes, it becomes difficult for them to get the full benefits of instruction and score well on quizzes and tests. Therefore, Kahoot! will be used for the review games to keep the students engaged throughout the activity.

Since student outcomes on assessments in a high school geometry class were not as high as they should be, this study was designed to look at possible improvement by infusing technology into the classroom activities to increase student engagement. More specifically, technology was used when the students participated in review sessions for their quizzes. The purpose of this study was to determine whether or not the use of Kahoot! for review games before administering quizzes would result in higher scores when compared to the outcomes of students who received a teacher-led review. This study was guided by the following research questions: (1) Will the use of Kahoot! as a tool for review games in a high school geometry class improve students' quiz scores more than the usual teacher-led review? And (2) does the use of Kahoot! as a tool for review games result in more observable student engagement when compared to student engagement from a teacher-led review?

Review of the Literature

The benefits of practice and review before quizzes and tests have been extensively studied over the years. However, with this age of technology, it is important to know whether technological applications can benefit student learning in a normal classroom setting. Although some research has studied the potential benefits of integrating Kahoot! in the classroom, researchers do not always agree on their conclusions.

Student Engagement

Desirable academic performance is usually tied to students who are highly engaged in their classroom lessons. Student engagement in the classroom is seen as one of the best predictors of one's learning and personal development. Students are evidently engaged when they are captivated in the lessons and participating in the designed classroom exercises (Abubakar, Abubakar, & Itse, 2017). A study by Corso, Bundick, Quaglia, and Haywood (2013) supports this by stating that there is a great amount of research that links student engagement to desirable academic and life outcomes. Students who are likely to excel academically and score higher on standardized examinations are those who are highly engaged in their schoolwork. Abubakar et al. (2017) describe three dimensions of student engagement: (1) behavioral; (2) cognitive; and (3) emotional engagement. *Behavioral* engagement relates to the students' attitude towards attending class, attentiveness during class activities, and effort exerted in class. *Cognitive* engagement involves indicators that are more internal such as self-regulation and self-sufficiency. This relates to the students seeking to learn and achieve academic goals. *Emotional* engagement includes the students' emotions and the degree of interest or boredom in the classroom activities.

Promoting Student Engagement

Corso et al. (2013) state that recognizing the students' internal and external views on student engagement is the best way to define and understand it. They explain that engagement is comprised of three modes. These three models include being engaged in *action*, *thought*, and *feeling*. All these three modes are consistent with behavioral, cognitive, and emotional engagement as defined by other researchers. Lekwa, Reddy, and Shernoff (2019), for instance, add that student engagement occurs when students can focus on the lessons and actively participate in the classroom. The authors suggest that student learning and achievement substantially depend on how the teacher delivers instruction, as well as the level of student involvement and attention during the activities. However, it is important to note that academic achievement is still dependent on the critical content covered by the teacher. To promote and ensure student engagement, the teacher should focus on how the students interact with their environment (Corso et al., 2013). Also, teachers should incorporate effective instructional strategies that guarantee active participation and undivided attention from students to promote academic achievement (Lenny, Reddy, & Shernoff, 2019). Gebbels (2018) states that the three aspects of learning include listening, seeing, and experiencing: all these aspects are met using digital technologies for instruction in the classroom. These researchers suggest that promoting student engagement has numerous benefits.

Positive Effects of Student Engagement

Engagement in the classroom lessons contributes to students' demonstration of desirable behaviors. Corso et al. (2013) explain that student engagement helps in increasing student participation, which often leads to obtaining higher grades. They highlight that students who are engaged generally perform well in their academics. Students taking interest in the learning task and academic accomplishment habitually yield personal satisfaction. It is also with these conditions in the classroom that ideal and effective instruction occurs (Abubakar et al., 2017). Corso et al. agree by stating that students who are engaged are more likely to experience individual well-being by feeling satisfied with their lives and having more self-esteem. Additionally, these students are less likely to get involved in risky sexual behaviors and crime. Lekwa et al. (2019) desirable behaviors that result from student engagement include responding to the teacher's cues and questions, as well as assisting their peers. The presence of these behaviors in the classroom produces meaningful student learning. Moreover, the students who are likely to attend and graduate from post-secondary institutions are those who are more engaged in school. Some researchers propose that student engagement has contributed to decreasing achievement gaps (i.e., Corso et al., 2013).

Game-Based Learning

Game-based learning (also known as educational gamification) is the use of games in the classroom to promote student-driven exploration. This refers to the type of instruction that deals with realistic game experiences (White & McCoy, 2019). McColgan, Colesante, and Andrade (2018) state that game-based learning is used interchangeably with the term “serious games.” The authors propose that game-based learning should include both pedagogical and entertainment value. Games that have been developed to be educational instruments are considered serious games. Other games that were initially created for entertainment but were later remodeled for educational purposes are also considered serious games. Ahmad, Malik, Siddiqui, and Khan (2018) add that one type of game-based learning that continues to advance in the field of education is digital game-based learning. The authors suggest that digital game-based learning is defined as the use of technological devices such as cellphones, tablets, and computers in a learning activity to promote experiential engagement. Using technological gamification in the classroom to deliver academic content is a promising avenue. This is crucial as there are newer educational standards that emphasize the need for teachers to support student learning with technologies. Many teacher preparation programs across the nation are preparing new educator candidates to create student-centered strategies with technology (McColgan et al., 2018). Ahmad et al. (2018) continue their recommendation that digital-game based learning provides means for students to act as players, fully engage with the course material, and learn through meaningful interaction as opposed to traditional schooling, textbooks, and other assignments.

Benefits of Game-Based Learning

There are existing studies that have proven and explained the benefits of digital game-based learning including increased motivation, involvement, and enhanced student academic performance (Gebbers, 2018). A study by White and McCoy (2019) agrees and states that game-based learning or serious games are persistently used in the classrooms as they have helped encourage student participation and motivation. McColgan et al. (2018) say that students have expressed the positive effects of participating in a game-based learning activity with the use of technology. According to the authors, digital game-based learning helped their students acquire content knowledge and skills with ease. Additionally, students mention that they view themselves more immersed in the content and interactive after participating in such games. These findings are supported by the research that White and McCoy (2019) conducted. They report that the principle of social interaction is what guides serious games. Using the method of competitive exploration, digital game-based learning offers students many opportunities to discover concepts. Ahmad et al. explain that play is a crucial element in the development of children and digital technology has played a key part in exploring this element. The authors also highlight digital game-based learning’s potential to impart deeper learning. Gebbers (2018) adds that her students exhibited a growth mindset after teaching math in the form of a game. This growth mindset from the students is supported by their improved academic performance. Although studies from these researchers explain the different benefits of integrating digital game-based learning in the classroom and mention no negative effects, Gebbers warns that technology alone, will not make activities better as it is still crucial for the teacher to know the students’ profiles and understand the learning objectives.

Competition Environment in the Classroom

A competition involves two or more people in an activity such as a game, wherein there would be a winning individual or group in the end. Students have been exposed to competition since they were at a young age. Mazza’s (2018) study incorporates competition in a review activity for two of his classes to determine the effects of competitive environment on student success in the classroom. Competition could serve as a motivation for students to succeed or a hindrance to students exerting insufficient effort. In conclusion, he says that competition as an intervention for a review resulted in higher quiz averages. Aside from integrating competition in a review activity, it could also be adapted when conducting actual assessments. Cutri, Marim, Cordeiro, Gil, and Guald (2016) suggest that using a digital game-based learning tool such as Kahoot! brings natural competition in the classroom, which creates a fun and friendly environment for the students.

Kahoot! in the Classroom

One of the latest and most popular digital game-based learning tools that educators and students enjoy using is Kahoot! (Sabandar, Supit, & Suryana, 2018). Kahoot! is a game-based student-response system that focuses on engaging the students in the classroom. It is an educational software that offers teachers the ability to create

questionnaires, quizzes, discussions, and exams (Tóth, Lógó, & Lógó, 2019). The same authors state that the use of digital game-based learning tools such as Kahoot! improves participation because it keeps students involved by using technologies that they are already familiar with. They add that when something relevant to young students is integrated into their activities, meaningful learning happens. Cutri et al. (2016) claim that students are more engaged and motivated when using Kahoot! since it can be accessed through new technological resources such as their cellphones. Tóth et al. (2019) explain that students enjoy and find activities that use digital game-based student-response systems more engaging than the traditional pen-and-paper forms. They also mention that they used Kahoot! to create and administer quizzes in their classes (2019). Cutri et al. (2016) state that they used Kahoot! to give a quiz at the beginning of class to reinforce concepts and skills that they have already gone over during their previous class meetings. Prieto et al. add that Kahoot! has templates that allow teachers to add images and videos to enhance their presentations. The authors stress that the use of Kahoot! as a formative assessment allows the teacher to identify specific concepts that students may have difficulties with. Therefore, teachers can take appropriate actions in addressing the problems in the learning process.

Method

This study aimed to increase student engagement by having students participate in a review game using Kahoot! before taking their quizzes. The research was designed to explain the effects of playing review games using Kahoot! on students' quiz scores in a high school geometry class at Tiyan High School in Guam.

Participants. The participants in this study were from two geometry classes (Class A and Class B) with a total of 42 students. The students were made up of 10th, 11th, and 12th graders and from ages 15-18 years old. There was a total of 20 girls and 22 boys. Class A had 12 girls and 9 boys, while Class B had 8 girls and 13 boys. Both classes had approximately the same distribution of difficult learners, advanced learners, and English as a Second Language (ESL) students. None of the classes had any student receiving special education services. Both classes were similar in terms of academic achievement and quiz outcomes. All the students had Kahoot! experiences from their previous classes. Therefore, all participants were familiar with using interactive technology as an educational tool.

Materials. To reduce the variability in the outcomes, the same set of review questions were provided to both the experimental and control groups. The teacher used the iPad and projector to deliver the same lecture notes to both classes. The same set of checkpoint and textbook problems were assigned to the students during the pre-intervention period. At the start of the review sessions, students were provided scientific calculators, white/filler papers, and pencils that they used to work out the solutions to each problem. Students from the experimental group used their cellphones for the review game. The students either connected to the internet via school Wi-Fi or their data from their cellphone carrier. The game PIN that allowed the students to join the review game on Kahoot. It was projected on the board. At the end of the review sessions, the teacher administered the quizzes with the same set of questions to both classes. All the participants were allowed to use scientific calculators.

Procedure. The teacher ensured that the lesson plan used for both classes had the same content. The only variation was the delivery of the review. The control group was made up of students from Class A, while the experimental group was comprised of the students from Class B. Students from both Class A and Class B participated in a review and took their quizzes every fifth-class meeting. Class A received copies of the review problems, as well as scientific calculators and white paper. The review for this group was teacher-led. Therefore, the students were instructed to pay close attention and take notes. The teacher went over each of the problems and their solutions with the class. The students were given the chance to ask questions after each problem was discussed and solved. The quizzes were given to the students after each teacher-led review was finished. Class B was given scientific calculators and white paper, wherein they were able to write their own work and solution during the game. To start the review game, students were instructed to log into kahoot.it to enter the game pin. The game pin to join the review game online was announced aloud, as well as projected for the students to see. Then, the teacher started to project the problems from the review game. When the time was up to answer each question, the distribution of students' responses was displayed with the correct answer being highlighted with a checkmark. The teacher then presented and explained the complete solution to the class. The students had the chance to ask for further clarification on the questions before moving on to the next. The quizzes were administered after each review game using Kahoot! was played.

Data Collection and Analysis. The classes chosen for this study were similar in composition and achievement. That is, the distribution of difficult learners, advanced learners, and English as ESL students was about the same for both classes. Consequently, the quiz outcomes of both groups were generally very similar. The data obtained were the participants' scores from the three quizzes given. The scores will be in percentages. They were used to analyze the effects of playing a review game using Kahoot! on students' quiz scores. The mean quiz scores from both the control and experimental groups were compared to determine the percentage point differences in the mean scores of each quiz, as well as which group obtained the higher overall average. The scores used for the data analysis were only from the participants who participated in all three review sessions and took all three quizzes.

Limitations. This research presents several limitations that could be possibly addressed by extending the study. The limitations of this study include the small sample size of 42 students in a high school geometry class in Guam and the short amount of time that was possible for the implementation of the intervention. While there were occasional student absences from both the experimental and control groups during the intervention days for quiz preparation, overall, these absences were few enough that they did not significantly affect the class averages. However, the findings of this study may not apply to other populations.

Research Questions and Hypotheses. The first research question was: Will the use of Kahoot! as a tool for review games in a high school geometry class improve students' quiz scores more than the usual teacher-led review? (Hypothesis 1: The use of Kahoot! as a tool for review games in a high school geometry class will improve students' quiz scores more than the usual teacher-led review.) The second research question was: Does the use of Kahoot! as a tool for review games result in more observable student engagement when compared to student engagement from a teacher-led review? (Hypothesis 2: The use of Kahoot! as a tool for review games will result in more observable student engagement when compared to student engagement from a teacher-led review.)

Results

Data from the participants included all students' scores on the three quizzes given during the implementation phase of the study. The same quiz was always administered to both the experimental group and the control group, and the mean scores in percentages were calculated for each. In addition, the differences in mean scores between the two groups (higher mean minus lower mean) were calculated for all quizzes. Research Question 1 asks whether the use of Kahoot! as a tool for review before quizzes in a high school geometry class will improve students' quiz scores more than the usual teacher-led review. Table 1 summarizes the mean scores for all three quizzes that the participants from both the experimental and control groups achieved. Since the mean scores from the experimental group were higher, the percentage point differences for each of the quizzes shown in the table were obtained by subtracting the mean scores of the control group from those of the experimental group.

Table 1
Summary of the Differences in Students' Quiz Averages in Percentage Points

	Quiz 1 (Mean)	Quiz 2 (Mean)	Quiz 3 (Mean)
Experimental Group (N = 18)	83.3%	81.1%	82.2%
Control Group (N = 16)	78.8%	71.3%	70.0%
Percentage Point Difference (Exp – Con)	+4.5	+9.8	+12.2

Although the general ability of the students and typical quiz outcomes for the experimental and control groups were very similar before the intervention, when looking at Table 1, it is clear that the students from the experimental group who participated in the review game using Kahoot! prior to taking the quiz achieved higher overall average scores than those in the control group on every quiz administered. The experimental group had a mean score of 83.3% for Quiz 1, while Quiz 2 and Quiz 3 produced mean scores of 81.1% and 82.2%, respectively. The control group averages for the three quizzes covering the same content were 78.8%, 71.3%, and 70.0%, respectively. This shows that, on average, the experimental group achieved quiz results that were a full letter grade (B vs. C) higher than the control group.

Micronesian Educator #30

Quiz 1 yielded the highest mean score in experimental and control groups, which indicates that the subject content covered by the last two quizzes was becoming increasingly difficult, as would be expected in a high school geometry class. Although the participants' mean quiz scores decreased as the content material became more challenging, the differences in the quiz outcomes between the experimental and control groups increased. For Quiz 1, the percentage point difference between the mean scores of the experimental group and the control group was 4.3. The percentage point differences between the mean scores of Quiz 2 and Quiz 3 were 9.8 and 12.2, respectively. Quiz 3, which had a 12.2 percentage point difference between the experimental and control groups showed the greatest difference. The progressive differences between the experimental and control groups' averages have continued to increase over time. With all other elements of instruction and assessment remaining the same for both groups, the most likely explanation for the increase in mean quiz scores and the continuous increase in the differences among these averages can be attributed to the use of Kahoot! with the experimental group. The use of Kahoot! as a review tool can be very effective for improving quiz scores in high school geometry classes. A part of the results worth noting is the mean scores of the ESL students from both groups. Table 2 summarizes the mean scores for Quiz 1, Quiz 2, and Quiz 3 for the ESL students.

Table 2
Summary of the Differences in ESL Students' Quiz Averages in Percentage Points

	Quiz 1 (Mean)	Quiz 2 (Mean)	Quiz 3 (Mean)
Experimental Group (N = 4)	85.5%	75.0%	80.0%
Control Group (N = 3)	80.0%	66.7%	66.7%
Percentage Point Difference (Exp – Con)	+5.0	+8.3	+13.3

The ESL students from the experimental group had a mean score of 85.0% for Quiz 1, while Quiz 2 and Quiz 3 produced mean scores of 75.0% and 80.0%. The control group averages for the three quizzes covering the same content were 80.0%, 66.7%, and 66.7%, respectively. Similar to their whole class averages, Quiz 1 yielded the highest average for the ESL students in both the experimental and control groups. For Quiz 1, the percentage point difference between the mean scores of the experimental group and the control group was 5.0. The percentage point differences between the mean scores of Quiz 2 and Quiz 3 were 8.3 and 13.3, respectively. Quiz 3, which had a 13.3 percentage point difference between the experimental and control groups showed the greatest difference. The progressive differences between the experimental and control groups' averages for the ESL students also continued to increase over time. Since the results of the ESL students resemble their respective group's results, the most likely explanation for the increase in the differences in averages over time can be linked to the participation of the ESL students from the experimental group in review games using Kahoot! before taking their quizzes.

The hypothesis for Research Question 1 stated that the use of Kahoot! as a tool for review games in a high school geometry class would help improve student scores on content quizzes. Overall, this study shows that the use of Kahoot! had a positive impact on the performance of geometry students on their quizzes. Outcomes indicate that not only did the students' scores improve, but over time, they were increasingly better than the control group's mean scores. Therefore, the hypothesis for the first research question is shown to be correct. Research question 2 asks whether the use of Kahoot! as a tool for review games before quizzes will result in more observable student engagement when compared to student engagement from a teacher-led review. Figure 1 shows the number of students who were off-task and needed to be redirected during the review sessions for both groups. The review sessions with the experimental group used Kahoot! while the sessions with the control group were teacher-led.

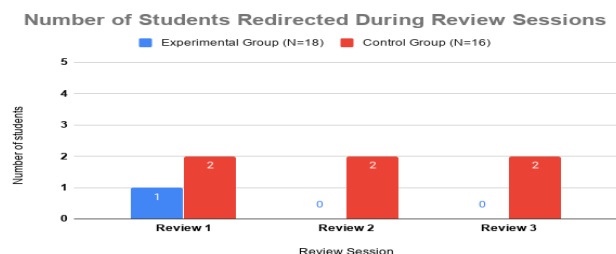


FIGURE 1. Number of Students Who Needed Redirection During the Review Sessions

During the first review session, there was one student from the experimental group and two students from the control group who needed to be redirected. No student was off-task from the experimental group during the second and third review sessions, while there were two students from the control group who were off-task for those sessions. The students who needed redirection received both verbal and non-verbal directives from the teacher. The verbal directives used by the teacher involved asking the students what they think about the review problem at hand. This type of directive prompted the students to look at the problem and attempt to formulate the solution. The non-verbal directives included hand signals and gestures and standing next to the off-task student's desk. These instructions shifted the students' attention back to the current problem being worked on during the review session. Furthermore, the teacher only had to give these directives to the students once. That is, the student remained focused for the remainder of each review session. It is important to highlight that the off-task behaviors that the students displayed were non-disruptive. All off-task students from the control group appeared to be daydreaming during the session and therefore requiring redirection. The off-task student from the experimental group during the first review session was working on a different task. More specifically, the student was troubleshooting the device's setting as the student deemed the internet connectivity was not ideal.

As illustrated in Figure 1, the number of students in the experimental group who were off-task and needed to be redirected diminished, whereas the number of off-task students in the control group remained the same for all three review sessions. In addition, the eagerness of students to participate in the review activity was notably greater when using Kahoot! Encountering greater student enthusiasm and fewer off-task behaviors suggest that the students who participated in the review games using Kahoot! appeared more motivated and engaged, as they maintained the focus on the task at hand more than those who did not. The level of motivation and engagement demonstrated by participants in the experimental group can be attributed to the fact that the review session was gamified. The hypothesis for Research Question 2 stated that the use of Kahoot! in a review game will result in more observable student engagement when compared to student engagement from a teacher-led review. Since the results showed that there were more engaged and on-task students in the experimental group when compared to the number of students in the control group, the hypothesis for Research Question 2 is supported.

Conclusion

This study was conducted to examine the effects of using Kahoot! as a review game in a high school geometry classroom on students' quiz scores and student engagement. The purpose was to determine whether or not the use of Kahoot! for review games before administering quizzes would result in higher scores when compared to the outcomes of students who received a teacher-led review. This study was done to see if the same intervention would yield more observable student engagement when compared to student engagement from a teacher-led review. The findings presented in this study suggest that using Kahoot! for review games in a high school geometry classroom resulted in overall higher quiz average and more observable student engagement when compared to the quiz average and engagement of students who were presented with a traditional teacher-led review.

The improvement of students' attitude towards learning and the boost in their motivation as a result of the gamification of the review session were consistent with existing research by White and McCoy (2019), which proved and explained the various benefits of game-based learning. The higher overall quiz averages of the class that participated in review sessions using Kahoot! proved that promoting individual active participation results in desirable academic performance (Corso et al., 2013). Additionally, the results of having more observable student engagement in a classroom that use Kahoot! as a tool for review sessions reflected the findings of a previous research study that highlighted a greater involvement of students in technological activities than the traditional pen-and-paper forms (Tóth et al., 2019). The integration of Kahoot! in review activities has shown positive effects on the students' academic performance through increased motivation and engagement. Overall, the results of this study agree with the current literature.

The use of Kahoot! during review games in a high school math classroom helped many students to recall the concepts learned in previous classes. In addition, students in the present study's experimental group showed enthusiasm towards the review game using Kahoot!, by actively requesting it. The magnitude of positive effects from using

Kahoot! in review games (e. g., effects on students' exam scores) will likely increase in classrooms where students all use similar devices, and where Internet access is highly reliable. (Neither condition obtained in the present study.) Future studies may address this possibility.

REFERENCES

- Abubakar, A. M., Abubakar, Y., & Itse, J. D. (2017). Students' engagement in relationship to academic performance. <https://pdfs.semanticscholar.org/ec53/431afcac01859ba38e57777ad1c10c6b048a.pdf?ga=2.53289067.2100654798.1586474713-2146674220.1586474713>
- Ahmad, F., Malik, M., Siddiqui, S., & Khan, H. (2018). Investigating the impact of game-based learning in mathematics on tablets among primary school students. <http://dl4d.org/wp-content/uploads/2019/03/Pakistan-DGBL.pdf>
- Corso, M., Bundick, M., Quaglia, R., & Haywood, D. (2013). Where student, teacher, and content meet: Student engagement in the secondary school classroom. *American Secondary Education*, 41(3), 50–61.
- Cutri, R., Marim, L.R., Cordeiro, J.R., Gil, H.A., & Guald, C.C. (2016). Kahoot, a new and cheap way to get classroom-response instead of using clickers. <https://www.asee.org/public/conferences/64/papers/14649/view>
- Gebbers, M. (2018). Re-engineering challenging and abstract topics using Kahoot!: A student response system. *Compass: Journal of Learning and Teaching*, 11(2). doi: <https://doi.org/10.21100/compass.v11i2.844>
- Lekwa, A. J., Reddy, L. A., & Shernoff, E. S. (2019). Measuring teacher practices and student academic engagement: A convergent validity study. *School Psychology*, 34(1), 109–118.
- Mazza, N. (2018). Competition: Motivating or declination of academic success. <https://scholarworks.bgsu.edu/honorsprojects/328>
- McColgan, M., Colesante, R. & Andrade, A. (2018). Pre-service teachers learn to teach with serious games. *Journal of STEM Education*, 19(2). Laboratory for Innovative Technology in Engineering Education. <https://www.learntechlib.org/p/184156>
- Prieto, M.C., Palma, L.O., Tobías, P.J.B., & León, F. J. M. (2019). Student assessment of the use of Kahoot in the learning process of science and mathematics. *Education Sciences*, 9(1), 55.
- Sabandar, C., Supit, N. R., & Suryana, E. (2018). Kahoot!: Bring the fun into the classroom! <https://doi.org/10.20961/ijje.v2i2.26244>
- Tóth, Á., Lógó, P., & Lógó, E. (2019). The effect of the Kahoot quiz on the student's results in the exam. *Periodica Polytechnica Social and Management Sciences*, 27(2), 173–179.
- White, K., & McCoy, L. P. (2019). Effects of game-based learning on attitude and achievement in elementary mathematics. *Networks: An Online Journal for Teacher Research*, 21(1), 1–17.

The Effects of Choral Reading and Peer Discussion in Small Groups on Reading Fluency and Comprehension in a 3rd Grade Classroom

Alyxandra Borja Reyes, University of Guam

This study has focused on increasing reading fluency and reading comprehension in the third-grade reading class by adding frequent use of choral reading and peer discussion to regular reading instruction. The choral reading intervention aims to increase reading fluency through modeled reading of accuracy, rate, and expression. The intervention of peer discussions in small reading groups aims to increase reading comprehension through the strategy of thinking out loud. The results indicate that choral reading in small groups is an effective intervention method for students who are almost proficient in reading fluency.

Keywords: reading comprehension, choral reading, peer discussion, elementary classroom

This study was designed to determine whether the use of choral reading and peer discussions within small groups would be successful in increasing reading fluency and reading comprehension in a third-grade classroom. Reading proficiency in Guam is a regular topic in research. The third grade is an important transition year in primary school with expectations of students to progress from learning to read into reading to learn. Students advance from learning decoding skills in second grade into learning more complex comprehension skills in the third grade.

From the beginning of the school year, it was evident that the majority of students in this third-grade class were performing well below proficiency in both reading fluency and reading comprehension. Students struggled with accuracy, reading rate, and correct expression when attempting to read third grade leveled passages. Additionally, many students had difficulties answering the fundamental comprehension **who**, **what**, **where** and **when** questions (4W Questions) pertaining to the text. The ability to answer the 4W Questions is a basic skill that is generally expected to be mastered by the end of the second grade. It was also clear that low reading skills have had a negative effect on students' academic progress in other content areas including Health, Science, Social Studies, Language Arts, and Math. Modified directions and assignments were often given to help students successfully achieve acceptable performance on standards in various content areas, however this does not solve the underlying problem of low reading skills. Below grade-level reading ability effects scores on annual standardized tests not only in Language Arts, but in other content areas as well, resulting in low test average scores overall.

The objective of this study is to increase reading fluency and reading comprehension in the third-grade reading class by adding frequent use of choral reading and peer discussion to regular reading instruction. The choral reading intervention aims to increase reading fluency through modeled reading of accuracy, rate, and expression. The intervention of peer discussions in small reading groups aims to increase reading comprehension through the strategy of thinking out loud. Changes in student progression or regression of reading fluency and comprehension were measured throughout the six-week intervention period through oral and written tests and teacher observations. This study was guided by the following research questions: Does choral reading in small groups increase fluency in oral reading among third grade students in a public-school setting? Will peer discussion in small groups increase reading comprehension a third grade in public-school setting?

Review of the Literature

Importance of Reading

Reading is a foundational skill that contributes to all students' futures and academic success. Third grade is a critical transition year in primary school in which students are expected to move from learning how to read into reading to learn. This is an important period wherein students have already mastered reading fluency, phonemic awareness, and phonics. In the third grade, they begin to build more complex skills of reading comprehension such as critical thinking and summarizing texts (The Annie E. Casey Foundation, 2000).

Micronesian Educator #30

The National Assessment of Educational Progress (NAEP) is a program that was created after a need for national assessment and now includes researchers, district education officials, policymakers, and teachers who collaborate to measure students' academic performance in the United States (National Assessment of Educational Progress, 2018). Student performance in the area of reading has been observed to be declining since 1992 when the NAEP began administering and recording reading assessments to fourth and eighth grade students in the United States. In 1992, the National Center for Education Statistics (NCES) reported 29% of fourth grade students scored at or above reading proficiency. The most recent assessment in 2019 determined that 35% of fourth grade students were at or above the NAEP reading proficient level (National Center of Education Statistics, 2020).

Student reading performance scored in 2019 are as follows: 66% students scored at or above the fourth-grade basic achievement level, 35% students scored at or above the fourth-grade proficient level, and 9% students scored at the advanced level (The Nations Report Card, 2020). Student reading performance scored in 1992 are as follows: 62% at or above the fourth-grade basic achievement level, 29% at or above the fourth-grade proficient level, and 6% at the advanced level (NCES, 2020). In a span of twenty-seven years, there has been a slight (6%) increase of students who reached reading proficiency, notably leaving 66% of students below proficiency. There is a substantial percentage of students below proficiency in reading and not a significant amount of change since assessments were first given in 1992. In 1997, Congress attempted to find a solution to the nation's low reading scores by requesting the Director of the National Institute of Child Health and Human Development and the Secretary of Education to organize a national panel with a focus on reading. In 2000, the Panel constructed five essential components as follows: phonemic awareness, phonics, vocabulary, fluency, and comprehension. These constituents of proficient reading are in alignment with the Common Core State Standards, providing educators with the knowledge and strategies to help develop proficient readers (Fiester, 2010). The National Assessment of Educational Progress recently reported that 65% of fourth graders and 66% of eighth graders performed below reading proficiency in the NAEP reading assessment in 2019 (The Nations Report Card, 2020).

In response to the issue of low nation-wide reading scores the Annie E. Casey Foundation (2000), a foundation focused on promoting the success of at-risk children, published *Learning to Read: Why Reading by the End of Third Grade Matters* to raise awareness of the importance of reading in the third grade. This long-term research supported the idea that the third grade is a crucial time for students to reach reading proficiency, emphasizing that the expectations of reading on grade-level will have an effect on areas of life well beyond academics in the classroom (Fiester, 2010). The failure to acquire grade-level reading skills hinders student achievement in other interdisciplinary areas such as science and social studies in which reading and language arts are often integrated, contributing to overall academic scores. Students may continue to struggle with this skill and endure challenges within other interdisciplinary areas as they continue onto the higher-grade levels of their academic careers.

Reading Fluency

Reading fluency is identified by the Panel as a necessary component to navigate students towards reading proficiency (Fiester, 2010). Within reading fluency, there are three interdependent concepts: accuracy, rate, and expression. Accuracy is measured by a students' ability to identify words correctly and, additionally, know the meaning of words that are being read. Accuracy is also known as the ability to decode and automatically identify words and its meaning. The International Literacy Association recognized that the skills of word identification and knowledge of word meanings must be simultaneous and effortless for a student to be considered an effective fluent reader. A student who lacks accuracy in reading will struggle with phonics or decoding. As a result, the students' focus will be on these areas, such as decoding a word, instead of comprehending the text being read (International Literacy Association, 2018). Reading Rockets, a national public literacy media recognized by the Library of Congress, also emphasized the importance of reading fluency as students enter the upper elementary grade levels (Reading Rockets, n. d.). In the fourth grade, there is an increase in the length and density of reading passages (International Literacy Association, 2018). Students are expected to read with accuracy to progress towards learning more complex reading skills that are required in the third grade.

The second component of reading fluency is rate, the speed in which a student reads a text. Speed and reading fluency are often confused with each other. Although a student may read at a fast speed, they might lack expression or reading comprehension. Educators in the classroom may encourage students to slow their reading to a rate in

which the student can comprehend the text that is being read. While rate proves to be essential in reading fluency especially when it comes to reading longer passages, the ultimate goal in reading is the student understanding what is being read (ILA, 2018). The last component of reading fluency is expression. The International Literacy Association (ILA) identified expression to include pitch, tone, volume, emphasis, and rhythm of a student when reading a text (ILA, 2018). Research by the National Assessment of Educational Progress significantly noted that reading expression is a characteristic of a fluent reader through their ability to naturally express the passage; readers who are not yet fluent will lack this skill (Daane, 2005).

Third Grade Proficiency Expectations

Students who are not proficient in reading specifically by the third grade will experience challenges in upcoming grade levels. In the fourth-grade, students' reading comprehension skills are applied to understand content and absorb information through reading texts. Students begin to learn independently through reading; they are reading to learn. Without grade-level reading skills, many students inevitably come across a literacy barrier that prevents them from learning the same academic content with their peers. As a result, research shows that students who struggle with reading proficiency in fourth grade encounter academic challenges and become more susceptible to dropping out of high school (Fiester, 2010). A review based on 203 published studies on understanding predictors of high school dropouts concluded that poor academic achievement beginning as early as elementary school is in the high ranks of strong predictors (Rumberger & Lim, 2008). A cross sectional study over 4,000 students, conducted by the City University of New York, found that 88% of students who did not receive a high-school diploma were struggling readers during while in elementary grade levels (Samuels, 2015).

The expectations to meet reading proficiency in the third grade are so significant that many states adopted "third-grade retention laws," requiring students to meet a specific reading proficiency level before they can progress to the next grade (Lee, n. d.). As of 2017, there are 16 states in America that have adopted this policy (Bayer, 2017). Although there is controversy on student retention, many researchers believe that retaining a student prior to fourth grade is beneficial to the students' success. Statistics collected in 2004 discovered that 21% high school dropouts had been previously retained in other grade levels (National Center for Education Statistics, 2006): 17% of these students were retained in secondary grade levels (6th–12th grade) and 10% were retained in elementary grade levels (K–5th grade), indicating that students are less susceptible to the incompleteness of high school if they are retained in elementary grade levels in order to gain proficiency in foundational skills.

Research conducted by Martin West, a professor from Harvard Graduate School of Education, shows that third-grade retention when the child had not gained a sufficient level of reading skills had positive effects on academics with an emphasis in reading and math scores (Schwerdt & West, 2017). Although there are beliefs that retaining students creates results of high school student dropouts, Schwerdt and West's study produced results that third-grade retention had no effect on these students graduating from high school. Students in this study needed little remediation throughout the rest of their school years, leading to conclude that they had less difficulties once reading proficiency was obtained.

Choral Reading Fluency Benefits

An article in *The Reading Teacher*, published by the International Literacy Association, emphasizes that modeling fluent reading is a significant way for students to develop reading fluency (Richards, 2000). Students are more likely to mirror fluent reading when they hear correct accuracy, rate, pitch, and expression. The National Institute for Literacy describes choral reading as a group of students reading aloud in unison or simultaneously (2001). The instructor will read the text to model fluent reading including accuracy, rate, and expression. Afterwards, the whole class will read together in unison. Choral reading is a classroom strategy that helps develop fluent readers through the instructional strategy of modeling.

Correlation Between Reading Fluency and Comprehension

Several studies have examined the correlation between reading fluency and reading comprehension. Researchers have questioned whether oral reading fluency can be an indicator of students' reading comprehension. The Florida Center for Reading Research conducted a longitudinal study over students from kindergarten to third grade (Young-

Suk, Petscher, Schatschneider, & Foorman, 2010). This study concluded that although oral reading fluency has been theorized as a strong predictor of reading comprehension once oral reading fluency is achieved students' comprehension scores did not show any additional signs of growth (2010). Reading is a cognitive process of the perception of text as a combination of fluency, including phonemes and letter sounds, and comprehension or the understanding of the text (Basaran, 2013). ORF contributes to reading comprehension to the extent of understanding the text that is being read instead of focusing on decoding words or the unknown meaning of words. Yet, it is not the sole predictor of reading comprehension and students will need to be taught more complex reading skills to further their growth.

Basaran Mustafa of Dumlupinar University completed a study that also examined the correlation between reading fluency and reading comprehension. The results of this study supported that fluency may be an indicator of reading comprehension, however educators additionally need to build students' reading skills in order to reach in-depth comprehension (2013). Furthermore, the results of his study concluded that reading at a speed parallel to the natural rate of speaking influences positive comprehension results while speed reading may produce negative results on reading comprehension scores. Notably in this research, it was also discovered that prosody, or reading with expression, is a significantly high indicator of reading comprehension (Basaran, 2013).

Small Group Discussion

In *Exploring Talk in Schools*, Barnes (2008) theorizes that speech or talk is an effective way for students to learn, understand, or explore a topic. Educators often require students to demonstrate a skill through creating a written response, a project, or a calculation. To produce a demonstration of their understanding, students first engage in thought. Piaget's theory on cognitive development states that thought comes before language (McLeod, 2008). Students must engage in thought to formulate a response that shows understanding. Speech, Barnes states, is a flexible way for students to attempt new ideas or change if the idea seems insufficient (2008). When students think out loud, they have an opportunity to build on an idea or reword adequately if needed.

Vygotsky's theory accentuates the role of language and socio-cognitive development in children. His belief is that thought, and language are separate entities that become merged as children reach the age of three. Vygotsky explained that verbal thought may also be known as 'inner speech' (McLeod, 2008). Children may also engage in 'private speech' which is often correlated to solving problems or a difficult task (Berk, 1986). Vygotsky's (1978) socio-cognitive development theory included the Zone of Proximal Development in which children learn from socializing with peers. His supports that talk and discussion amongst peers is an essential tool that allows students to become active learners. Both Vygotsky and Piaget's theories emphasize that language is the way children think and should be used as a learning tool. Children talk to learn and engage in purposeful talk to learn from peers and adults as well, in which the discussion with peers and adults creates an environment of active learnings.

Active student response (ASR) is a term when a student responds to the ongoing lesson and is engaged in the discussion, according to The Center on Innovations in Learning (Tincani & Twyman, 2016). Small groups allow for students to be in the Vygotsky's Zone of Proximal Development, in which talking leads to active learning from peers and teachers. Additionally, students are engaged through being in a small group setting and benefit upon receiving frequent teacher feedback and peer discussions. Within small groups, students become more motivated to participate and demonstrate positive behaviors through staying on task (Tincani & Twyman, 2016).

Method

Participants. The participants were students in a third-grade classroom in a public elementary school located in the northern district of Guam. This school consists of families with low socio-economic statuses and varies with parental involvement in terms of school volunteer opportunities and helping children study at home. The reading block for this school year occurs daily in the morning for one hour and thirty minutes. The reading class in this study is composed of 14 students. There are 8 girls and 6 boys who range from eight to nine years old. There are 7 English as a Second Language (ESL) learners. There is evidence through AIMSweb testing that students in this class have varying reading level scores in oral reading fluency, vocabulary, and reading comprehension.

Micronesian Educator #30

Materials. Reading passages and comprehension tests by Teacher Created Materials, an educational publisher whose products are research and evidence-based, was used within this six-week study. A pre and post-test on reading comprehension was administered at the beginning of this six-week study. Third grade reading passages will be utilized daily for choral reading in small groups. These passages will also be used for fluency check-ins at the end of each week, and a pre and post-test at the beginning and end of this study. Comprehension questions pertaining to the reading passage of the day will be used for oral comprehension questions. All data will be entered onto a Microsoft Excel sheet, printed, and placed in a secure cabinet. The Academic Intervention Monitoring System (AIMSweb), created by Pearson's Clinical Assessment, is a benchmark system that screens and monitors students in reading and math skills. Guam Department of Education continues to use AIMSweb Plus in the public-school system as a means to monitor student progress throughout the school year. AIMSweb will also be utilized in my study as a way to monitor student oral reading fluency and reading comprehension skills.

Procedure. A reading comprehension and reading fluency pre-test will be given at the beginning of this six-week study using Teacher Created Materials to assess each participant's reading fluency and reading comprehension level. Reading fluency will be assessed with a third-grade reading passage and participants will be assessed by words read per minute. A pre-test by Teacher Created Materials will be given to score each participant's reading comprehension skills. Participants will be sorted into small homogeneous reading groups centered on their reading fluency scores. Each group will have a 5-10-minute meeting with the researcher daily for six weeks after the day's reading lesson. The researcher will model fluent reading with the reading passage of the day. The small group and the researcher will read together for the second reading. The small group will read in unison for the third reading. If extra practice is needed, the researcher may give feedback and instruct a fourth or fifth reading. The researcher will ask comprehension questions of the 4Ws, pertaining to the reading passage of the day, on a daily basis. Participants in each small group will have time to discuss the answer amongst each other. At the end of each week, participants will be assessed on reading fluency and reading comprehension. The researcher will assess each participant's oral reading fluency score using a reading passage. The researcher will unobtrusively assess each participant's reading comprehension during the verbal discussion of the reading passage of the day's comprehension questions. At the end of this six-week study, a post test will be given to each participant. Each participant will be assessed using the reading comprehension test by Teacher Created Resources. Additionally, each participant will be assessed on their reading fluency with a reading passage measured with words per minute.

Data Collection and Analysis. Data was collected for the preintervention and intervention phases of the study then organized using Microsoft Excel spreadsheets and stored in a password protected computer. The data collected were analyzed to show student growth or regression. Descriptive statistics were used to describe outcomes of this study.

Limitations. The small group of participants may have an impact on the replicability of this study. Although this study may accurately show outcomes for a third-grade reading class in a public school in Guam, results may not be applicable to the other schools on the island with different populations.

Research Questions and Hypotheses. The first research question was: Will choral reading increase fluency in oral reading among third grade students in a public-school setting? (Hypothesis 1: Choral reading will increase fluency in oral reading among third grade students in a public-school setting.) The second research question was: Will peer discussion in small groups increase reading comprehension in a 3rd grade public school setting? (Hypothesis 2: Peer discussions in small groups will increase reading comprehension in a 3rd grade public school setting.)

Results

Research Question 1 stated "Will choral reading increase fluency in oral reading among third grade students in a public-school setting." This research question addresses the critical problem of low oral reading fluency scores in a third-grade classroom. The importance of proficiency in reading fluency in the third grade is significant due to a gradual shift towards denser content in all academic areas where information is gathered through independent reading. The analysis of this study led to results that are relevant to educators in third-grade classrooms. In the beginning of the school year, students were given an oral reading fluency assessment using a third-grade text to determine their reading level. The ORF assessment during this pre-intervention period was measured using words

Micronesian Educator #30

per minutes (WPM). Participants' ORF abilities were composed of varying levels with 11 students (79%) reading below third-grade level and 3 students (21%) reading on grade level, as per Fountas and Pinnell's Oral Reading Rates. Choral reading and peer discussion interventions were not used during this period.

The oral reading fluency pre and post-test given to participants displayed a positive growth rate among participants, shown in Table 1. Table 2 indicates a growth rate of +6 WPM. Although all students improved as a result of instruction, the assessment given at the end of the pre-intervention period showed that 9 students (64%) were still reading below third-grade level, 3 students (21%) were reading on grade level, and 2 students (14%) were reading above grade level. In total, 5 students (35%) were reading proficiently, indicating a 15% increase of proficient readers compared to data collected at the beginning of the school year. Without choral reading interventions applied, the average student growth of +6WPM was noted during this period as shown in Table 2.

A pre-test was given to participants at the beginning of the six-week study and a post-test given at the end of the study after interventions were in place, using a third-grade text by Teacher Created Materials and measured with words per minute (WPM). The effects of the choral reading intervention on individual participants during the post-intervention period are shown in Table 1, indicating an overall average of +29WPM growth of all participants seen in Table 2. This is significantly greater than the improvement shown during the pre-intervention period.

Table 1
Comparison of Pre-Intervention Assessment Results to Post-Intervention Assessment Results

Student	Pre-Intervention			Post-Intervention		
	Pre-Test	Post-Test	Growth	Pre-Test	Post-Test	Growth
1	72	75	+ 3	83	126	+ 43
2	86	99	+ 13	114	130	+ 16
3	98	98	+ 0	117	160	+ 43
4	98	101	+ 3	103	139	+ 36
5	51	51	+ 0	53	87	+ 34
6	130	141	+ 11	160	160	+ 20
7	80	86	+ 6	88	108	+ 20
8	60	67	+ 7	78	114	+ 36
9	130	146	+ 16	140	160	+ 20
10	51	54	+ 3	72	97	+ 25
11	73	77	+ 4	88	130	+ 42
12	101	109	+ 1	123	155	+ 32
13	99	102	+ 3	98	128	+ 30
14	74	79	+ 5	95	129	+ 34

Noteworthy findings include a significant change in the proficiency of oral reading fluency. Data collected at the beginning of the six-week study found that 8 students (57%) were reading below grade level, 4 students (29%) were reading on grade level, and 2 students (14%) were reading above grade level. In summary, 6 students (42%) were reading on grade level and 8 students (57%) were reading below third-grade level. Student progress was assessed at the end of this six-week study using the post-test student scores. Results showed that only 2 students (14%) were reading below grade level, 8 students (57%) were reading on grade level, and 2 students (14%) were reading above grade level. In summary, 2 students (14%) were reading below grade level while 8 students (71%) were reading on the third-grade level. Overall, a 29% increase in students who had reached grade level or higher reading proficiency as a result of the choral reading intervention is very significant.

Table 2
Class Average of Pre-Intervention Assessment Results and Class Average of Post-Intervention Assessment Results

Pre-Intervention			Post-Intervention		
Class Average Pre-Test	Class Average Post-Test	Growth	Class Average Pre-Test	Class Average Post-Test	Growth
86	92	+ 6	101	130	+ 29

Micronesian Educator #30

All student scores were compiled to determine the class average of oral reading fluency growth during the pre-intervention period. The class average of ORF growth during the pre-intervention period is shown in Figure 1, indicating a positive growth of student ORF rates during the pre-intervention period of +6WPM. It is noted that the class average in WPM does not meet third grade ORF rates of 100 - 140WPM. A student focused graph in Figure 2 shows participant scores including those who were able to achieve third-grade oral reading rates. The third-grade oral reading fluency rates are identified as 100WPM – 140WPM and emphasized in these graphs with dashed lines.

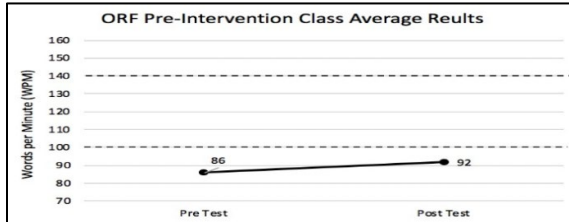


FIGURE 1. Oral Reading Fluency Pre-Intervention Class Average Results

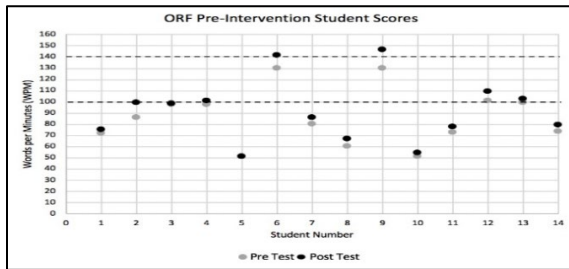


FIGURE 2. Oral Reading Fluency Pre-Intervention Student Scores

Figure 3 displays the class average growth with choral reading interventions in place. The average of all participants meets the 100WPM requirement of third grade ORF rates and increases significantly to 130WPM, notably 10WPM below maximum WPM for the grade level. A student focused graph in Figure 4 shows individual participants who started with below grade level scores and achieved third-grade oral reading fluency rates within the intervention period.

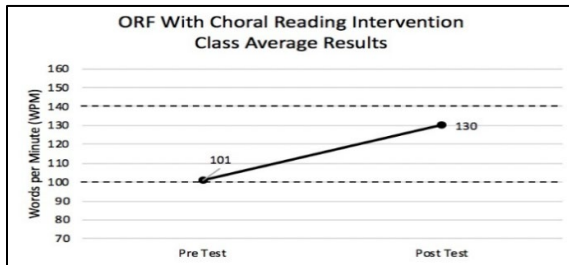


FIGURE 3. Oral Reading Fluency with Choral Reading Intervention Class Average Results

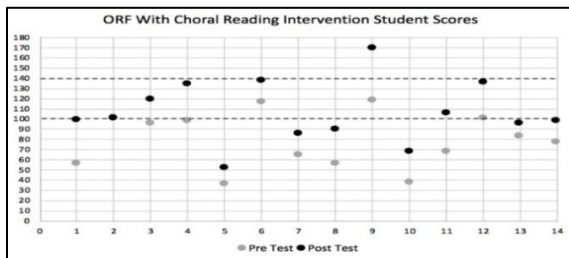


FIGURE 4. Oral Reading Fluency with Choral Reading Intervention Student Scores

Micronesian Educator #30

A comparison of student ORF growth collected from assessments taken during the pre-intervention period and assessments taken with the choral intervention is shown in Figure 5. During the pre-intervention period, participants averaged an estimated growth of +6WPM. With choral reading interventions in place, participants averaged a growth of +29WPM. Results show an increase of approximately +23.5WPM with choral reading interventions in place.

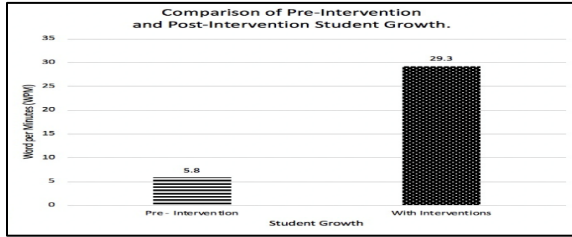


FIGURE 5. Comparison of Pre-Intervention and Post-Intervention Student Growth

To further determine the impact of choral reading interventions on participants' oral reading fluency, participant scores were analyzed from the Academic Intervention Monitoring System (AIMS Web) Fall and Winter assessments. Figure 6 depicts AIMS Web scores from the pre-intervention period taken in Fall and the post-intervention period taken in Winter. The AIMS Web oral reading fluency assessment data was analyzed to show the percentage of students scoring in the range of below average, average, and above average. These results may also be understood by the following: below average or below grade-level, average or proficient and on-grade level, and above average or above-grade level. Data collected shows that within the assessment given during pre-intervention period, participants make up scores of 5 students (36%) Below Average, 9 students (64%) Average, and no scores that were Above Average. Data collected post-intervention shows that participants of this study showed significant improvement. Following the intervention, 2 students (14%) scored Below Average, 8 students (57%) were now Average, and 4 students (29%) scored Above Average.

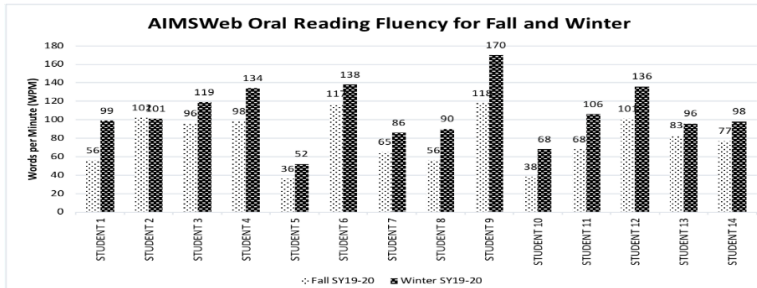


FIGURE 6. AIMSWeb Oral Reading Fluency for Fall and Winter

The comparison in Figure 7 displays the oral reading fluency growth of the participants in this study. The percentage of participants reading below grade-level has decreased by 22% after choral interventions were used. The percentage of participants reading at grade-level, in other words proficient in oral reading fluency, decreased by 7%. After interventions were applied, a 29% increase of participants in this study were reading fluently above grade-level expectations. There were 0% students scoring above average during the pre-intervention period.

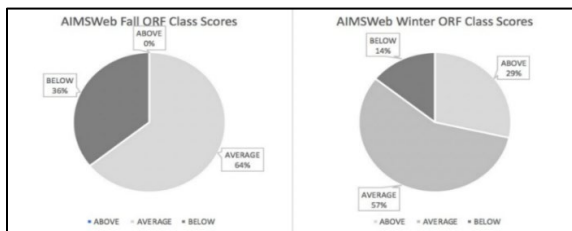


FIGURE 7. AIMSWeb Fall and Winter Class Scores

Hypothesis #1 stated choral reading will increase fluency in oral reading among third-grade students in a public-school setting. The findings shown from data collected during pre-intervention and data collected with choral reading interventions applied support Hypothesis #1 with evidence of positive growth and student achievement in oral reading fluency scores. Participants were able to achieve third-grade oral reading fluency rates and some above grade-level rates. Participants who were not yet reaching ORF third-grade rates displayed a positive growth during this intervention period. Therefore, the hypothesis is shown to be correct.

Research Question 2 asked whether or not peer discussion in small groups would increase reading comprehension in a 3rd grade public school setting. This study looked at low reading comprehension scores in a third-grade classroom. Participants were given a pre and post-test at the beginning of the school year to assess reading comprehension skills. This assessment consisted of five reading comprehension questions pertaining to a short passage. Participants scored an average of 73% in the reading comprehension pre-test and an average of 86% in the post-test, as shown in Figure 8. Peer discussion in small groups were not used during the pre-intervention period. The results for the pre-test showed 9 participants (64%) with a passing grade and 5 participants (36%) below passing. Post-test results showed 12 participants passing (86%) and 2 participants (14%) below the passing grade. There was an increase of 13% during this period.

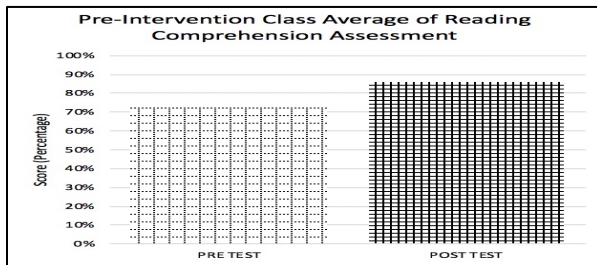


FIGURE 8. Pre-Intervention Class Average of Reading Comprehension Assessment

Participants were given a pre and post-test at the end and beginning of this six-week study using a reading comprehension assessment by Teacher Created Materials. This assessment consisted of fourteen reading comprehension questions pertaining to short reading passages. Peer discussion interventions were used during this period. A class average of 46% was collected using participant scores from the pre-test, indicating a below passing grade. Data collected at the end of this six-week study showed a class average of 64%.

Individual participant scores from the pre and post-test are shown in Figure 9. An increase in reading comprehension is evident in a majority of participants, averaging +18% increase, with the exception of one participant with a decrease of -7%. The highest increase of reading comprehension shown is Student 9 with +43% growth and lowest increase is Student 4, Student 10, and Student 14 with a +7% growth. Pre-test results indicated that 4 students (29%) completed the assessment with passing scores while 10 students (71%) below passing scores. Post-test results depicted that 9 students (64%) completed the assessment with passing scores while 5 students (36%) below passing scores. With peer discussion interventions, participants in this study increased their class average of on-grade level reading comprehension by +35%.

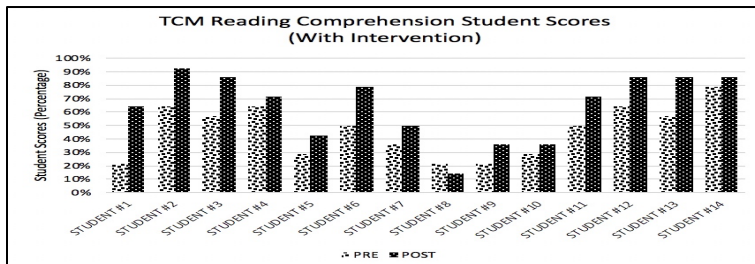


FIGURE 9. Teacher Created Materials Reading Comprehension Student Scores (With Intervention)

Micronesian Educator #30

To determine the effectiveness of small group peer discussions as an intervention, student scores from the AIMSWeb Reading Comprehension assessments were additionally analyzed for this study. The AIMSWeb Fall assessment showed 43% participants with average scores, or proficient in reading comprehension, and 57% participants with below average scores. The AIMSWeb Winter assessment given after interventions of peer discussion showed 14% participants with above average scores, 57% participants with average scores, and 29% participants below average scores. With the intervention of peer discussions in small groups, participants' reading comprehension scores progressed from 43% at or above average to 71% at or above average, indicating a +28% positive growth.

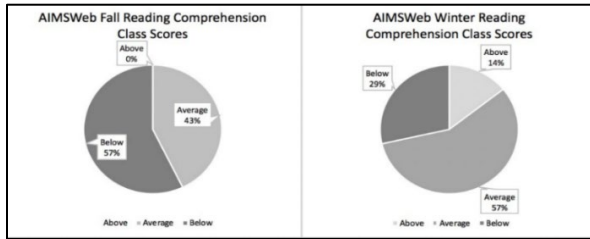


FIGURE 10. AIMSWeb Fall and Winter Reading Comprehension Class Scores

Table 1 shows a comparison of AIMSWeb Fall and Winter reading comprehension scores. Eleven of fourteen participants showed growth, or 78% participants in this study. Three of fourteen participants showed regression, or 22% participants in this study. Overall, the student growth rate of the Fall and Winter AIMSWeb scores is +12 points.

Table 1
AIMS Web Fall and Winter Reading Comprehension Student Scores

Participants	AIMSWeb Reading Comprehension Student Scores		
	FALL	Winter	+ / - Change
Student 1	109	117	+ 8
Student 2	174	220	+ 46
Student 3	144	180	+ 36
Student 4	140	153	+ 13
Student 5	130	109	- 21
Student 6	159	171	+ 12
Student 7	135	136	+ 1
Student 8	130	150	+ 20
Student 9	123	160	+ 37
Student 10	135	145	+ 10
Student 11	149	136	- 13
Student 12	163	145	- 18
Student 13	179	204	+ 25
Student 14	152	160	+ 8
Class Average	144	156	+ 12

A comparison, shown in Figure 11, shows the class average scores of pre and post-tests given during the pre-intervention period and the with-intervention period, or during the six-week study. There is a significant difference shown between the pre-intervention and the with-intervention scores. Pre-intervention pre-test scores were 73% and post-test scores were 86%. During the six-week study, pre-test scores were 46% and post-test scores were 64%. Participants scored higher during the pre-intervention period, however the growth rate between pre and post-test is noteworthy. The student growth rate during the pre-intervention period was +13% and the student growth rate with interventions in place was +18%, indicating that the intervention of peer discussions in small groups were successful with evidence of a +5% increase in student growth.

Micronesian Educator #30

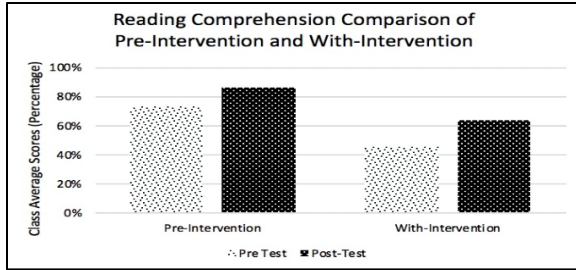


FIGURE 11, Reading Comprehension Comparison of Pre-Intervention and With-Intervention

Hypothesis #2 stated peer discussions in small groups will increase reading comprehension in a 3rd grade public school setting. Data collected from the pre- and post-reading comprehension assessments during the pre-intervention period and during the intervention period conclude that peer discussions in small groups will increase reading comprehension. Evidence of student growth concludes that peer discussion in small groups contribute to an increase in reading comprehension scores, however more support is needed in order to reach student achievement in reading comprehension proficiency.

Discussion

This study’s primary purpose was to examine whether the intervention of choral reading will improve reading oral fluency in third-grade students. Furthermore, this study intended to determine whether peer discussions in small groups will improve third grade reading comprehension scores. Research on both purposes may benefit educators in a third-grade classroom as interventions to use in order to improve student reading scores.

It is important to note that the group of participants consisted of differentiated reading fluency levels. To collect and organize data about oral reading fluency, participants in this study were categorized by their oral reading fluency scores. Tier 3 participants are identified as students with scores that range below grade level: 0 – 100WPM. Tier 2 participants are students that can read fluently and proficiently at grade-level: 100 - 140WPM. Tier 1 are students whose ORF is above grade level: +140WPM.

Results indicated that choral reading intervention within small groups had a positive effect on student growth in oral reading fluency. Data showed that participants who placed at Tier 3 in ORF at the beginning of this study increased their scores. As shown in Table 2, Tier 3 participants with the lowest WPM scores increased their scores over +20WPM. Six of 8 participants placed in Tier 3 increased their scores into Tier 2, reading on grade level, by the end of this six-week study. Two participants did not progress into Tier 2 but increased their scores by +25WPM.

Table 2
TCM Oral Reading Fluency Tier 3 Student Growth

Participants	Reading Comprehension Tier	Words per Minute (WPM)	Reading Comprehension Tier	Words per Minute (WPM)	ORG Growth
Student 5	3	53	3	87	+ 34
Student 10	3	72	3	97	+ 25
Student 8	3	78	2	114	+ 36
Student 1	3	83	2	126	+ 43
Student 7	3	88	2	108	+ 20
Student 11	3	88	2	130	+ 42
Student 14	3	95	2	129	+ 34
Student 13	3	98	2	128	+ 30

Data from this study showed that participants who placed in Tier 2 and in Tier 1 additionally increased their scores as shown in Table 3. By the end of this study, data shows 2 participants reading below grade level, 8 participants reading on grade level, and 4 participants reading above grade level. In sum, twelve participants (86%) were reading

Micronesian Educator #30

on grade level and 2 participants (14%) were reading below grade level. Results conclude that choral reading interventions are most effective for students who are almost reading on grade level or who are at grade level. Students who are reading well below grade level may need a different intervention or may also benefit from choral reading intervention extending to a longer amount of time.

Table 3
TCM Oral Reading Fluency Tier 2 & 1 Student Growth

Participants	Reading Comprehension Tier	Words per Minute (WPM)	Reading Comprehension Tier	Words per Minute (WPM)	ORG Growth
Student 4	2	103	2	139	+ 36
Student 2	2	114	2	130	+ 16
Student 3	2	117	1	160	+ 43
Student 12	2	123	1	130	+ 7
Student 9	2	140	1	160	+ 20
Student 6	1	160	1	160	+ 0

Data collected from oral reading fluency and reading comprehension show several noteworthy findings. Oral reading fluency proficiency does not necessarily predict on grade level reading comprehension skills. Not all participants possessing grade level ORF were able to reach average reading comprehension skills. However, all participants who scored over 80% in reading comprehension were also proficient in oral reading fluency. Students who scored below 70% in ORF, or below grade level, struggled with reading comprehension as well. The three participants with the lowest reading comprehension scores are identified as English as a Second Language learners. Although these students benefited from choral reading interventions, it is evident that ESL student will be at an advantage if more support was given alongside the interventions of peer discussions in small groups.

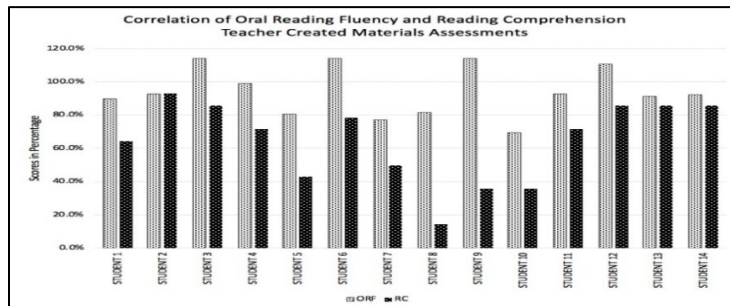


FIGURE 12, Correlation of Oral Reading Fluency and Reading Comprehension Teacher Created Materials Assessments

Data collected from Teachers Created Materials post-tests in oral reading fluency and reading comprehension did not show a strong correlation between oral reading fluency and reading comprehension, depicted in Figure 12. The three students who possessed the lowest reading comprehension scores are ESL learners, indicating that extra support is needed for reading comprehension skills. Observations made throughout this study found that students who read with notable expression and at a normal speaking rate were shown to be proficient in reading comprehension and achieved the highest participant scores. There are not enough findings to conclude whether reading fluency is a predictor of reading comprehension.

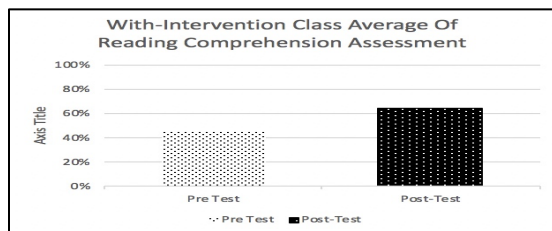


FIGURE 13. With-Intervention Class Average of Reading Comprehension Assessment

Micronesian Educator #30

Results produced from the intervention of peer discussions within small groups were not significant in numbers. There was a small increase of +18% shown in Figure 13. Verbal discussion among peers provided a safe place to make mistakes and led to participants becoming more comfortable in sharing their thoughts out loud. A change I would make for this intervention would be to include questions displayed on a worksheet and instructions for students to write their answers. Reading comprehension assessments are seldom verbal. The routine of writing answers and seeing questions displayed on worksheets will give students the opportunity to practice answering reading comprehension questions using this platform.

The intervention of choral reading is an instructional strategy that I would recommend to teachers. I would also recommend the intervention of peer discussions within small groups, with additional support. All participants across varying reading levels had positive feedback on this study. Students enjoyed being part of small reading groups and felt more comfortable reading aloud together. Additionally, students improved on reading with expression and voicing thoughts out loud with enthusiasm. Peer discussions in the small reading groups created a comfortable environment for students to discuss comprehension questions.

Conclusion

The interventions used in this study produced results that lead to conclude that these interventions can be incorporated in a regular classroom routine during a reading block, providing several opportunities for students to achieve proficiency in reading fluency and reading comprehension. With choral reading interventions, students became aware of reading fluency expectations through the instructor and peer modeling. Through positive results of choral reading, I would recommend continuing this intervention throughout the school year. Additionally, students should be given personalized data trackers, generating student responsibility for their learning as well as opportunities for students to monitor their individual progress and achievements. Throughout the intervention, students often wanted to know if they increased their reading fluency skills from the previous reading fluency check-in. Providing individual data trackers would be a motivator for students.

Active learning was observed upon using the intervention of peer discussions in small reading groups, acquiring attention and engagement from students within each small group. Although positive growth of reading comprehension was seen in the results, it was observed that more instruction was needed for students to achieve proficiency in comprehension. A recommendation for the intervention of peer discussion in small groups is to incorporate the instruction of a mini lesson on a specific comprehension skill in each differentiated group meeting. Students will also benefit from providing writing opportunities in addition to this intervention.

Results of this study concur with research findings by the Florida Center for Reading Research and Basaran Mustafa. In this study it was found that students who read at a natural reading rate and who were able to read with expression possessed proficient reading comprehension scores. In some cases, reading fluency was an indicator of reading comprehension; those whose reading fluency was on grade-level were more likely to have average scores in reading comprehension and those who were below grade-level in reading fluency struggled in reading comprehension. A notable observation was found in students with a high reading rate: speed did not coincide with reading comprehension skills. With these considerations, reading fluency is a building block needed for reading comprehension however more instruction is needed for students to gain complex reading skills.

Results of this study indicated that choral reading in small groups is an effective intervention method for students who are almost proficient in reading fluency. However, these methods are not as significantly effective for students who were reading well below grade level. Students reading well below grade level will have an advantage utilizing this intervention for longer periods of time and with extra support in fluency skills such as reviews in consonant blends, decoding, and phonics. Peer discussions in small groups were used daily, however, do not produce overall success in students' reading comprehension skills. These results indicate that instruction of more complex reading comprehension skills need to be utilized with the intervention for students to reach grade level achievement in a third-grade classroom.

Micronesian Educator #30

REFERENCES

- Barnes, D. (2008). *Exploring talk in schools*. Mercer, N. & Hodgkinson, S. (Ed.). London, UK: Sage.
- Basaran, M. (2013). Reading fluency as an indicator of reading comprehension. *Educational Sciences: Theory & Practice*, 13(4), 2287–2290.
- Bayer, C. (2017). When kids are held back, gains can follow. Harvard Graduate School of Education. <https://www.gse.harvard.edu/news/uk/17/07/when-kids-are-held-back-gains-can-follow>
- Berk, L. E. (1986). Relationship of elementary school children's private speech to behavioral accompaniment to task, attention, and task performance. *Developmental Psychology*, 22(5), 671.
- Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). Fourth-grade students reading aloud: NAEP 2002 Special Study of Oral Reading (NCES 2006-469). U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. Washington, DC: Government Printing Office.
- Fiester, L. (2010). Early warning-why reading by the end of third grade matters. *A Kids Count Special Report*. The Annie E. Casey Foundation.
- Fountas I. and Pinnell G. (2009). *Fountas and Pinnell recommended oral reading rates chart*. Fountas and Pinnell Literacy. <https://www.fountasandpinnell.com/resourcelibrary/resource?id=300>
- Fountas I. and Pinnell G. (2012). Guided reading—the romance and reality. *The Reading Teacher*, 66(4), 268–284.
- International Literacy Association (2018). Reading fluently does not mean reading fast. *Literacy Leadership Brief*. <https://literacyworldwide.org/docs/default-source/where-we-stand/ila-reading-fluently-does-not-mean-reading-fast.pdf>
- Kuhn, M. (2005). A Comparative Study of Small Group Fluency Instruction. *Reading Psychology*, 26(2), 127–146.
- Lee, A. (n. d.). Third-grade retention laws- what you need to know. <https://www.understood.org/en/school-learning/choosing-starting-school/moving-up/third-grade-retention-laws-what-you-need-to-know>
- McLeod, S. A. (2018). *Jean Piaget's theory of cognitive development*. Simply Psychology.
- National Assessment of Educational Progress. (2018) Reading assessment. <https://nces.ed.gov/nationsreportcard/reading>
- National Center for Education Statistics. (2006). *The condition of education: Grade retention*. <https://nces.ed.gov/pubs2006/2006071.pdf>
- National Institute for Literacy. (2001). Put reading first: The research building blocks for teaching children to read. Jessup, MD: Author.
- Nation's Report Card. (2020). NAEP report card—reading. <https://www.nationsreportcard.gov/reading/nation/achievement/?grade=4>
- U.S. Department of Education, National Center for Education Statistics. (2019). The Condition of Education 2019. https://nces.ed.gov/programs/coe/indicator_cnb.asp
- Richards, M. (2000). Be a good detective: Solve the case of oral reading fluency. *Reading Teacher*, 53(7), 534.
- Rumberger, R., & Lim, S.A. (2008). Why students drop out of school: A review of 25 years of research. California Dropout Research Project. https://www.hws.edu/about/pdfs/school_dropouts.pdf
- Samuels, C. (Jan 2015). States press to ensure that children in the earliest grades get the literacy support they need to meet the crucial 3rd grade milestones. *Stairsteps to Reading Fluency*, 34(16), 24–26.
- Schwerdt, G., West, M., & Winters, M. (2017). The effects of test-based retention on student outcomes over time—regression discontinuity evidence from Florida. *Journal of Public Economics*, 152, 154–169.
- Tincani, M., & Twyman, J. (2016) Enhancing engagement through active student response. The Center on Innovations in Learning.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Workman, E. (2014). Third grade reading policies. Education Commission of the States. <http://www.ecs.org/clearinghouse/01/16/44/11644.pdf>
- Young-Suk Kim, Petscher, Y., Schatschneider, C., & Foorman, B. (2010). Does growth rate in oral reading fluency matter in predicting reading comprehension achievement? *Journal of Educational Psychology*, 102 (3), 652–667.

SolarSPELL and Its Effects of Student Engagement and Test Scores

John Arby G. Pacheco, University of Guam

Focusing on finding a way to heighten student engagement in a high school biology class, the purpose of this study was to continue current classroom procedures that addressed curriculum content but to add the use of the SolarSPELL device as a means of supplementing content and engaging students, reducing off task behaviors, and clarifying content and thereby improving student learning outcomes. Based on the research findings, it is highly recommended that future studies to assess the effectivity of SolarSPELL to increase test scores and decrease off-task behaviors be done in other contents since the digital library has a lot to offer other than scientific references.

Keywords: SolarSPELL, high school biology, learning with technology, digital library, ESL students

Actively engaging students in the classroom and increasing students learning outcomes are important aspects of every teacher's goals. With this in mind, this study was conducted in order to determine whether or not the use of a solar powered educational learning library called SolarSPELL has an effect on engagement and achievement of tenth grade Biology students at Simon Sanchez High School in Yigo, Guam. In addition, it seeks to find students' opinions on the effectiveness of the use of the SolarSPELL as a classroom supplementary tool. The study took place in a sample of students who were taking Biology at Simon Sanchez High School where a diverse population of students represented a wide variety of cultures, backgrounds, and ability levels. Biology is one of the prerequisite courses for higher level science courses. While the content material in this 10th grade Biology class is generally interesting, it was noted that some students had difficulty understanding areas of the content and remaining engaged with classroom activities. Students who do not understand parts of the lesson, who are not engaged or are drifting away into daydreams are more likely to cause disruptions in class and have little chance at learning needed biological concepts or scoring well on classroom assessments. In addition, there are a number of students who are English Language Learners (ELL) or special needs learners and who would benefit from more individualized attention and supplementary material that would clarify content in a more visual manner. Test scores in Guam high schools in all subjects across the board tend to be below national average. Low achieving students are less likely to complete assignments, to enjoy academic satisfaction, and are more likely to drop out of high school. Students who do not achieve passing grades in Biology are denied access to more advanced science classes which may have a major impact on a student's future and lifetime earnings.

The aim of the study was to continue current classroom procedures that address curriculum content but to add use of the SolarSPELL device as a means of supplementing content and engaging students, reducing off task behaviors, and clarifying content and thereby improving student learning outcomes. The goal was to achieve at least an 80% passing rate on weekly quizzes, and a decrease of at least 50% off task behaviors when compared to data gathered during the pre-intervention phase. Three questions guided this study were: (1) Will use of the solar powered digital library, SolarSPELL, decrease student off-task behaviors in a tenth-grade biology class? (2) Will use of the SolarSPELL in a tenth-grade biology class result in improved student scores on classroom assessments? And (3) What are student views on the effectiveness of the SolarSPELL as an interesting and effective tool to enhance performance in a tenth-grade biology class?

Review of the Literature

Technology in Academics

Teachers have found it a positive way to engage students in their regular classrooms: learners favor the use of technology over traditional methods when it is implemented effectively by the instructor (Raja & Nagasubramani, 2018). Recognizing that technology skills are an important aspect of an academically well-prepared student, Guam Department of Education (2012) has incorporated Common Core Standards for technology into the mandated curriculum. Integrating technology as a tool to raise student achievement is a common focus nowadays.

Micronesian Educator #30

Policymakers such as senators and governors, together with the educators, are renewing their commitment to curriculum and instructional strategies to improve results in teaching and learner outcomes. Due to the extensive use of technology in the 21st century, the usage of technology in instruction and education is critical if we are to have a long-term influence on how learners are educated (Christen, 2009). The changes essential to prepare 21st-century students are transformational and represent a shift in practice for many teachers (Boatright, 2014). When students can use a variety of technologies, they become more empowered and less dependent on the teacher. The role of the teacher is increasingly to become mentors, facilitators, and coaches—talents which most of the great teachers have practiced over the ages to not only educate but also give inspiration to their learners (Wortley & Lai, 2017). The current academic society is all for exploiting these new technological advancements and incorporating them in the learning experience (Stakkestad & Stordal, 2017).

It can be challenging to say that the technologies they use in the classroom will—or will not—expand their learning. It is all based on how a student uses these devices, some may use these devices productively for research, learning a new material, while others may use it unproductively by visiting inappropriate websites, or play online games. In this sense, the different learning technologies available today are tools; students can either use these technologies as a learning tool or a distraction (Bouygues, 2019). The usefulness of computer technologies in a classroom is more a result of the way they are utilized during instruction rather than just having a set of computers available in the classroom, and special features such as touchscreens do not tend to add to the learning experience (Bain, MacNaught, Mills, & Luekenhausen, 1998).

Cons of Technology in the Classroom

While many teachers and researchers have found that technology is beneficial to learning, some scholars disagree and claim that the use of technology in the classroom decreases student learning. Some studies show that technology tends to distract students, harm students' social development, and cause students to not pay attention during classes (Heissel, 2016). This was supported by a study that reports that the use of laptops and mobile devices in class had some detrimental effects to learning and sometimes led students to be distracted rather than engaged (Attia, Baig, Marzouk, & Khan, 2017).

Modern equipment, such as laptops and mobile phones, can be problematic when used in the classroom. It is always possible that these technologies can tempt students to use the devices for off task activities. One study, for instance, discovered that about two-thirds of the time, students who brought laptops to their classrooms used them for purposes other than classroom learning (Ragan, Jennings, Massey, & Doolittle, 2014). According to a 2013 study, when students multitask during lectures, student comprehension decreased by at least 11-percent. In addition, students who just sat near them also showed a decrease in lesson understanding (Sana, Weston, & Cepeda, 2013). An example of a multitasking is "Checking." Checking is when someone checks for text messages, social media updates, emails, latest sales, or even whether their friends are checking them (Goundar, 2014).

Everyone has their opinion about how technology affects both teacher and learner. There are some concerns that use of technology can interfere with healthy teacher-student relationships and that these important connections could become more distant and less personal (Wilkins, 2014). Valentine supported this idea by stating that when students learn through computers and the world wide web, they can be disorganized and not focused. The gap between the teacher-student relationship widens due to the lack of eye contact, body language, and physical communication making the more distant (Laurillard, 2002). Another research indicates that students who are addicted on technology has a negative relationship between their fellow students and teachers, because technologies used in the classroom are often misused by the students, which in turn limits educators from giving their best, due to lack of learner's initiative in their education (Khodabandelou, That, & Anne, 2016).

Pros of Technology in the Classroom

Computers are in almost every classroom in the developed countries, whether at each student's desk or at every teacher's desk (Flanagan, 2008). One of the benefits of using technology in the classroom may be the ability to monitor the student's progress (Ma, Adesope, Nesbit, & Liu, 2014). Technologies can promote partnerships with other schools or even other countries using Skype or other communication applications (Grinager, 2006). Garthwait and Weller's (2005) study provides evidence that students are more eager to learn due to the presence of modern

technology such as a laptop. As computers have become more common, the use of information technology has become widespread. It is hard to imagine our everyday lives without our phones and computers, whether in a public space, a classroom, or in one's home (Lavin, Korte, & Davies, n. d.). Lowerison, Sclater, Schmid, and Abrami (2006) stated that there is a high potential to transform the classroom environment from passive to active with the use of technology and allows the learner to have a sense of autonomy for his learning.

In a world of rapid technological advancements, it stands to reason that the present-day classrooms should mirror what is happening in the current society. Learners' intrinsic values to learn content, show more interest and motivation increases when shown real-world technological applications such as 3D printing, Robotics, or using digital libraries for in-class research (Usher, 2012). Heafner (2004) suggested that using technology changes the type of the task, heightens student self-efficacy, and increases student self-worth. Technology has great potential to engage students and enhance the classroom learning but educators stress it is not a replacement for a well-thought-out lesson and an enthusiastic, well prepared teacher. In order for technology-based tools to thrive in the field of education, they must accompany appropriate pedagogy (Laurillard, 2002).

Digital Libraries

Digital libraries that we know of at the present day began with Vannear Bush's Memex machine; the main idea was to provide comfortable, finger-tip access to information for everyone (Bush, 1945). Digital libraries evolved drastically, along with the age of informational technology. According to Brahaj, Razum, and Hoxha (2013), over the past two decades, digital libraries have evolved dynamically. What seems to be a farfetched theoretical concept of a digital library was now a reality. As well as the use of the term, it has been dependent on the user groups or communities utilizing the digital resources, the specific usage scenarios, which lead to a variety of definitions. What is the most appropriate definition of a digital library? There has been much confusion surrounding this phrase stemming from three factors. First, the library community has used numerous phrases over the years to denote this concept; the most used terms are the virtual library, electronic library, and library without walls. What each of these different phrases meant was not clear, which then added to the confusion (Cleveland, 1998). Another factor that adds to the confusion was that digital libraries are at the main point of interest for many distinctive areas of research, and what establishes a digital library varies depending upon the community of researchers that is describing it (Nurnberg, Furuta, Leggett, Marshall, & Shipman, 1995). Third, confusion arises from the fact that there is a variety of online resources on the Internet that our society is calling "digital libraries," which is contradictory from a librarian's point of view. For instance, for a publisher, it may be another online version of a catalog. Regardless of the different terminologies mentioned, digital library is the most accepted term and is used almost entirely at conferences, online, and in the current literature (Cleveland, 1998).

Drawbacks of Digital Libraries

Digital libraries provide many opportunities to classrooms where normal library resources are either limited or nonexistent. They can be beneficial to students and teachers in remote or underprivileged areas, however there are also difficulties that can arise as a result of implementing use of digital libraries. While hardware and software acquisition may be the first problems that come to mind (Mishra, 2016) authorization for accessing the library itself and concerns about copyright of the digital materials are also valid concerns (Fischman-Afori, 2013). In addition, appropriate use of a digital library in a classroom must be supervised by a well-prepared teacher and compatible lesson plan. For successful use, a digital library cannot be simply a free-for-all delve into its content, whether it is applicable to the course content or not. The creator of a digital library must provide, and often pay for, digital security, which can add significantly to the cost of the library (Robinson, 2015). It is also important that digital library users be trained. Although students today tend to be very technologically savvy, some users may have difficulty in figuring out and pinpointing available resources and identifying usable from useless information (Bamgbade, Akintola, Agbenu, Ayeni, Fagbami, & Abubakar, 2015).

SolarSPELL

Digital libraries are relatively new to the technological world, and the SolarSPELL is one of the newest of these. Therefore, little has been studied or written about the use of SolarSPELL in a regular classroom. SolarSPELL, also is known as the "Solar Powered Educational Learning Library," is a user-friendly, offline solar-powered digital library

Micronesian Educator #30

that was fashioned to simulate an online learning experience for the students (Linzy and Hosman, 2018). One of the primary advantages that the SolarSPELL has that other digital libraries may not is that it requires no electricity to recharge the device; it is entirely solar powered and can serve an entire classroom of students at one time, making it ideal for remote or underserved locations (M. J. Miller, personal communication, November 23, 2019).

According to a web article from the World Economic Forum, more than 4 billion people, mostly in emerging countries, do not have access to the world wide web. This statistic means that more than half of the current world's population is unable to access the internet and are unable to experience the educational, health, financial, communication and other advantages that can be gained through internet connectivity (Luxton, 2016).

The goal for creating the solar powered digital library was to provide access to quality educational materials in areas where resources are scarce (SolarSPELL, 2019). The SolarSPELL allows students to have an internet-like experience with curated material that has been reviewed for copyright compliance, safety, and content appropriateness. There would be no fees for data, no need for electric power to recharge the device, and no concerns that students may inadvertently roam into undesirable websites (M. J. Miller, personal communication, November 23, 2019). The SolarSPELL can be accessed by any smart device from a cell phone to a computer and is intended to supplement curriculum content (SolarSPELL, 2019).

A recent study in the Pacific Islands concluded that after implementing the use of the SolarSPELL in public school classrooms, there was an improvement in learners' comfort level with technology and an increase in their access to a wider quantity and quality of educational resources (Linzy & Hosman, 2018). This result confirmed the idea of Grinager (2006) that current learning technologies that we utilize in the classrooms can resolve material deficiencies that most classrooms are experiencing. The SolarSPELL has shown promising results in eliminating many of the challenges to providing quality educational content for learners. The use of the self-sustaining digital library in locations from Africa to Pacific Island communities has shown its potential to promote literacy and expanded educational possibilities (Linzy & Hosman, 2018).

Method

Participants. This study took place in three Biology classes held at Simon Sanchez High School in Guam and included 91 students. Of the 91 students, 27 have been identified as ELLs, and six students have been identified as special needs learners. There was a wide variety of socioeconomic backgrounds among the students while likely leads to a wide range of comfort using new technology. The majority of students were CHamorros, but a number of other cultural and ethnic backgrounds were also represented in the class.

Instruments. The study used tests and quizzes to look at whether students improved academically following use of the SolarSPELL in class and results were compared to preintervention tests. Pre-test and post-test were administered at the beginning and end of biology chapters and teacher made quizzes were given every other week to keep track of student progress. These tests contained a variety of relevant question types and focused on course content that was covered during class using the solar library. A student behavior monitoring sheet was also used to track student off-task or disruptive behaviors. The check sheet noted both desirable and undesirable behaviors. Off task behaviors included items such as not doing assigned work or using cell phones during class. Tally marks were used to indicate the number of, and type of behaviors observed by the teacher. Finally, a student survey was administered to look at whether students viewed the use of the SolarSPELL was an effective and enjoyable supplement to the regular classroom procedure. The survey asked for students' opinions of the device and responses were recorded on a 5-point Likert scale.

Procedure. The study began with applying for Human Subjects approval from University of Guam. Once approval was gained then Guam Department of Education had to approve the study. The study was discussed with the principal of the school and permission was gained to send notes home for students and parents to give consent for study results to be published. The study took place over a twelve-week period, six weeks for the pre-intervention phase and six weeks for the intervention phase. Student behaviors were observed and noted daily during both the preintervention and intervention phases using the behavior monitor chart. Any off-task behavior that hindered a

student's productivity was noted. Pre-test and post-test were administered at the beginning and end of biology chapters and teacher made quizzes were given every other week to keep track of student progress. These tests contained a variety of relevant question types and focused on course content that was covered during class using the solar library. During the preintervention phase, classes were conducted as normal with lecture, activities, assignments and tests or quizzes given at the same interval as during the intervention phase. At the beginning of the intervention phase, students were introduced to the SolarSPELL and given a fun challenge to help them become acquainted with the device and to see how easy it is to access and use. Students were given a variety of assignments and activities that required them to use the SolarSPELL in small groups of with partners. These activities ranged from scavenger hunts, reading selections, videos, and research on teacher-specified topics. Students were also allowed some time to explore library content on their own. At the end of the intervention phase, students were asked to complete a survey asking their views on the effectiveness and usefulness of the solar library as well as whether they just liked using and exploring the content in the SolarSPELL.

Data Collection and Analysis. Test scores were collected from students during both the intervention and preintervention phases of the study. These test scores were collated and disaggregated using Excel to look for any changes in student achievement. In addition, the daily tally marks in the behavior monitoring sheet were totaled and summarized to look for trends in student behaviors during intervention when compared to preintervention. Results of the survey questionnaire administered at the end of the study period were also entered into Excel. Results were collated and averaged so that conclusions could be drawn about students' views of using the SolarSPELL. Data from all three sources of information were used in answering the research questions. Descriptive statistics were used to describe the outcome of this study.

Limitations. The small sample size may have had an impact on the validity and replicability of the study. Although the outcomes accurately show results for the three tenth-grade Biology classes at Simon Sanchez High School that were included in the study, outcomes may not be applicable to the other schools, locations, or populations. Even though careful observation was conscientiously conducted by the teacher, it is possible that some off-task behaviors were not observed and therefore were not tallied.

Research Questions and Hypotheses are as follows:

Question 1: Will the use of the SolarSPELL in a tenth-grade biology class result in improved scores on tests and quizzes? (Hypothesis 1: The use of the solar powered digital library, SolarSPELL will have no significant effect on improving student's test scores in a high school biology class.)

Question 2: Will the use of the solar powered digital library, SolarSPELL, improve the number of off-task behaviors observed in a tenth-grade Biology class in Guam? (Hypothesis 2: The use of the solar powered digital library, SolarSPELL will have no significant effect on student's off-task behaviors in a tenth-grade Biology class.)

Question 3: Will students state positive views on the effectiveness of using the SolarSPELL to supplement content in a tenth-grade biology class. (Hypothesis 3: Students will state positive views on the effectiveness of using the SolarSPELL to supplement content in a tenth-grade biology class.)

Results

Research Question 1 asks whether or not the use of the SolarSPELL digital library for supplementary material in a tenth-grade biology class will result in improved scores on tests and quizzes. To answer the research questions, participants were given biweekly quizzes during the 12 weeks of the study. A pre- and post-test was administered for each two-week period to assess the student's academic growth. Quizzes 1, 2, and 3 were administered during the pre-intervention phase and Quizzes, 4, 5, and 6 were administered during the intervention phase. Data from these quizzes were used to answer the first research question. Quiz scores both during the preintervention and intervention phases show a good increase in student academic knowledge. This is expected as a result of regular classroom teaching. The goal is to determine whether using the SolarSPELL as a supplement to normal classroom teaching will enhance student understanding of content and therefore improve student scores on quizzes.

Micronesian Educator #30

Table 1
Preintervention Test Results in Percentages for Three Quizzes

Class Block	Pre-Test Percentage	Post-Test Percentage	Average Percentage Point Increase
Pre-intervention Test 1 Average Results			
Block 3	31%	72%	41%
Block 4	36%	84%	49%
Block 6	35%	76%	41%
Quiz 1 Average Point increase for Three Blocks			44%
Pre-Intervention Test 2 Average Results			
Block 3	37%	69%	42%
Block 4	44%	87%	43%
Block 6	31%	74%	43%
Quiz 2 Average Point increase for Three Blocks			43%
Pre-Intervention Test 3 Average Results			
Block 3	39%	72%	33%
Block 4	36%	82%	46%
Block 6	31%	72%	41%
Quiz 3 Average Point increase for Three Blocks			40%
TOTAL AVERAGE POINT INCREASE FOR 3 QUIZZES			42%

Table 1 shows the growth of the students per block during the pre-intervention phase. Pre-test and Post Test Averages were compiled and compared and the difference in the scores show the amount of growth in learning. The percent of growth on quiz 1 was 44%, and the percent of growth was 43% on quiz 2. Student improvement on quiz 3 was 40%. Altogether, the amount of improvement the students showed on the combined three quizzes averaged out to 42%. The same process of pretest and posttest was used to determine the amount of student growth that occurred when the use of the SolarSPELL digital library was added. Table 2 shows the average growth of the students per block during the intervention phase. In general, student achievement during both the preintervention and intervention phases showed similar growth. In general, achievement scores that improve as a result of instruction is expected. However, the quiz averages while using the SolarSPELL did show greater improvement between pre and posttests than quizzes taken during the preintervention phase. The amount of improvement on the first two intervention quizzes (quizzes 4 and 5) was 43% on each. Quiz 6 showed a gain of 65%. Students were particularly interested in the content that quiz 6 covered and in the supplementary material provided by the SolarSPELL related to the content. It is probable that this had an influence on the notably higher scores achieved on this post-test (quiz number 6) than on previous posttests. As shown in Tables 1 and 2, the amount of student improvement between intervention and nonintervention was very similar until quiz 6. As is evident in Table 2, the higher score on quiz 6 appeared to have a notable influence on the ultimate averages.

Table 2
Intervention Phase Test Results in Percentages for Three Quizzes

Class Block	Pre-test Percentage	Post-test Percentage	Average Percentage Point Increase
Intervention Test 4 Average Results			
Block 3	18%	55%	37%
Block 4	22%	73%	51%
Block 6	22%	63%	41%
Quiz 4 Average Point increase for Three Blocks			43%
Intervention Test 5 Average Results			
Block 3	13%	56%	43%
Block 4	16%	62%	46%
Block 6	13%	52%	39%
Quiz 5 Average Point increase for Three Blocks			43%
Intervention Test 6 Average Results			
Block 3	25%	97%	72%
Block 4	24%	93%	69%
Block 6	19%	73%	54%
Quiz 6 Average Point increase for Three Blocks			65%
TOTAL AVERAGE POINT INCREASE FOR 3 QUIZZES			50%

Micronesian Educator #30

Table 3 gives the final comparison of total average academic growth during the preintervention phase compared to the intervention phase. While there is a notable difference in overall improvement in student quiz scores, this may be partially attributed to the greater interest in and engagement with the content covered by quiz 6. The higher scores on quiz 6 seems to be largely responsible for the greater overall average quiz scores during the intervention period as shown in Table 3.

Table 3
Overall Average Improvement in Quiz Scores between Preintervention and Intervention
Preintervention (without SolarSPELL) vs. Intervention (with SolarSPELL)

Preintervention/Average of Improvement Quizzes 1, 2, and 3	Intervention/Average of Improvement Quizzes 4, 5, and 6
42%	50%

Among the three biology classes which used the SolarSPELL digital library, there were a number of English as a Second Language (ESL) students. Because the SolarSPELL technology was new to everyone in the classes, these students seemed to feel on more of an equal footing with their classmates as they explored the supplementary content presented. Working with partners or alone they were often more engaged with the lesson content and several of them, especially on Quiz 6, scored higher than some native English speakers in the class. This is unusual for these ESL students. The null hypothesis was used for this study stating that there will be no difference in quiz outcomes as a result of using the SolarSPELL in tenth grade biology classes in Guam. Overall, the outcomes show that there was an increase in the mean scores between preintervention and intervention for each quiz and this would be expected as a result of normal classroom teaching. However, the findings indicate that there was a larger gain in post test scores when using the SolarSPELL than not using it. The null hypothesis is not supported.

Research Question 2 asks whether the use of the solar powered digital library, SolarSPELL, will improve the number of off-task behaviors observed in a tenth-grade Biology class in Guam. The question aims to look for any relationship between the introduction of the chosen classroom intervention (SolarSPELL digital library) and changes in the number of off-task behaviors observed during the time of the study.

Students in three biology blocks were observed during class time and any off task or disruptive behaviors that needed to be redirected were noted and tallied by the teacher on a behavior check sheet. Table 4 compares the number of various undesirable behaviors that were noted during each class block between preintervention and intervention phases. This is presented by class block so that differences in individual classes can be noted.

Table 4
Comparison of Disruptive Behaviors Observed During the Pre-intervention Phase and Intervention Phase

Disruptive Behavior Monitored	Pre- Intervention	Intervention	Pre- Intervention	Intervention	Pre- Intervention	Intervention
	Block 3	Block 3	Block 4	Block 4	Block 6	Block 6
Fell asleep	18	10	6	4	11	11
Not listening/ daydreaming	7	7	12	6	7	10
Looking at mobile phone	75	25	44	16	83	32
Standing when not asked to	39	22	20	10	44	23
Drumming/tapping	15	13	5	5	13	11
Chatting non-content related topics	41	24	21	17	41	21
Doing homework for another class	2	5	12	24	4	2
Total	197	106	120	82	203	89

Not surprisingly, Table 4 shows that the behavior receiving the largest number of off task tally marks was students checking their phones during class. The number of students standing during class would include those going to the restroom, the pencil sharpener or the trash can at inappropriate times. The behavior that received the fewest

Micronesian Educator #30

number of tally marks was doing homework for another class. Table 5 makes the difference in student behaviors clearer by focusing on the total number of undesirable behaviors in all categories and changes that occurred in each class block while engaged in using the digital library.

Table 5
Comparison of Total Number of Off Task Behaviors of Students in Each Class Block between
Preintervention and Intervention Periods of the Study

Class Block	Preintervention Phase Total Number of Off Task Behaviors	Intervention Phase Total Number of Off Task Behaviors	Difference between Preintervention and Intervention Off Task Behaviors
Block 3	197	106	-91
Block 4	120	82	-38
Block 6	203	89	-114

Table 5 shows there was a notable decrease in off task behaviors of students during the times when they were using the SolarSPELL digital library. This alone would make use of the device a good idea, even if the results on assessments remained relatively even.

For research question 2, the null hypothesis was used. It stated use of the solar powered digital library, SolarSPELL would have no significant effect on student's off-task behaviors in a tenth-grade Biology class. Looking at the considerably lower numbers of off task behaviors noted while students were engaged with the SolarSPELL this hypothesis is not supported.

Research question 3 aims to find out whether the students had positive views on the effectiveness of using the SolarSPELL to supplement content in their tenth-grade biology class. A brief survey was administered to the students following the intervention phase asking students their opinions about using the SolarSPELL as a classroom activity. Table 5 shows the outcome of this survey.

Table 6
Student Opinion about the Usage of SolarSPELL Digital Library in the Classroom

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The SolarSPELL helped me to be engaged in the class	66%	20%	8%	4%	2%
The SolarSPELL helped me to increase my scores in the test	66%	22%	8%	4%	0%
The SolarSPELL library made the class more interactive than what it was before	31%	41%	19%	7%	2%
The schools need the SolarSPELL to enhance learning	27%	48%	20%	2%	2%

Even a quick glance at the results of the survey show that most students stated that they liked using the digital library technology and that they thought it was an effective way to learn content. Responses to the first question on the survey shows that 86% of the students either strongly agreed or agreed that the SolarSPELL was effective in keeping them engaged in class. Only 6% thought it was not helpful and either disagreed or strongly disagreed.

The second survey question asked students if they thought the SolarSPELL helped increase their scores on tests. Almost all the students believed that the digital library was at least of some value in helping them achieve higher test scores as only 4% disagreed with the statement and none strongly disagreed. Sixty six percent strongly agreed with the survey statement and another 22% agreed with them.

The survey went on to ask the students' opinion on whether using the digital library made the class more interactive than during normal instruction. It may be because this class already employed a number of interactive lessons that the response here was less pronounced in the strongly agree columns. Thirty one percent of the students strongly agreed that using the SolarSPELL was more interactive. Nine percent believed the class was more interactive using normal teaching strategies and 19% seemed to think it was about the same amount of interactivity with the SolarSPELL as with normal activities.

Micronesian Educator #30

When asked if they thought that schools need to provide digital libraries to enhance student learning, the majority thought this would be a good idea, but this support was much more pronounced in the agree column with a 48% response rate and strongly agree being selected by only 27% of the students. Very few students disagreed (2%) or strongly disagreed (2%) with this statement.

The hypothesis for this question says that students will state positive views on the effectiveness of using the SolarSPELL to supplement content in a tenth-grade biology class. In response to each of the survey questions asked of students the responses were much higher in the agree and strongly agree categories. This outcome supports the premise of the hypothesis, so the hypothesis is shown to be correct.

Conclusion

Infusing education with the latest technology, such as digital libraries, is a common trend that we see in this digital age. Due to these current trends, educators have been finding ways to increase student engagement and student test scores. Biology classes are often perceived as a problematic subject, especially to those who did not have a good foundation during their middle school years. With the implementation of the SolarSPELL digital libraries, it was seen that it could improve student outcomes not just with their test scores but also with the student's disruptive behavior in class. It is also worth noting that the SolarSPELL is something that most of the students favored and would like to have as a supplementary tool for learning Biology. It is highly recommended that future studies to assess the effectivity of SolarSPELL to increase test scores and decrease off-task behaviors be done in other contents since the digital library has a lot to offer other than scientific references. Despite countless efforts to infuse our classrooms with the technology, it can be tough at times depending on how remote an area is, especially when an educator would like to involve the internet in their instructions, SolarSPELL can be a game-changer and be the bridge from that disconnect.

REFERENCES

- Attia, N., Baig, L., Marzouk, Y. I., & Khan, A. (2017). The potential effect of technology and distractions on undergraduate students' concentration. *Pakistan Journal of Medical Sciences*, 33(4). doi: 10.12669/pjms.334.12560
- Bain, J. D., McNaught, C., Mills, C. & Lueckenhausen, G. (1998). Describing computer-facilitated learning environments in higher education. *Learning Environments Research*, 1(2), 163–180.
- Bamgbade, B. J., Akintola, B. A., Agbenu, D. O., Ayeni, C., Fagbami, O. O., & Abubakar, H. O. (2015). Comparative analysis and benefits of digital library over traditional library. *World Scientific News*. 24, pp. 1–7.
- Boatright, T. (2014). Technology integration for common core state standards implementation: Developing differentiated professional development based on the concerns-based adoption model.
- Bouygues, H. L. (2019). Does educational technology help students learn? An analysis of the connection between digital devices and learning. https://reboot-foundation.org/wp-content/uploads/_docs/ED_TECH_ANALYSIS.pdf
- Bush, V. (1945). As we may think, *Atlantic Monthly*, July 1945, pp. 101–108.
- Christen, A. (2009). Transforming the classroom for collaborative learning in the 21st century. *Techniques: Connecting Education and Careers*, 84(1), 28–31.
- Cleveland, G. (1998). Digital libraries: Definitions, issues, and challenges. <https://archive.ifa.org/Vl/5/op/udto/p8/udt-op8.pdf>
- Fischman-Afori, O. (2013). The battle over public e-libraries—tacking stock and moving ahead. *IIC*, no. 44, pp. 392–417.
- Flanagan, J. L. (2008). Technology: The positive and negative effects on student achievement. Education and human development master's theses. https://digitalcommons.brockport.edu/ehd_theses/254
- Garthwait, A., & Weller, H. G. (2005). A year in the life: Two seventh grade teachers implement one-to-one computing. *Journal of Research on Technology in Education*, 37(4), 361–377.
- Goundar, Sam. (2014). The distraction of technology in the classroom. *Journal of Education and Human Development*, 3, 211–229.
- Grinager, H. (2006). How education technology leads to improved student achievement. <http://www.ncsl.org>

Micronesian Educator #30

- Guam Department of Education. (2012). FY 2012 title V-part a consolidated grant for innovative programs application packet.
- Heafner, T. (2004). Using technology to motivate students to learn social studies. *Contemporary Issues in Technology and Teacher Education*, 4(1), 42–53.
- Heissel, J. (2016). The relative benefits of live versus online delivery: Evidence from virtual algebra I in North Carolina. *Economics of Education Review*, Elsevier, 53(C), 99–115.
- Hoxha, Julia & Brahaj, Armand & Razum, Matthias. (2013). Defining Digital Libraries. 8092. 10.1007/978-3-642-40501-3_3
- Khodabandelou, R., That, J.E., MelindaAnne, A., S. Selvaraju, P., Ken, T.Y., Kewen, Z., Yan, Z., & Ning, T. (2016). Exploring the main barriers of technology integration in the English language teaching classroom: A qualitative study. *International Journal of Education and Literacy Studies*, 4(1), 53–58.
- Laurillard, D. (2002). Rethinking university teaching: A conversational framework for the effective use of learning technologies.
- Lavin, A., Korte, L., and Davies, T. (n.d.). The impact of classroom technology on student behavior. *Journal of Technology Research*, 1–13. <https://www.aabri.com/manuscripts/10472.pdf>
- Linzy, K., & Hosman, L. (2018). The SolarSPELL offline digital library. <http://library.ifla.org/m2106/1/205-linzy-en.pdf>
- Lowerison, G., Sclater, J., Schmid, R. F., and Abrami, P. C. (2006). Student perceived effectiveness of computer technology use in post-secondary classrooms. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.532.2054&rep=rep1&type=pdf>
- Luxton, E. (2016). 4 billion people still don't have internet access. Here's how to connect them. <https://www.weforum.org/agenda/2016/05/4-billion-people-still-don-t-have-internet-access-here-s-how-to-connect-them>
- Ma, W., Adesope, O. O., Nesbit, J. C., & Liu, Q. (2014). Intelligent tutoring systems and learning outcomes: A meta-analysis. *Journal of Educational Psychology*, 106 (4), 901–918.
- Mishra, R. K. (2016). Digital libraries: Definitions, issues, and challenges. *Innovare Journal of Education*, 4 (3). <https://innovareacademics.in/journals/index.php/ijoe/article/download/12997/5665>
- Nurnberg, P.J., Furuta, R., Leggett, J. J., Marshall, C., and Shipman III, F.M. (1995). Digital libraries: Issues and architectures. In Proceedings of the Second Annual Conference on the Theory and Practice of Digital Libraries. Austin, Texas, June 11-13, 1995, pp. 147–153.
- Ragan, E. D., Jennings, S. R., Massey, J. D., & Doolittle, P. E. (2014). Unregulated use of laptops over time in large lecture classes. *Computers & Education*, 78, 78–86.
- Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3(S1), 33.
- Robinson, J. D. (2015). The dogs bark and the circus move on, the bottom line: Managing. *Library Finances*, 28, (1/2), 7–18.
- Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. *Computers & Education*, 62, 24–31.
- SolarSpell. (2019). About the SolarSpell initiative. <http://solarspell.org/about>
- Stakkestad, S., & Størdal G., (2017). The effects of technology on students' academic performance rollout of individual laptops in Norwegian upper secondary schools. <https://openaccess.nhh.no/nhh-xmlui/bitstream/handle/11250/2487301/master2017.PDF?sequence=1&isAllowed=y>
- Usher, A. (2012). What nontraditional approaches can motivate unenthusiastic students? Washington, DC: Center on Education Policy.
- Valentine, D. (2002). Distance learning: Promises, problems, and possibilities. *Online Journal of Distance Learning Administration*, 5(3), 1–11.
- Wilkins, J. (2014). Good teacher-student relationships: Perspectives of teachers in urban high schools. *American Secondary Education*, 43(1), 52–68.
- Wortley, D. J., Lai, P. C. (2017). The Impact of disruptive enabling technologies on creative education.

Education for Sustainable Development: Education as if our Islands Matter

Deborah Ellen, Guam Community College

“We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise”: This quote, from the Earth Charter Preamble, speaks to the urgency of a change in humanity's attitudes and behaviors throughout Earth's human population. With hundreds of billions of dollars spent yearly on promoting consumerism and unsustainable lifestyles at the expense of our planetary boundaries, what can be done to combat this spiral into planetary obliteration? This article explores Education for Sustainable Development as a way forward.

Keywords: education for sustainable development; systems thinking; living values education; emergent teaching

What is sustainable development and what does education for sustainable development mean? The term and concept of sustainable development became popularized in 1987 following the submission of the Brundtland Report, also referred to as “Our Common Future.” The report demonstrated a specific connection between poverty and global environmental issues: the non-sustainable practices of the Northern (economically developed) countries were said to have exacerbated the poverty of the Southern (less economically developed) nations. The report also provided a clear definition of sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987, p. 15). Environmentalists had been sounding the alarm since the 1960s with efforts such as the publishing of Rachel Carson's *Silent Spring*, the Wilderness Act of 1964, the passing of the Clean Air Act in 1970, and the founding of Earth Day in 1970 and groups such as Greenpeace in 1971. Yet here we are some 50 years later, and one could ask, “Has our planet benefited from such efforts?”

Unfortunately, the answer would be a resounding “No.” One area of concern has been the dramatic increase in urban populations with “the majority of the world population now [living] in cities” (Cividino, Halbac-Cotara-Zamfir, & Salvati, 2020, p. 11). Within Micronesia, migration has also taken place including migration from the Outer Islands of Ulithi and Fais to Yap Proper which can disrupt traditional fishing and land rights on Yap Proper and alters food consumption from local, sustainable items (i.e., fish, taro, breadfruit) to imported goods (i.e., canned meat, rice, and Ramon noodles). Recent studies indicate there are 18,874 regional migrants living in Guam (Gilbert, 2019), which has also altered traditional lifestyles as people leave behind taro patches, fish traps, and families often only to face financial hardship in Guam due to the high costs of living (Hezel, 2013). Urbanization is an indication of a move away from smaller community-based support, as well as a shift from farming practices which were based on diversity of plants and organic methods to mono-agricultural practices of corporations. Large corporations have taken control of farming and the raising of livestock such that over one million farmers in the United States have lost their farms over the past 50 years (Pew Research Center, 2012), and some 16,000 farmers in India commit suicide each year due to loss of land and crops, often to corporations (Merriott, 2012). This migration away from rural areas has increased the demand on urban resources, leading to issues related to air quality, availability of water, waste disposal, and increased use of energy (“Urban Threats,” n. d.). The rapid overpopulation of urban areas also correlates to a growth of slum areas and poverty (Rai, 2017). Certainly, there is evidence of disparity of living conditions in Guam, as well as an increase in the homeless population said to reach 873 in 2019 (Hezel, 2013; Homeless Coalition, 2019).

The shift from traditional practices such as crop diversity and crop rotation to monoculture farming based on reliance of hybrid seeds, as well as breaking the natural cycle of seed production and use at the local level threatens the biodiversity required for a sustainable system (Shah, 2014; “The Privatization of Seeds,” n. d.). This shift toward industrial farming practices has also created other problems with food production. For example, the introduction and extensive use of chemicals such as glyphosate, first patented by Monsanto and sold as Roundup, has been used to kill weeds since the early 1970s. Repeated use of glyphosate affects the soil by killing off microorganisms which—just like plants—absorbs carbon dioxide, thus able to offset carbon dioxide emissions from the burning of fossil fuels. The glyphosate is absorbed from the soil into the plant which is then consumed by humans thereby killing the microorganisms within humans which are necessary for life (Tickell, Tickell, Engelhart, Fisher, Benenson, & O'Hara,

Micronesian Educator #30

2020). Glyphosate is sprayed on farms that produce and sell foods such as corn, soybeans, wheat, and even rice. In order for herbicides such as glyphosate to not kill off the desired crops, scientists created genetically modified versions of the desired crops. Glyphosate also leaches into water sources thereby affecting the water used for drinking, washing, and bathing. There is evidence that glyphosate is linked to health issues such as certain cancers and birth defects (Tickell et al., 2020). Hence, the practices used to produce food for farm animals and people are harmful to living beings as well as water sources and the planet's soil. While herbicides may not be heavily used in Guam, reports indicate the presence of numerous hazardous substances (including Agent Orange) within the soil and groundwater of Guam which are directly related to the military operations (Civilian Exposure, 2017).

Perhaps the most recognized area of concern is the overuse of resources, mainly in Northern countries. For example, in Northern countries, more people have cars, use greater amounts of electricity, and engage in air travel. Being an island with an international airport, Guam is a hub of air travel within the region and globally. Further, Guam is home to a U.S. Air Force base, Anderson Air Force Base, which was said to store over 66 million gallons of fuel in 2008; one can imagine that the amount of fuel being currently used at the air base exceeds that amount (Witt, 2008). As of 2019, 119,481 vehicles were registered in Guam indicating just over one car per resident of Guam (Borja, 2019). If one considered only those within the population who can hold a driver's license, the ratio would be much higher. Commercial businesses, including those related to tourism, use approximately 30% of the island's electrical energy which relies mainly on diesel and other fuel resources: all which must be imported, adding to the use of energy and to pollution (U.S. Energy Information Administration, 2019).

Of special note on Guam is the environmental impact of the U.S. Military's presence—both Anderson Air Force Base and the Naval Base. The military occupies about a third of the island's 212 square miles of land. This occupation includes the clearing of land for housing and other projects, as well as dredging of deep harbors—all of which impact the island's land and water sources. Ongoing construction itself affects the island in multiple ways. For example, higher levels of wastewater and sedimentary runoff affecting water sources, reefs, and coastal waters occur with the expansive construction activities which occur over time. The proposed dredging of 300,000 square meters of coral habitats will greatly impact the sea creatures who live there (Gawel, n. d.). Another impact of construction relates to the relocation of military members from Okinawa and the immigrant workers who are involved in the construction efforts. The additional numbers (a possible increase of 44% in Guam's total population) will intensify the strains on Guam's resources (Haw, 2013).

Over-consumption of resources adds to global warming, generates higher levels of pollution and waste, and ultimately depletes the planet's natural resources (Singh & Singh, 2016). When considering the depletion of the Earth's natural resources, one must address the question of how this will impact current and future generations. As with environmental efforts, scientists and environmentalists have been sounding the alarm for over 50 years. Recently, tools have been developed to measure estimated use and overuse of the planet's natural resources. Based on the findings from Earth Overshoot Day and Global Footprint Network, we would need 1.75 Earths to address the current global use of the planet's natural resources, with Northern countries using the greatest amounts of resources. If everyone on the planet used resources to the degree to which people in the United States currently use the Earth's resources, we would need 5 planet Earths (World Wildlife Fund, 2019). The United States is one of the top two countries in global greenhouse gas emissions, just behind China (Mulvaney, 2019). Why have we, as humans, continued 'business as usual' when we have been made aware of the urgency to address environmental issues for over 50 years?

A key factor in the lack of aggressive action is due to the story being passed on to us that economic development is of utmost importance. Certainly, there has been a push toward the ideation of having more rather than being more. We are told that economic development must grow to address poverty and to raise standards of living. As Macy and Johnstone (2012) assert, we have been sold the idea that for economies to grow, we must consume more: "Each year, more than four hundred billion dollars are spent on advertising that pushes the message 'buy this, and your life will improve'" (p. 47). Assadourian (2017) goes so far as to say that "\$579 billion a year [is] spent around the world to promote the ever-increasing consumption of consumer goods—from fast food, soft drinks, and coffee to cars, computers, and smartphones.... no longer seen as luxury items but as necessities" (p. 5). While Americans have been spending more money each year since the 1950s, reports demonstrate the fact that this has not equated to

Micronesian Educator #30

greater degrees of happiness or satisfaction in life (Ingraham, 2019). Americans spend more and have more, but this has only added to a waste of resources, excessive gas emissions, and to the social disparity of those who have much with those who are struggling to make ends meet. So why do we keep buying into the idea of having more meaning being more? Part of that answer can be found in questions related to education.

Role of Education

How does this all relate to education? In the documentary, *Kiss the Ground* (Tickell et al., 2020), conservationist Ray Arculeta states, “We have a social problem. We have an education issue, and until we get that right, we can’t fix our ecological issues.” Education is often said to be a pivotal change agent in society—sometimes positive and sometimes detrimental. Current educational practices which focus on competition in the global labor force do not address the planetary issues of today (Orr, 2004; Sterling, 2001). David Orr (2004), distinguished professor of Environmental Studies and renown environmentalist, suggests the need for a shift in education in preparing young people for “how to live sustainably on the earth” (p. 148). There have been some efforts to address various aspects of current global issues, such as in environmental courses, programs, and clubs. There have also been school-wide efforts as evident in the Green School Bali (currently expanding to schools in New Zealand, South Africa, and Mexico), Eco Schools, Edible Schoolyard programs, and Global Schools. Nevertheless, given the environmental, social, and economic issues being faced on a global scale which impact the very life of our planet, there must be a more extensive and expansive effort in the very purpose of education (Assadourian, 2017; Sterling, 2001).

Hence the question, what is the purpose of education? Enter any school and you will find similar vision statements, textbooks, and curriculum. You will see vision statements such as “To prepare students to be productive and contributing citizens” or “To prepare young people for the future.” Throughout history, education has served several key purposes such as the assimilation of immigrants and Indigenous youth into an American identity, and “preparing workers for an industrialized 20th century workplace” (Sloan, 2012, para. 4). Over the years, education has also instilled certain values such as the importance of being part of an economic model based on jobs which will help them to earn a living—while helping others (usually larger corporations) to make huge profits (Botha, 2010; Norberg-Hodge, 2010). Students have also learned certain values such as the concept that nature and natural resources are intended to serve our human purpose (of having more). Wade Davis (anthropologist, author, and National Geographic “Explorer-in-Residence”) notes this aspect in talking about his experience growing up in British Columbia. Davis was taught that the forests “existed to be cut” as an unequivocal part of forestry, while a Kwakwaka’wakw youth of British Columbia believed the forest to be the abode of sacred spirits. Another example he sets forth is how one person may grow up to view a mountain as a nonliving pile of rock to be mined, as opposed to another person may be taught that the mountain is home to protective spirits. Davis (2009) explains:

The point is not to ask or suggest which perspective is right or wrong...What matters is the potency of a belief, the manner in which a conviction plays out in the day-to-day lives of a people, for in a very real sense this determines the ecological footprint of a culture, the impact that any society has on its environment. (p. 122)

Education systems directly impact the identities, values, and perspectives of young people who become the adults and leaders of communities (Browne, 2012). American values include the belief that humans are superior to all other beings, the idea that we should control and profit from resources, the need to accumulate and consume products, and the ideation that needs in the community are driven by markets (Orr, 2004; Sterling, 2001).

Indigenous values promote the idea that all life is interconnected, there is a need for balance in life and nature, people need to take care of each other, and the needs are driven by maintaining balance. These differences are evident in the type of education provided within American versus Indigenous settings (Curwen-Doige, 2003). In American schools, the focus is on academic achievement and meeting the needs of corporations and industry (Appiah, 2012). There is a high level of competition, an outcomes-based approach, and everyone is held to the same standard (Gawlik, 2012; Guskey, 2013). In traditional Indigenous communities, education was holistic in nature, and focused on functional and spiritual development (Mease, n. d.), as well as the needs of family and the community. Rather than competitiveness, learning focused on the values of interdependence with others and with one’s environment (Cajete, 1994). It was process-based rather than outcomes-based, and young people filled a niche in

Micronesian Educator #30

the community rather than everyone being expected to learn the same skills. CHamoru culture encapsulates these values through the traditions of inafa'maolek, chenchule', and respect—"to make good for all."

Macy and Johnstone (2012) purport that American (Western) education has created a rift between humanity and the environment since the Industrial Revolution: "The whole basis of society was transformed, including people's relationship with one another and with Earth" (p. 26). Hathaway and Boff (2009) raise the point that people may engage in conversations about saving the environment—not because of a sincere love and concern for the environment, but "because it is somehow useful to humanity" (p. 63). The shift from being a part of the biosphere to being apart from and superior to the biosphere has shut down our emotional connection, as well as our sense of awe, wonder, care and gratitude for the world around us. How else could humanity engage in such destruction of our planetary home? As Macy and Johnstone (2009) point out, when we are emotionally connected to the world, we will sense the pain of the Earth which "... alerts us to danger [and] reveals our profound caring. And this caring derives from our interconnectedness with all life...as a healthy expression of our belonging to life" (p. 38). If young people see themselves as one entity within the whole system, they will better understand that by taking care of the world around them, they are also taking care of themselves; conversely, if they continue to engage in lifestyles and practices that cause harm to the world around them, they will understand that they are also bringing harm to themselves and to future generations.

What role can education play to encourage a love of the planet and all that is within it? Perhaps one way to address this challenge can be found in efforts such as Education for Sustainable Development (ESD), which focuses on several key concepts and is based on research-based strategies which promote learning. UNESCO (2012) defines ESD as "Education for Sustainable Development empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity" (para. 1). While there is no one-size-fits-all method, several components provide a common ground for ESD: systems thinking, place-based learning, connecting to nature, values-based education, and emergent teaching. Key themes which run throughout ESD include the environment, society, economy, and culture (UNESCO, 2012, p. 5).

Education for Sustainable Development: Systems Thinking

Imagine a typical meal served in a local restaurant in Guam: eggs with bacon, sausage or Spam, and rice. Where does the food originate from? Most food items in Guam are imported, which is an issue in and of itself. But, in considering each item, entire systems begin to emerge. Most of these food items come from farms in the States, where the animals are kept in factory conditions where they will grow and later be slaughtered (ASPCA, n. d.; PETA, n. d.). These animals are mainly fed a plant-based diet. The plants rely on sunshine, water, and healthy soil. Healthy soil consists of mineral, decaying plant life and millions of organisms. Just one handful of soil contains some 100 million bacteria, 100,000 protozoa, and up to 5,000 insects and worms: "There are more organisms in a tablespoon of soil than there are people on the planet" (Walsh, 2018). Consider the impact of the herbicides, as discussed above, into the food chain. Consider the fact that more land is used in the United States for raising food for livestock than for humans. Consider the people involved in the farming of food for the animals and in the animal factories, whose lives depend on those jobs. Consider the weather patterns of the places where the food and animals are raised such as potential flooding or drought. Consider the carbon dioxide emissions from the shipping of the meat products to Guam, and the packaging of the items to be sold which adds to plastics pollution. Also, consider the impact of food choices in Guam to current health issues—mainly the high rate of diabetes in Guam: 12% of all adults, 16% of adults of CHamoru heritage, and is the 4th leading cause of death in Guam (PR Newswire, 2018). This is systems thinking, wherein everything is connected and interdependent. The example could continue indefinitely in considering the impact on health services, families, lifestyles, and education.

Everything in life is interconnected in some way. The human body itself is one system containing multiple systems which all interact. There are systems within systems at the micro and macro levels. Fritjof Capra—renown scientist, author, educator, and activist—states, "In order to understand life, we really need to understand networks... patterns of relationships. Therefore, to understand networks, we have to learn to think in terms of patterns and in terms of relationships" (Earth Charter International, 2016). Some scholars argue that the very environmental issues

of today are a result of "... our failure to see things in their entirety. That failure occurs when minds are taught to think in boxes" (Orr, 2004, p. 94). Interdependency and systems thinking needs to be the basis of all learning in our schools, as it is the foundation of all life. If one looks at a typical school schedule, subjects are separated throughout the day from elementary through high schools. Why? Research indicates several facts: 1) connecting new learning to previous learning strengthens the learning process; 2) learning is enhanced through exploring patterns and relationships between information and experiences; and 3) learning is reinforced when it is explored through diverse means (Jack, 2010; McCall, 2012; Portnoy, 2019). Hence, learning would be enhanced through the implementation of a systems thinking approach.

Systems thinking can be implemented through an interdisciplinary, thematic approach. For example, consider an example under the theme of oceans, which is very relevant to living in Micronesia. Students could read the novel, *Call it Courage*, about a young boy living on an island in the Pacific Ocean who ventures out on his own to an uninhabited island. He learns to survive on his own and overcome the fears which forced him to leave his home island. Students could engage in learning centers which integrate language arts, science, math, and art activities related to sea creatures, Micronesian island entities, and Micronesian legends of sea creatures. Taking any overarching theme can provide the connection that students need to see and experience. Skills and comprehension are more likely to be reinforced when used in different ways and for different purposes. For example, reading and writing skills are enhanced when reading and writing for different purposes (novel, information, journaling, letters). Students can learn about islands throughout Micronesia and the ocean which connects all islands, while gaining new perspectives related to the various islands and their classmates who may be from those islands. Authentic math activities such as measuring distances between the islands or comparing the lengths and weights of various sea creatures demonstrate the relevance, practicality, and importance of math skills. Materials and learning activities are integrated across separate disciplines as a way to demonstrate the interconnectedness of life and learning.

When helping students to see the connectivity in subjects they are learning about and their relationship to topics or themes, they learn to see the relationships in life. They see the way that all systems in life are connected and how their actions can impact those systems environmentally, socially, and economically (Schuler, Fanta, Rosenkraenzer, & Riess, 2018). Consider the statement posed by the Center for Ecoliteracy (n. d.): "Since explaining things in terms of their contexts means explaining them in terms of their environment, all systems thinking is environmental thinking" (para. 6).

Education for Sustainable Development: Place-Based Learning

As with systems thinking, place-based learning focuses on relationships and connectivity to one's place. David Sobel is well known for his work related to place-based learning, including one of the more popular books entitled *Place-Based Education*. Sobel (2003) defines place-based learning (or place-based education) as, "...the process of using local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, and other subjects across the curriculum" (p. 11). By grounding education within one's place, young people are provided with opportunities to explore the systems they are directly part of, to observe and examine potential risks to their water and land, and to develop or take part in community efforts to address local issues. While young people – and adults – may feel overwhelmed when contemplating solutions to global issues, they should be empowered to address issues within their community: "... some problems that appear to be unsolvable in the global context may be solvable on a local scale if we are prepared to do so (Orr, 2004, p. 163). Place-based learning starts where the students live, with their experiences and realities.

Local leaders in Guam advocate for this approach, arguing that place-based learning is a fundamental part of human learning. Dr. Robert Underwood (R. Underwood, personal communication, February 8, 2017) noted, "It's not really a political statement about American vs non-American: it's just an educational theory. You go from what you know to what you don't know.... If you have an island-based curriculum, ...then you have a healthy school...or healthy society". According to Dr. Laura Souder (L. Souder, personal communication, May 30, 2018), "If knowledge is not rooted in what children experience and breathe and live and is around them, then it's not going to be solidly founded; there's no bearing on it...we're gonna be screwed for life because we're losing generations of learners."

Micronesian Educator #30

CHamoru oral historian, Tony ‘Malia’ Rameriz, also argued for the need for a more place-based learning approach:

When you’re born, your first observations are very important. What are they looking at? Coconut trees, breadfruit trees. Why don’t they know anything about the breadfruit? Why don’t they know much about coconut trees? Why are they disassociating from two very fundamental food staples - not only in Guam, but in the entire Oceania? Why are they learning about the maple tree, the cherry trees, the oak trees? What is that to them? ... Your eye is your first observation of what you accumulate in your mind... Young people don’t know about the different stages and uses of our trees.... What are these textbooks doing? Need I say more? (T.M. Rameriz, personal communication, April 18, 2017)

Place-based learning involves more than simply learning about where they are: it implements hands-on and life learning experiences. While some may equate such as approach to an environmental program or class, place-based learning goes beyond outdoor or environmental education. Place-based learning includes interactions and relationships within the community, such as local community members (i. e., elders, specialists, government and business leaders, community organizations, and so forth). Using the ocean thematic unit as an example, students could work with community experts in observing and collecting data related to coral and fish life, create videos related to their data which can be used within local businesses or the Guam Visitors Bureau, and could spend part of a day with local fishermen learning about fishing and listening to their stories.

The walls of the school classroom are broken down such that students are outside of the classroom, while nature and community members are part of the learning experience. In this way, place-based learning connects young people to where they are and who they are, as part of an environmental, social, economic, and cultural community system. It should also be noted that place-based learning does not mean that students would not also learn about the world beyond their immediate community; it is about starting from where you are and always maintaining that awareness and connection throughout the educational experience.

Education for Sustainable Development: Connecting to Nature

David Sobel—an ardent advocate of place-based, outdoor education—eloquently stated, “If we want children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it.” One way to promote a love of nature is by spending time outdoors. As with relationships in general, it takes time. In this case, young people need time in nature. With younger children, time in nature need not be structured with lesson plans, learning outcomes, and assessments: in fact, such methods may have adverse effects on the goal of developing a relationship with nature. One of the key elements said to play a role in children developing a relationship or love of nature is allowing them time to explore and play, both alone and with peers.

One study by Barthel, Belton, Raymond, and Giusti (2018) specifically demonstrated the role of direct student engagement in nature as compared to students learning about nature through classroom instruction. Some students spent time outdoors observing and learning about salamanders; the other students were taught about salamanders mainly in the classroom. Both groups had access to observing salamanders in local ponds, but the experimental group spent extended periods of time in direct observations and interactions with the salamanders and the pond. Both groups were also provided with information via local experts knowledgeable about salamanders, their habitat, and threats to their wellbeing. The salamander project occurred over a two-month period of time. The findings indicated that the students who had spent extended time in nature in learning about and observing the salamanders demonstrated an increased appreciation of salamanders and nature in general, as well as deeper knowledge of the types and variations of salamanders, and a general sense of connection to nature.

Perhaps one of the greatest threats to such engagement in nature is the drive toward having more—consumerism—which has prompted emigration from island communities into more urban settings where the fostering of such interactions in nature is limited. One example is the long-term leasing (99 years) of the land and ocean rights of entire villages on Yap Proper (T. Rutun, personal communication, December 2018). Villagers are tempted by large amounts of money from foreign investors to lease their traditional, family lands, often on long stretches of tranquil shorelines of sandy beaches, swaying coconut trees, and coral reefs. Sometimes the temptation of money—which

Micronesian Educator #30

equates to iPhones, store-bought food items, cars, concrete homes, private homes or relocating—is more than people are willing to turn away from. Nevertheless, in doing so, traditional practices of fishing and gardening are threatened, as well as children’s access to exploration and play in nature.

Studies demonstrate a decisive link between time spent in nature to adult attitudes, behaviors and decisions related to the environment (Rosa & Collado, 2019; Rosa, Profice, & Collado, 2018; Sobel, 2004). Such research indicates a number of benefits from extended childhood experiences in nature: “increased bio-centric values...connectedness to nature... stronger sense of place attachment...increased positive emotions...and a stronger sense of morality toward the environment” (Rosa & Collado, para. 3). Environmentalists such as John Muir, Rachel Carson, David Attenborough, and Aldo Leopold developed a passion for nature at early ages through exploration in their immediate surroundings, whether on farms, along rivers, or in fields and forests. The component of unstructured play and exploration in general has been touted as pivotal in the development of a child’s creativity, physical and emotional wellbeing, and general intelligence (Whitebread, 2017).

Exploration and play in nature lay the foundation for pro-environmental attitudes throughout life, as a means of advocating for and protecting that which we are reliant on and a part of (Suttie, 2016). Children come to see empty lots as playgrounds and homes to tadpoles, dragonflies, and diverse trees and grasses—not as a commodity to be sold off to the highest bidder. Throughout the islands of Micronesia, there are endless possibilities for exploration and play whether at beaches, mangroves, limestone forests, hills, the ocean, school yards, or backyards. The adventures are available—if children are allowed and encouraged to play and learn outside of the walls of classrooms and homes. The learning and relationships in nature that await them are sure to foster lifelong commitments to preserving and promoting the vitality of the Earth’s systems.

Education for Sustainable Development: Values-Based

Values can be defined as core beliefs that a person has which directs the person’s attitudes and behaviors. A person’s values provide a basis of their identity and relationship with everyone and everything in life. Values involve a person’s cognitive, affective, conative, and spiritual development (Preston, 2010). In creating a shift in education toward sustainable development, values are central to the changes that would need to take place. It is not enough to learn information; students must be able to process information with values to better understand the implications of the information and how to act upon it (Crowell, 2018). Given the past, current, and potential challenges of climate change, social and economic disparity and justice, ongoing wars and political struggles, and pollution around the globe, the need for a values-based approach in education seems paramount: “You can’t solve problems with the way of thinking that led to their creation” (Albert Einstein as quoted by Preston, 2010, p. 187).

There are many values-based programs and efforts currently being implemented around the globe. One example is the Living Values Education (LVE) program, founded in the 1990s and established as the Association for Living Values Education International (ALIVE) in 2004. Participants from some 60 countries implement LVE into their schools with support and resources provided from ALIVE. LVE is integrated throughout the schools’ curriculum and is central to the schools’ vision statements. Values include peace, love, caring, respect, responsibility, tolerance, honesty, humility, happiness, cooperation, simplicity, compassion, unity, caring for the Earth and oceans, and freedom (ALVEI, n. d., p. 6). These values are the foundation of such schools. For example, at Kuwait American School, school-wide assemblies are held throughout the week with songs and class performances related to the value of the month. School-wide efforts based on the values of caring and responsibility have prompted numerous fundraising activities such as aid for typhoon relief efforts in the Philippines to aid in providing school materials for a remote school in Nepal comprised of Tibetan refugees (personal experience, August 2012–May 2015). Another program which has been implemented on a global level is based on the Earth Charter, which was developed by community members across the globe:

The Earth Charter is a document with sixteen principles that turn conscience into action. It seeks to inspire in all people a new sense of global interdependence and shared responsibility for the well-being of the whole human family, the greater community of life, and future generations. It is a vision of hope and a call to action (Earth Charter, n. d.)

Micronesian Educator #30

The Earth Charter was the result of a call to action set into motion in 1987 by the United Nations World Commission on Environment and Development. The effort extended over a ten-year period to ensure the inclusion of key values from around the planet. Four cornerstones (pillars) became the basis of 16 principles and sub-principles. Pillar I is Respect and Care for the Community of Life, Pillar II is Ecological Integrity, Pillar III is Social and Economic Justice, and Pillar IV is Democracy, Nonviolence, and Peace. A plethora of resources are available, as well as training and certification programs. The Earth Charter demonstrates a systems thinking approach in its philosophy and implementation, and it is the foundation of many schools grounded in ESD, as it presents a path for addressing the Sustainable Development Goals.

Some schools and even countries have developed their own values programs. For example, Australia commenced the inclusion of Values Education in 2005 to be part of the schools' curriculum across English, science, mathematics, and history (Australian Government, n. d.). Resources are provided which are place-based, "relevant to the students' lives and address the contemporary issues they face" (Australian Government, p. 4). It is not clear, however, the extent to which schools or educators adhere to the implementation of the program.

Guam's Department of Education provides resources for Character Education, which differs slightly from values-based education. In perusing the Home Learning Resources Page, one can find resources for each grade level. Topics for each elementary grade level include Corona Virus/Safety, My Community/Citizenship, Organizing/ Scheduling Task, Budgeting/Needs and Wants, Dealing with Anger/Frustration, Respect, and Nutrition/Exercise. Evidence of materials or curriculum related to Character Education was not available beyond the 5th grade. The materials for K-5th grade were set for an eight-week period of time from April through May. Hence, this would indicate that the Character Education program is added to the curriculum rather than a school or system-wide approach to incorporating values-based education.

No matter of the choice of programs or approaches, a values-based approach is central to addressing the challenges being faced around the globe. An important component of any values-based program or effort is that of being the foundation of the entire school community or system, without which, the effort will be limited. Whichever values-based effort is implemented, it must find ways to encourage "spiritual and ethical awakening" (Preston, 2010, p. 191): to alter the ways of viewing ourselves and the systems, we are part of (and are part of all systems) such that action is taken to ensure sustainability of our planet and all that is part of our planetary system.

Education for Sustainable Development: Emergent Teaching

Emergent teaching is based on the Greek word for education—*Edukos*—which translates to "draw forth from within." Crowell (2018) notes that "Meaning is created from within and cannot be imposed or transmitted from someone else. Information, by itself, has no meaning" (p. 5). The argument is that teaching, in and of itself, does not necessarily equate to learning. Students must be provided opportunities to internalize and reflect on what they are exposed to or is presented to them. They need time to consider how the information relates to them, to their life experiences, and to what is around them. As with systems thinking and place-based learning, students need to see and understand the ways in which the material is connected to them. As they contemplate the connectedness of the material, meaning emerges (Crowell, 2018).

To describe emergent teaching, Crowell and Reid-Marr (2013) refers to systems thinking wherein systems are "open and dynamic... constantly interacting with their environment—changing, adapting, and evolving" (p. 2). The authors expand on the systems thinking of openness and evolving to include the role of the nervous system in creating meaning: "Experience in central to any understanding of the mind" (Crowell & Reid-Marr, 2013, p. 4). It is important to encourage students to engage in multisensory opportunities in making meaning. Thus, emergent teaching is based on the concept of allowing students to engage, internalize, make meaning of information, experiences, or materials such that they create their *own* meaning.

Emergent teaching is not emergent curriculum, such as that used in Early Childhood approaches inspired by Reggio Emilia. In fact, emergent teaching is not a curriculum; it is more of a practice which can be implemented within any

Micronesian Educator #30

curriculum or program. An example provided by Crowell and Reid-Marr is set within an art class. The students needed to complete projects, one of which was creating a sculpture. The instructor, Reid-Marr, invited students to spend time in a forest area near the school to explore and look for natural materials and inspiration for a piece. Once completed, students were told to visit their sculpture every other week for six months to observe changes and keep a journal to describe the changes and their feelings. This allowed time for students to reflect and connect with the forest and life within it, and to appreciate the changes taking place over the six months. They learned more than just about creating a sculpture: they learned about the forest, the changes in the forest over time, and formed a relationship with the space and all that lived there. This type of learning could not really have been taught; it had to emerge from their experience. In the same way, educators should look for and create opportunities for such time and processing to occur. Educators cannot predict the learning that will emerge, but they do need to allow for such learning to occur.

Emergent teaching relates well to traditional Indigenous learning, such as demonstrated prior to colonial education throughout Micronesia—and is still seen today in some Micronesian communities. For example, on the island of Yap Proper, elders continue to teach skills in traditional dance, making traditional clothing, and fishing. Each of these skills can be taught, but the degree and extent to which a young person learns and makes meaning for themselves will vary. Such skills take time—sometimes months or years—to learn, to develop, to internalize. Fishing, for example, requires knowing about where the best fish habitats are, any limitations in terms of family fishing areas, when the best times and seasons are for fishing, knowing how to swim and surface dive, and knowing which fish are best to eat and which ones to avoid. Such learning will also include language and cultural traditions, such as sharing of food and how much each family receives based on social hierarchy. Emergent learning will take place naturally, including confidence, knowing one's limit, and appreciation for one's place within the environment and community. There are no limits on the learning and making meaning of the learning that can occur, as long as no limits are set.

This is especially important in ESD, wherein students need time to reflect upon values and the interconnectivity of all systems and their part in the systems. Information in itself is not learning. Teaching in and of itself is not learning. Learning needs meaning and meaning needs time. It needs to emerge from the learner. Learning becomes “learning about yourself and your relationship with the world” (Crowell, 2018, p. 11).

Conclusion

Education has been a key player in many of the issues evident today: social and economic disparity, global climate, pollution, and the lack of an appreciation of mankind's place in our planetary system. Nonetheless, education can also play a pivotal role in promoting solutions for creating a more just, peaceful, and sustainable future. However, we cannot expect changes without altering the essence, meaning, and direction of education. Education should address questions such as “What kind of person do I want to be?” and “What kind of world do I want to live in?” (Crowell, 2018, p. 6). ESD is a timely course of action which encourages an analysis and reflection on the purpose of education and our purpose as individuals and as a community. As Crowell (2018) states, “ESD insists that we need a planetary vision that brings us together as a human family yet also maintains the unique cultural diversities that shape and define who we are” (p. 14).

ESD encapsulates what is known about the brain and learning. It fosters a thematic, systems thinking approach with hands-on learning which engages all senses. ESD is holistic in that it addresses cognitive, social, and emotional development vis-à-vis connecting to nature. Students need opportunities to make meaning of learning by looking at patterns and relationships, and ESD encourages this through emergent teaching. Without a clear shift in attitudes and perspectives, there is little chance of changing the current path which is leading to the devastation of our planet—of our islands. What we do to our planet and island, we do to ourselves. As Sterling (2001) notes, “We need to ‘see’ differently if we are to know and act differently... we need learning experiences to facilitate this change of perspective” (p. 52). ESD provides a way forward in addressing the current trajectory and is well-aligned with Indigenous values and pedagogy.

Perhaps ESD is best summed up by Crowell (2018): “ESD is not learning *about* sustainability, it is learning *for* sustainability. It is an education that speaks to the hearts, minds, and attitudes of students that their lives and choices matter” (p. 2). I would add that our islands matter, and not just today but for the next seven generations.

REFERENCES

- Animal Society for the Prevention of Cruelty to Animals [ASPCA]. (n. d.). Animals on factory farms. <https://www.aspca.org/animal-cruelty/farm-animal-welfare/animals-factory-farms>
- Appiah, J. K. (2012). The significance of international comparison of student achievement. http://www.iaea.info/documents/paper_30e42a204.pdf
- Association for Living Values Education International [ALVEI]. (n. d.). <file:///C:/Users/Admin/Downloads/alive-ebrochure-print-version.pdf>
- Assadourian, E. (2017). EarthEd: Rethinking education on a changing planet. In E. Assadourian & L. Mastny (Eds.), *EarthEd: Rethinking education on a changing planet* (pp. 3–20). Washington, DC: Island Press.
- Australian Government. (n. d.). Values education and the Australian curriculum. http://www.curriculum.edu.au/verve/_resources/ValuesEducationAustralianCurriculum.pdf
- Barthel, S., Belton, S., Raymond, C. M., & Giusti, M. (2018). Fostering children’s connection to nature through authentic situations: The case of saving salamanders at school. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00928>
- Borja, J. I. (2019). Number of vehicles in Guam rises with population. *Marianas Business Journal*. <https://www.mbjguam.com/2019/02/18/number-of-vehicles-on-guam-rises-with-population/#:~:text=Data%20from%20the%20Guam%20Department.car%2Dto%2Dperson%20ratio>
- Botha, L. R. (2010). Indigenous knowledge as culturally centered education in South Africa. *Education Review*, 7(1), 39–50.
- Browne, J. R. (2012). *Walking the equity talk: A guide for culturally courageous leadership in school communities*. Thousand Oaks, CA: Corwin Press.
- Cajete, G. (1994). *Looking to the mountain: An ecology of Indigenous education*. Rio Rancho, NM: Kivaki Press.
- Center for Ecoliteracy. (n. d.). *Systems thinking: Shifts of emphasis*. Rio Rancho, NM: Kivaki Press.
- Cividino, S., Halbac-Cotoara-Zamfir, R., & Salvati, L. (2020). *Revisiting the “city life cycle”: Global urbanization and implications for regional development*. <file:///C:/Users/Admin/Downloads/sustainability-12-01151-v2.pdf>
- Civilian Exposure. (2017). <https://www.civilianexposure.org/andersen-air-force-base-yigo-guam>.
- Crowell, S. (2018). *Earth charter pedagogy: New understandings of emergence applied to ESD*. Re-Enchantment Press.
- Crowell, S., & Reid-Marr, D. (2013). *Emergent teaching: A path of creativity, significance, and transformation*. R&L Education.
- Curwen-Doige, L. A. (2003). A missing link: Between traditional Aboriginal education and the Western system of education. *Canadian Journal of Native Education*, 27(2), 144–160.
- Davis, W. (2009). *The wayfinders: Why ancient wisdom matters in the modern world*. House of Anansi Press Inc.
- Earth Charter. (n. d.). The earth charter. <https://earthcharter.org/read-the-earth-charter>.
- Earth Charter International. (2016). *Interview with Fritjof Capra: The systems view of life* [Video]. YouTube. https://www.youtube.com/watch?v=Zi8AY8Nu3RU&t=1s&ab_channel=EarthCharterInternational
- Gawel, M. (n. d.). *Guam: Military development threatens reefs*. World Resources Institute. <https://www.wri.org/guam-military-development-threatens-reefs>
- Gawlik, M. (2012). Moving beyond the rhetoric: Charter school reform and accountability. *Journal of Educational Research*, 105(3), 210–219.
- Gilbert, H. E. (2019, May 14). U.S. Census Bureau: Guam hosting 9% more migrants from Freely Associated States in 5 years. *Guam Pacific Daily News*. <https://www.guampdn.com/story/news/local/2019/05/13/guam-migrant-population-increase-9-percent-2013-2018-us-census-bureau-shows/1195035001>
- Guskey, T. R. (2013). Defining student achievement. In J. Hattie & E. M. Anderman (Eds.), *International guide to student achievement*. Abingdon, UK: Routledge.
- Hathaway, M., & Boff, L. (2009). *The Tao of liberation: Exploring the ecology of transformation*. New York, NY: Orbis Books.

Micronesian Educator #30

- Haw, J. (2013). Military buildup's environmental takedown. *Scientific American*. <https://blogs.scientificamerican.com/expeditions/military-buildups-environmental-takedown>
- Hezel, F. X. (2013). Micronesians on the move: Eastward and upward bound. *Pacific Islands Policy*, 9. <https://www.eastwestcenter.org/system/tdf/private/pip009.pdf?file=1&type=node&id=34149>
- Homeless Coalition. (2019). *Preliminary results of Guam's point-in-time homeless count released*. https://www.ghura.org/sites/default/files/preliminary_results_of_guam_pit_count_released_1.31.2019.pdf
- Ingraham, C. (2019). Americans are getting more miserable, and there's data to prove it. <https://www.washingtonpost.com/business/2019/03/22/americans-are-getting-more-miserable-theres-data-prove-it>
- Jack, C. D. (2010, May). *Exploring brain-based practices in secondary education* (Doctoral dissertation). <http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1114&context=td>
- Macy, J., & Johnstone, C. (2012). *Active hope: How to face the mess we're in without going crazy*. New World Library.
- McCall, L. A. H. (2012). Brain-based pedagogy in today's diverse classrooms: A perfect fit—but be careful! *Delta Kappa Gamma Bulletin*, 78(3), 42–47.
- Mease, A. (n. d.). History of the Denesuliné (Dene) in northern Saskatchewan. University of Saskatchewan. <http://scaa.usask.ca/gallery/northern/content?pg=ex04-1>
- Merriott, D. (2016). Factors associated with the farmer suicide crisis in India. *Journal of Epidemiology and Global Health*, 6(4), 217–227.
- Mulvaney, K. (2019). Climate change report card: These countries are reaching targets. National Geographic. <https://www.nationalgeographic.com/environment/2019/09/climate-change-report-card-co2-emissions>
- Norberg-Hodge, H. (2010). In C. Black (Director), *Schooling the world: The white man's last burden* [Motion picture - documentary]. Lost People Films.
- Orr, D. (2004). *Earth in mind: On education, environment, and the human prospect*. Washington, DC: Island Press.
- People for the Ethical Treatment of Animals. [PETA]. (n.d.). *Factory farming: Misery for animals*. <https://www.peta.org/issues/animals-used-for-food/factory-farming>
- Pew Research Center. (2012). *How corporate control squeezes out small farms*. <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2012/07/18/how-corporate-control-squeezes-out-small-farms>
- Portnoy, L. (2019). *Designed to learn*. Association for Supervision and Curriculum Development.
- PR Newswire. (2018). StayWell Guam Diabetes Foundation recognizes the deadly impact of diabetes on Guamanians, calls for immediate action. <https://www.prnewswire.com/news-releases/staywell-guam-diabetes-foundation-recognizes-the-deadly-impact-of-diabetes-on-guamanians-calls-for-immediate-action-300704323.html>
- Preston, N. (2010). *The why and what of ESD" A rationale for Earth Charter education (and naming some of its difficulties)*. Newbury Park, CA: Sage.
- Rai, M. S. (2017). Impact of urbanization on environment. *International Journal of Emerging Technologies* 8(1), 127-129.
- Rosa, C. D., & Collado, S. (2019). Experiences in nature and environmental attitudes and behaviors: Setting the ground for future research. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00763>
- Rosa, C. D., Profice, C. C., & Callado, S. (2018). Nature experiences and adults' Self-reported pro-environmental behaviors: The role of connectedness to nature and childhood nature experiences. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.01055>
- Shah, A. (2014). *Why is biodiversity important? Who cares?* <https://www.globalissues.org/article/170/why-is-biodiversity-important-who-cares>
- Schuler, S., Fanta, F., Rosenkraenzer, F. & Riess, W. (2018) Systems thinking within the scope of education for sustainable development (ESD)—a heuristic competence model as a basis for (science) teacher education. *Journal of Geography in Higher Education*, 42(2), 192–204.
- Singh R. L., & Singh P. K. (2017) Global Environmental Problems. In Singh R. (Ed.) Principles and applications of environmental biotechnology for a sustainable future. https://doi.org/10.1007/978-981-10-1866-4_2
- Sloan, W. M. (2012, July). What is the purpose of education? *Association for Supervision and Curriculum Development—Education Update*, 54(7). <http://www.ascd.org/publications/newsletters/education-update/jul12/vol54/num07/What-Is-the-Purpose-of-Education%C2%A2.aspx>
- Sobel, D. (2003). *Place-based learning: Connecting classrooms and communities*. Great Barrington, MA: Orion.
- Sterling, S. (2001). *Sustainable education: Re-visioning learning and change*. Green Books.
- Suttie, J. (2016). How to raise an environmentalist. *Greater Good Magazine*. https://greatergood.berkeley.edu/article/item/how_to_raise_an_environmentalist

Micronesian Educator #30

- “The Privatisation of Seeds.” (n. d.). RESET. <https://en.reset.org/knowledge/privatisation-seeds>.
- Tickell, R. H., & Tickell, J. (Directors, Producers, Screenplay), Engelhart, R. Fisher, D., & Beneson, B. (Producers), O’Hara, J. (Screenplay). (2020, April). Kiss the ground [Film].
- United Nations Educational, Scientific and Cultural Organization. [UNESCO]. (2012). Education for Sustainable Development Sourcebook. <https://sustainabledevelopment.un.org/content/documents/926unesco9.pdf>
- United Nations. (1987). Our common future. file:///C:/Users/Admin/Downloads/our_common_futurebrundtlandreport1987.pdf
- “Urban Threats.” (n. d.). National Geographic. <https://www.nationalgeographic.com/environment/habitats/urban-threats>
- U.S. Energy Information Administration. (2019). Guam territory profile and energy estimates: Profile analysis. <https://www.eia.gov/state/analysis.php?sid=GQ>
- Walsh, S. (2018). Do you know what’s in a handful of soil? AgriLand. <https://www.agriland.ie/farming-news/do-you-know-whats-in-a-handful-of-soil>
- Whitebread, D. (2017). Prioritizing play. In E. Assadourian & L. Mastny (Eds.), *EarthEd: Rethinking education on a changing planet* (pp. 107–116). Washington, DC: Island Press.
- Witt, C. (20018). POL: Behind the scenes. <https://www.andersen.af.mil/News/Article-Display/Article/416121/pol-behind-the-scenes/#:~:text=Andersen%20is%20home%20to%20the.of%20fuel%20is%20stored%20here>
- World Wildlife Fund. (2019). Earth Overshoot Day 2019 is the earliest ever. <https://wwf.panda.org/?350491/Earth-Overshoot-Day-2019>

Formative Assessments as Feedback: The Case of Blended Assessment

Yukiko Inoue-Smith, University of Guam

In addition to providing summations that quantify effectiveness, assessments can inform decisions about ongoing courses and approaches to teaching them. Such formative assessments particularly can monitor students' progress and suggest ways of optimizing it. Following a brief overview of formative and summative assessments, this paper focuses primarily on how formative assessments provide feedback on effectiveness in teaching. This includes a case study of a college-level course that blended formative and summative assessments in a two-stage core assignment. This paper further discusses advantages of making formative assessments an essential part of teachers' work with students, in joint fulfillment of learning objectives.

Keywords: evaluation, blended assessment, formative assessment, effective feedback, literature review

Introduction

Although educators often use the terms “assessment” and “evaluation” interchangeably, they are two distinct parts of the same process—and thus, both describe a process of generating and interpreting evidence of student learning (Iliya, 2014). As a rule, the purpose of assessment is *formative*: it focuses on the ongoing process, and on improving the quality of learning by providing feedback to individuals. The purpose of evaluation is generally *summative*: it addresses the final product, and the level of learning demonstrated, providing grades in reference to standards. The following, briefly yet effectively, summarizes this distinction: “The difference between assessment and evaluation lies within the intent of use. Choose assessment when you wish to determine educational strategies. Use evaluation when you want to understand your students’ performance so you can shape knowledge, belief, and behavior” (University of Nebraska–Lincoln, 2020, ¶13). That is, “Assessment is a vital part of any course of study” (English & English, 2019, p.1).

Educational assessment is essentially divided into *formative* and *summative* categories for definite objectives and practices: both formative and summative assessments are deeply embedded in current education systems (Broadfoot et al., n. d.). By contrast to formative assessments which are “process-oriented,” summative assessments are “product-oriented.” Product assessments focus on the creation of learning activities and timelines for expected outcomes, whereas process assessments are the evaluation of learning through alternative evaluation strategies. In the teaching and learning process, summative assessments are carried out at the end of a course and are used as a main source for student grades. Formative assessments are carried out throughout a course and provide ongoing feedback to support learning and progress at the same time (Broadfoot et al., n. d.). Both summative assessments and formative assessments are needed for effective teaching practices (NESA, 2019); basically:

It is important for teachers to use formative assessments efficiently and provide actionable feedback to promote student learning constantly. Moreover, assessment as learning: encourages students to take responsibility for their own learning; requires students to ask questions about their learning; involves teachers and students creating learning goals to encourage growth and development; provides ways for students to use formal and informal feedback and self-assessment to help them understand the next steps in learning; and encourages peer assessment, self-assessment, and reflection. (¶13)

In effect, “Assessment is vital to the education process. In schools, the most visible assessments are summative... But assessment may also serve a formative function. In classrooms, formative assessment refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately” (CERI, n. d., p. 1)—and first and foremost:

Teachers using formative assessment approaches and techniques are better prepared to meet diverse students’ needs—through differentiation and adaptation of teaching to raise levels of student achievement and to achieve a greater equity of student outcomes. But there are major barriers to wider practice, including perceived

Micronesian Educator #30

tensions between classroom-based formative assessments, and high visibility summative tests to hold schools accountable for student achievement, and a lack of connection between systemic school and classroom approaches to assessment and evaluation. (p. 1)

Perhaps most important is that formative assessment is not for grading...is not “about grading in terms of judging and classificatory function of evaluation, but rather improving the whole process of learning” (Pietrzak, 2017, p. 66). Formative assessment allows both the teacher and the student to monitor progress toward enhanced learning as well as teaching. First, this paper develops the above perspective by providing an overview of formative assessments (described as assessments *for* learning) and summative assessments (described as assessments *of* learning). Second, the paper describes an example in which the author of the paper applied both types of assessment to a college-level ongoing course. Third, the paper discusses ways of blending two forms of assessment to promote student learning with understanding.

Formative Assessment and Feedback

Because teaching and learning are continuous processes, the following notion is definitely useful: “There is no generally agreed meaning of ‘assessment feedback’.... But assessment feedback therefore includes all feedback exchanges generated within assessment design, occurring within and beyond the immediate learning context” (Evans, 2013, p. 71). The teaching and learning process is indeed a *complex* and *active* process—and so, it is very important “to remember that the most meaningful feedback is focused...that is meaningful and therefore relevant to the recipient is provided in a timely manner or closely connected to the event, relates to specific recipient behaviors...” (Missouri Education, n. d., p. 11). Below are the typical descriptions which illustrate the impact of *feedback as formative assessment* on student learning to adjust teaching practices accordingly:

Improving feedback practices can significantly improve student learning and the quality of teaching in classrooms.... Effective feedback practices provide the bridge between assessment and learning. There is a strong evidence base behind the impact of feedback. (aitsl, n. d., p. 3)

Both the teacher and the student use formative assessment results to make decisions about what actions to take to promote further learning. It is an ongoing, dynamic process that involves far more than frequent testing, and measurement of student learning is just one of its components. (Chappuis & Chappuis, 2007-2008, p. 14)

Formative assessment encompasses a whole host of tools that provide feedback to teachers or students to help students learn more effectively. (Dixon & Worrell, 2016, p. 154)

Feedback is a crucial component of formative assessment.... Feedback that the teacher provides to students is also an essential resource so the students can take active steps to advance their own learning...the feedback to students can be understood as instructional action. (Heritage, 2011, p. 18)

Formative assessment is concerned with how judgments about the quality of student responses (performances, pieces, or works) can be used to shape and improve the student’s competence by short-circuiting the randomness and inefficiency of trial-and-error learning.... Feedback is a key element in formative assessment. (Sadler, 1989, p. 119)

As regards coursework, Owen (2016) argues that students need to know exactly *what* they will be expected to do, and *how* they will be expected to do it. This perspective shifts the focus from teaching as the transmission of information to providing progressive, low-stakes assignments: as opportunities for students to practice and hone their knowledge and skills, prior to submitting their final projects. Such assignments do not involve lowering the bar; even so, it is true that “offering ongoing formative assessment is invariably time consuming....Instructors wishing to adopt this type of strategy need to be mindful of the amount of time and energy they can expect to expend reading and rereading student work and providing very detailed feedback” (p.175): if students have come to rely on formative assessments, failing to provide such assessments when they matter most is poor practice.

Micronesian Educator #30

In terms of strengthening assessment practices, Ferriter (n. d.) cites ten tips taken from the book, entitled *Common Formative Assessment* by Bailey and Jakicic, including five points: (1) remember that getting information quickly and easily is important; (2) assess only the learning outcomes that the teacher identified as essential; (3) clearly tie every single question to an essential learning outcome (doing so makes tracking mastery by the student and standard possible); (4) when writing constructed response questions, it is better to provide students with enough context to be able to answer the question; and (5) make sure that higher level questions ask students to apply knowledge or skills in new situations.

It is unquestionably that “for formative assessment to be beneficial, it is imperative to include the class in the learning process by providing them with a great deal of feedback” (Cohen, 2014, p. 5)—Moreover:

Assigning a number or letter grade is not useful because it does not communicate to the students what they know or the areas in which they can improve. Rather, providing them with clear cut comments in the margins of the assignment will enable them to edit their work and learn something about their skills during the process. Feedback also should provide students with some sense of understanding about how they are progressing toward the goal and what is still needed to reach it. (p. 5)

Simply formative assessment is part of the instructional process: “When incorporated into classroom practice, it provides the information needed to adjust teaching and learning while they are happening. In this sense, formative assessment informs both teachers and students about student understanding at a point when timely adjustments can be made” (Garrison & Ehringhaus, n. d., p. 1). The same authors describe formative assessment strategies including three strategies: (1) goal setting with students engages them in instruction and the learning process by creating clear expectations; (2) observations, which go beyond walking around the room to see if students are on task, assist teachers in gathering evidence of student learning to inform instructional planning; and (3) questioning strategies should be embedded in lesson planning, because asking better questions allows an opportunity for deeper thinking and provides teachers with significant insight into the degree and depth of understanding.

For effective instruction, teachers need to be action researchers rather than deliverers of curriculum. The new paradigm requires that teachers acquire information and build on it to ensure that all students meet the learning goals and objectives, whereas students need to take a bigger role in the learning process: one of the most difficult transitions for teachers making this paradigm shift is turning over more responsibility for learning to students (Long, 2015). “Although the formative evaluation has the main purpose of helping the student, it can equally help the teacher by allowing him through feedback to orientate himself efficiently and chose the most valuable pedagogic strategies” (Frunza, 2014, p. 454).

Now, how about *blended* classroom assessment? “The integration of summative assessments with formative practices can make the assessment process more meaningful.... Integrating summative assessments into the learning process can also make it more authentic” (Broadfoot et al., n. d., p. 2).

Voelkel (2013) developed a two-stage online test. The first stage was formative, and students received prompt feedback. Students had to score at least 80 percent to progress to the second, summative stage of the test. This assessment design ensured that students completed at least two attempts; and therefore, fully benefitted from the learning opportunities presented at the formative stage. The results suggested that the prompt, specific feedback provided after the formative part of the online tests enabled students to see exactly what they needed to do in order to improve their performance. This design has the potential significantly to improve learning in classes of all sizes, and in a variety of disciplines.

Buchholtz, Krosanke, Orschulik, and Vorhölter (2018) applied two mixed-assessment methods to a practice-based seminar accompanying a school internship. First, the authors combined a formative e-portfolio assessment with a summative panel survey: to assess pre-service teachers’ opportunities for learning in mathematics. Second, the authors integrated a formative e-portfolio approach with a summative oral course examination, to assess learning outcomes among the pre-service teachers, and the processes contributing to their learning. Combining these two

forms of assessment provided evaluations of multiple aspects of the pre-service teachers' perceived opportunities to learn, and of their satisfaction.

The Case of Blended Assessment

A literature review assignment as a coursework provides students with an opportunity "to explore a particular topic in considerable depth. They can also develop a wide range of useful study and research skills" (Miller, n. d., p. 8); therefore, "Consider asking students to prepare a literature review on a given topic. This develops a number of research-type skills, encouraging students to source material, use search engines and be able to assimilate large amounts of material and select the most important" (p.14).

Based on the above perspective, a core assignment in an introductory research methods course that author had been teaching was to write a small-scale standalone literature review. Students enrolled in the course were mostly K-12 classroom teachers pursuing a master's degree in education. Students submitted the assignment in two stages. In the *first* stage, working within the assignment guidelines for students shown below, each student developed an introduction to his or her literature review. Instructions provided for a maximum of one page and indicated ways of writing effectively. Students posted their introductions in the course online discussion forum. The instructor provided students with the following message:

"After posting your submission, check out what others have written and then thoughtfully and substantively provide your feedback to, at least, two other participants. If you can answer the question that person wrote in their post, please do so. And, of course, provide any encouragements, suggestions, and resources that the person may find useful in order to complete the full literature review paper."

In the *second* stage, students completed their literature reviews (the final products) which were submitted to the instructor only, to be assessed in a summative manner using a scoring rubric, based on five criteria: (1) source quality; (2) introduction; (3) organization; (4) synthesis and conclusion; and (5) the American Psychological Association (APA) style. It is recognized that a good rubric describes "the types of mistakes students tend to make, as well as the ways in which good work shines, giving students valuable information about the task they are about to undertake, and taking the guesswork out of understanding what counts as high quality work" (Andrade & Valtcheva, cited in Inoue-Smith, 2019, p. 186).

Writing Literature Reviews: Guidelines for Students

A literature review is a written summary of the scholarly literature published on a topic. In addition to identifying significant contributions to the field, discussing as well as comparing the research of different authors who work in the same field are essential in writing a literature review. Based on five to seven refereed journal articles on a chosen topic, the literature review paper (eight to nine pages, double-spaced, plus a cover page indicating all necessary information) should adhere to the APA format and style.

Like most other formal papers, a literature review consists of an introduction, a body, and a conclusion. In the introduction, the review topic should be identified, pointing out what has already been published regarding trends and issues, establishing the specific questions guiding your review, and indicating how the review is organized. The body (the main part of the review) provides a critical evaluation of each work: by doing so, the body summarizes each concern appropriately according to its significance, identifying distinct areas of controversy among previous research results, and establishing questions for further research. In the conclusion, concise conclusions are drawn from the review of the literature, maintaining the focus presented in the introduction, identifying gaps and inconsistencies in the literature that are important for future study.

Students in this course all participated actively in the online discussion forum: providing their suggestions, opinions, and resources to other classmates. The instructor emphasized to students the importance of participating, through posting and providing feedback to others; and when students did so, they received full points. For example, some students provided other members with the title of a journal article that might help others to improve their reviews;

some students provided tips on establishing review questions; and some students corrected in-text citations, to accord with the APA format and style. The instructor provided feedback on each student's participation in the online discussion forum, in addition to written feedback on the student's introduction.

Through an online learning community, in particular, "Students can discuss assignments, ask questions, share personal experiences, reflect and think critically about someone's opinion, get exposed to new ideas, and share perspectives" (WBT Systems, n. d., ¶16)—Accordingly, individual members greatly depend on each other to achieve the learning outcomes: active participation facilitates *active learning* that "helps information go from short-term to long-term memory. Information does not stick when it is received passively, and nothing further is done to recall it. For information to become knowledge, learners must engage in activities that help them make meaning of the content they have digested" (¶17).

Summary and Conclusion

In summary, two questions should be considered here. The first is whether technology-enhanced assessments can integrate summative assessments with formative practices. The answer is *yes*. Students and the teacher use information from summative assessments formatively when it guides their subsequent work. Here, the initial assignment—developing the introduction of a literature review paper—was evaluated formatively to enhance the advanced assignment: completing the review paper. By encouraging students to participate actively in the course online discussion forum and to provide constructive responses to others, the instructor emphasized the importance of *active learning* and *cooperation*. Most important, integrated assessments—blending two main types of assessments—make it possible to evaluate instructors' effectiveness in teaching: gauging students' mastery of skills, and improvements in their final products particularly. By creating a "sense of community" in the classroom, this instructional practice clearly supports the following perspective: "Not only teaching and learning methods, but also tools and techniques of assessment are going through the process of rethinking and reconceptualization. Computer-mediated educational methods provide the opportunity to collect abundant information concerning many different aspects of learning experience" (Titov, Kurilov, Titova, & Brikoshina, 2019, p. 768).

The second question is: How can students make better connections between assessment and learning? The answer to the question is, in *several ways*. By developing useful assessments, providing corrective instructions, and giving students second chances to demonstrate success, teachers can improve their instruction and help students learn (Guskey, 2003). Three steps of elements of assessment actively engage students in the process and provide additional opportunities to learn (Starting Point, 2018). The first element is that instructors design learning objectives aligned with their students' educational needs. The second element is that students actively involve themselves in the assessment process and receive prompt feedback. The third element is that learners apply the skills and knowledge gained during assessment in new situations. These *three* steps were applied to the assignment described herein. In the first step, a student learning objective—thus writing a standalone literature review based on the APA style—was established for the course. In the second step, students took active part in the formative assessment process, by critiquing introductory sections of review papers from other students. In the third step, students applied all useful recommendations provided by their classmates as well as the instructor.

The experiences, this assignment afforded to the students and the instructor, confirmed the following: "Education is a process of exploring learners' potential to grow...assessment has a central and paramount role in extending support to students' learning outcomes" (Khan, 2012, p. 576); and, consequently, a real challenge for teachers is to accommodate and balance summative assessment of student learning with formative feedback. Brookhart, Guskey, McTighe, and Wiliam (2018) maintain as follows:

Balanced assessment systems generate a great deal of classroom formative assessment information, varying in length from a few seconds to a week, because the resulting actions are more immediate and smaller in scope—typically actions taken by learners and their teachers during lessons. These small outcomes are often not recorded—although they can be—but rather are the basis for student and teacher action. (p. 8)

As a final point, formative assessment—process-oriented—is important for teachers to take advantage of formative assessment itself. This is mainly because, as Chappuis and Chappuis (2008) argued, students provided with formative feedback are in the best position to enhance and optimize their final products. In the future, the instructor of this ongoing course described in this paper should evaluate student submissions during the first stage using a defined checklist: which substantially integrates summative assessments with formative practices.

REFERENCES

- aitsl [Australian Institute for Teaching and School Leadership]. (n. d.). Spotlight: Reframing feedback to improve teaching and learning. https://www.aitsl.edu.au/docs/default-source/research-evidence/spotlight/spotlight-feedback.pdf?sfvrsn=cb2eec3c_12
- Broadfoot, P., Timmis, S., Payton, S., Oldfield, A., & Sutherland, R. (n. d.). Integrating the formative and summative through technology enhanced assessment. bristol.ac.uk/education.
- Brookhart, S., Guskey, T., McTighe, J., & William, D. (2018). National panel on the future of assessment practices: Comprehensive and balanced assessment systems. https://www.learningsciences.com/wp/wp-content/uploads/2019/03/LSI_Policy_Paper_3_26_19.pdf
- Buchholtz, N. F., Krosanke, N., Orschulik, A. B., & Vorhölter, K. (2018). Combining and integrating formative and summative assessment in mathematics teacher education. <https://doi.org/10.1007/s11858-018-0948-y>
- CERI [Center for education research and innovation]. (n. d.). Assessment for learning: The case for formative assessment. <https://www.oecd.org/site/educeri21st/40600533.pdf>
- Chappuis, S., & Chappuis, J. (2007-2008). The best value in formative assessment. *Informative Assessment*, 65(4), 14–19.
- Cohen, M. T. (2014, Winter). Feedback as a means of formative assessment. *KDP New Teacher Advocate* (pp. 4–5).
- Dixson, D. D., & Worrell, F. C. (2016). Formative and summative assessment in the classroom. *Theory into Practice*, 55(2), 153–159.
- English, J., & English, T. (2019). Combining summative and formative evaluation using automated assessment. *Issues in Informing Science and Information Technology*, 16, 143–151.
- Evans, C. (2013). Making sense of assessment feedback in higher education. *Review of Educational Research*, 83(1), 70–120.
- Ferriter, B. (n. d.). Ten tips for creating formative assessment. <http://bit.ly/10Tips4FormAss>
- Frunza, V. (2014). Advantages and barriers of formative assessment in the teaching-learning activity. *Procedia-Social and Behavioral Sciences*, 114, 452–455.
- Garrison, C., & Ehringhaus, M. (n. d.). Formative and summative assessments in the classroom. <https://www.amle.org/BrowsebyTopic/WhatsNew/WNDet/TabId/270/ArtMID/888/ArticleID/286/Formative-and-Summative-Assessments-in-the-Classroom.aspx>
- Guskey, T. R. (2003). Using data to improve student achievement. *Educational Leadership*, 60(5), 6–11.
- Heritage, M. (2011, Spring). Formative assessment: An enabler of learning. *Better: Evidence-Based Education* (pp. 18–19).
- Iliya, A. (2014). Formative and summative assessment in educational enterprise. *Journal of Education and Practice*, 5(20), 111–117.
- Inoue-Smith, Y. (2019). Optimizing learning through activities and assessments: A TPACK-based online course design. In Y. Inoue-Smith (Ed.), *Faculty roles and changing expectations in the new age* (pp. 176–195). Hershey, PA: IGI Global.
- Khan, B. (2012). Relationship between assessment and students' learning. *International Journal of Social Sciences and Education*, 2(1), 576–588.
- Long, K. (2015). The role of assessment in differentiated instruction. <https://www.deltaeducation.com/resources/blog/mar-2015/role-of-assessment-in-differentiated-instruction>
- Miller, N. (n. d.). Alternative forms of formative and summative assessment. https://www.economicsnetwork.ac.uk/handbook/printable/assessment_v5.pdf
- Missouri Education. (n. d.). Essential principles of effective evaluation. The Department of Elementary and Secondary Education. <https://www.nctq.org/dmsView/eq-ees-essential-principles>

Micronesian Educator #30

- NESA [NSW Education Standards Authority]. (2019). Assessment for, as and of learning. <https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/understanding-the-curriculum/assessment/approaches>
- Owen, L. (2016). The impact of feedback as formative assessment on student performance. *International Journal of Teaching and Learning in Higher Education*, 28(2), 168–175.
- Pietrzak, P. (2017). A methodology for formative assessment: Feedback tools in the translation classroom. *Kwartalnik Neofilologiczny*, 64(1), 66–80.
- Sadler, R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119–144.
- Starting Point. (2018). How learning and assessment are linked. <https://serc.carleton.edu/introgeo/assessment/how.html>
- Titov, S., Kurilov, A., Titova, N., & Brikoshina, I. (2019). Integrative assessment framework in blended learning. *TEM Journal*, 8(3), 768–774.
- University of Nebraska–Lincoln. (2020). Assessment vs. evaluation. Office of Graduate Studies. <https://www.unl.edu/gradstudies/connections/assessment-vs-evaluation>
- Voelkel, S. (2013). Combining the formative with the summative: The development of a two-stage online test to encourage engagement and provide personal feedback in larger classes. *Research in Learning Technology*, 21. <http://dx.doi.org/10.3402/rlt.v21i0.19153>
- WBT Systems. (n. d.). Improve student success with an online learning community. <https://www.wbt systems.com/learning-hub/blogs/improve-student-success-online-learning-community>

Section Two



Critical Essays

Optimal Class Size for Online Education in Pasifika Contexts

STEPHEN FOX, University of Guam

Over the past two decades, online education has grown at a phenomenal rate, with increases in both online offerings from traditional schools and from entirely online programs and institutions where degrees are completed remotely. Students sought flexibility to take classes at geographic distance and to fit coursework into busy temporal schedules. Educators saw online learning as a means to provide opportunities to transmit knowledge to students without access, and administrators envisioned increased enrollment without additional physical infrastructure. What became evident, however, was that a number of factors influence outcomes throughout this process and neither equity nor success are assured (Fain, 2019; Protopsaltis & Baum, 2019). Students fail to pass or complete online courses more often than in-person classes, a trend that may only be countered by specific intervention and mentoring (Gaskell, 2006; Waters, 2013). Western academia began in Paris nearly a millennium ago and its hierarchy, processes and goals remain remarkably consistent, despite massive changes in society, culture, and technology. The Western system is particularly less effective for members of cultures that differ greatly from European norms, including Pasifika cultures (e.g., Kerr, 2017; Ratliffe, 2010).

The COVID-19 Pandemic forced much of the globe to shift some or all education online to maintain safety and quarantine protocols. At all levels, educators were asked to deliver their lessons electronically, whether with synchronous meetings online, asynchronously with contact only via email, discussions, and assignments, or in some combination or hybrid (Lewis & Harrison, 2012). Few were prepared, and the literature regarding online pedagogy presented a confusing array of recommendations, techniques, and results (Gering et al., 2018). The pandemic has exacerbated many issues inherent to distance education: students are isolated from social interactions and supports, increasing chances of depression and anxiety; instructors are literally more remote from their students, leading to misunderstandings, confusion, and frustration; and many instructors and students alike lack the infrastructure to assure their success.

Factors in Online Learning

All education ultimately comes down to transfer of knowledge between a learner and a source of that knowledge, set in a particular sociocultural context, occurring according to some formal or informal process, including (or not including) resources to facilitate the process, in ways that are more or less effective, and resulting in some outcome regarding the effectiveness of the knowledge transfer. These factors and roles remain consistent whether the transfer involves quantum physics or stone tool manufacture. In higher education, the factors can be described and measured on student, teacher, and course levels, though instructor level studies are particularly rare (Zheng et al., 2020). These obvious structural factors are further shaped by differences of ability, preparation, resources, and culture of the individuals involved (e. g., Francis et al., 2019). Cultural incongruence can interfere with educational processes, and complications can be particularly pronounced for Indigenous students (Stoicovy, 2018; Trieu & Jayakody, 2019) and for English Language Learners (ELL) in online courses (Zheng et al., 2020).

The factors that change most moving online are the social and interpersonal ones. We are a social species whose primary modes of knowledge transfer have always been social (Fox, 2020), so the effects of this transition are potentially enormous. Our ways of understanding ourselves in relation to others also comprises a primary source of intercultural difference, particularly in the dimension of individualism-collectivism. Differences on this dimension become most pronounced and relevant when cultural congruence between two groups is lowest. The difference between the Western (European) individualist model of education and the realities of life as a member of a Pasifika culture with strong emphasis on collective identity and membership sets the stage for major issues that can interfere with educational outcomes (Kerr, 2017; Stoicovy, 2018).

Research on Class Size

Three interrelated issues predominate concerns in research on class size: retention, interaction, and quality. Students want and need quality delivery to have a successful matriculation and subsequent outcomes in later

employment. In terms of retention, without other factors intervening, previous student success predicts retention (Cochran, Campbell, & Baker, 2013). Hixenbaugh, Dewart, & Towell, (2012) found that student physical health, well-being, and social support were primary factors in retention. If completion is to be the measure of success and funding, the simple solution is to raise entry standards, which will disenfranchise a massive portion of potential students. The alternative is to find methods to improve student success even amongst those with previous low performance and insufficient social support. Given the confluence of increasing demand for online classes and placement of accountability for completion at the institutional level, serious analysis is warranted. Triangulation of retention, instructional quality, and interaction are obvious areas of focus.

Kim (2013) states that participation is a key element in outcomes, but participation may vary from simply completing assignments to synchronous interaction between students and instructors. In Boettcher’s (2013) Best Practices compendium, practice number 5 suggests use of both synchronous and asynchronous activities, which would typically include a combination of posted asynchronous discussions along with some form of synchronous participation in a textual chat or other voice or video situation. Size of class affects both of these, and while systems such as Zoon can now handle large numbers of participants, meetings with more than 25-30 students will require multiple pages for participants’ video, which is about the same range where textual interactions such as discussion boards become unwieldy. Personalized instructor interaction is particularly valuable to students, though time consuming. Item 5 in Hanover Research Group’s (2009) Checklist for Online Interactive Learning (COIL) states that institutions should “Mandate smaller class sizes for online courses to give faculty appropriate time to deliver quality instruction” (p. 6). A surprisingly small number of journal articles address the issue of class size, despite the rapid expansion of online learning in recent years and the huge increase in class sizes as Massive Open Online Courses (MOOCs) are increasingly seen as an economically viable option for lower cost education. MOOCs have proven particularly problematic in their lack of instructor-student interaction (Fain, 2019).

Optimal Class Size (OCS)

Current actual class sizes range from very small (2 to 5) to MOOCs of hundreds of thousands. Retention and grades given begin to vary markedly, with research generally supporting better outcomes at smaller class sizes. Oestmann and Oestmann (2006) reported an optimal online class size of 20 to 25. In classes of less than 10 or greater than 25, the amount and quality of interaction decreased, and the resulting grade outcomes were reduced. Students were more likely to disengage when enrollment passed 25 (Meredith, pp. 9-10). In her review of available studies, Artz (2011) cites a number of factors that influence outcomes beyond size. For new instructors, a class of 12 appears optimal. In general, sizes of 16 to 19 students appear to have best outcomes. Lin and colleagues (2019) found a U-shaped relation to learning outcomes, with efficacy increasing until class size reaches 45 students, then falling off (See Tables 1 and 2).

Table 1
Orellana, Instructors’ Perceptions of Optimal Class Sizes

Measure	Min	Max.	M	SD
Optimal class size (OCS)	7	80	18.9	9.1
OCS if interaction goals achievable	5	50	15.9	6.6
Actual class size	4	81	22.8	13.7

Table 2
Class size by publication year

Authors	Year	Optimal size	Comments
Vrasidas & McIssac	1999	Not too small	Interaction decreases
Jones, Ravid, & Rafaeli	2004	Not too big	Too many discussion posts overwhelm students, less interaction
Arbaugh & Benbunann-Finch	2005	25-30	Larger classes more impersonal, classes over 30 negatively associated with learning outcomes
Tomei	2006	12	Smaller size generates more detailed messages
Rovai	2007	min 8–10, max 20–30	Good interactions happen in this range
Qiu, Hewitt, & Brett	2012	13-15	Smaller groups benefit class discussions

Asynchronous discussion and size

A primary method of interaction is asynchronous discussion, which potentially provides benefits via engagement and elaboration to increase learning outcomes. Berry's (2008) review of research suggests that discussions work best in very small groups less than ten, or in classes of 15 divided into smaller groups, though some studies recommend larger class sizes. He cites Fisher and colleagues (2005), who recommended 25 students as the optimal class size for such a discussion. Their two-year study found that this group size, which they deem large, produced an optimal number of acceptable messages in discussions. Also cited is Reonieri (2006), whose surveys of faculty and students concluded that 10 – 15 students per class is optimal. Smaller class sizes lacked diversity of views and larger classes became effective only when "divided into the optimally sized groups so that all voices could be heard" (Berry, 2008, p. 1).

In terms of discussion activity, larger class sizes may generate more messages, but not improved or uniformly distributed interactions. Arguello et al. (2006) found that while larger classes generated a high volume of messages, these tended to be posted by a relatively small proportion of the students who dominated discussions (Caspi, Gorsky, & Chajut, 2003; Abuseileek, 2012). Kim (2013) designed a study empirically to test effect of group size on discussion participation and interactivity. In a class totaling 138, students either discussed as a whole class or were divided into groups of 25-30 across the semester. In the smaller groups, both postings and interactivity were consistently much higher, with a particularly greater level of interactive posts in the small group discussions. Kim concludes that his study confirms earlier research "that small grouping itself encourages more interactive participation since the activity of reading in a small group does not remain to be passive and does encompass engagement, thoughts and reflection (Hrastinski, 2009)" (Kim 2013, p. 127). Qiu and McDougal (2015) found that classes divided into subgroups yielded the best collaborative discussions.

Cultural Considerations for Pasifika Students

Research has demonstrated that Pacific Islanders are highly collectivistic in their interpersonal relationships as opposed to the individualistic tendencies of Europeans and Euro-Americans (c.f. Podsiadlowski & Fox, 2011). Across the Pacific, the people share linguistic and cultural elements as descendants of the Great Pacific Migration, a journey that began 20,000 years ago and required extreme levels of cooperation during long voyages and when settling new islands (Fox, 2020). Knowledge transmission occurred face to face, with oral histories estimated to go back 18,000 years. Cultural norms and beliefs emphasize deep interpersonal connectedness, with families often deeply involved in students' lives (Bishop, 2017; Kerr, 2017). Connectedness provides great sources of resilience and strength (Fox, 2010). The absence of direct social contact in online environments, however, can make the experience quite foreign to Pasifika students and interfere with their navigation of online learning.

Several factors can help to reduce cultural distance and discomfort. One is simply to keep class sizes small to facilitate quality student-student and student-instructor interactions. Vogel, Jordan, and Tharp (1987) summarized several years of research on Hawaiian youth education in which they studied home environments and social norms, with the intention of reducing differences between the academic and home contexts. The researchers implemented increased praise for students, reduced student-teacher hierarchic distance by having students work in small peer groups and made lesson materials as culturally congruent as possible. Standardized testing results showed marked increases, bringing students into the same range as higher performing ethnic groups.

In the online environment, these suggestions are more difficult to implement, but possibilities exist. Students can be assigned work in small groups for activities and discussions. Instructors can inquire about families and social relationships to establish rapport, and more importantly, can design activities to increase class connectedness and cohesion. The more collective the class context, the greater the likelihood of student success.

Conclusions

The Pacific has a great need for distance options in education; vast expanses of water limit opportunities, requiring students or faculty to travel at great expense. COVID-19 has caused entire universities to shift to online instruction,

including the University of Hawai'i system and the University of Guam. In the long term, this experience may enhance educational provision for the Pacific region, if the changes include awareness and sensitivity around cultural factors.

Both frequency and quality of interaction are highly relevant in student outcomes. Future research should include investigation on multiple levels, asking what kinds of interaction, and with whom, lead to better outcomes. The literature reviewed above indicates that frequent student-student and student-teacher interaction, in a class of around 20 students, is most likely to result in sufficient social support to facilitate positive outcomes. Class size does not alleviate the need for institutional provision of adequate resources for students to access content and interactive spaces. Cultural factors can add to the inherent obstacles encountered in online education, but they also present marvelous opportunities to utilize cultural supports and culturally congruent concepts to enhance learning for indigenous and non-Western students.

REFERENCES

- Abuseileek, A. F. (2012). The effect of computer-assisted cooperative learning methods and group size on the EFL learners' achievement in communication skills. *Computers & Education, 58*, 231–239.
- Arbaugh, J. B., & Benbunan-Fich, R. (2005). Contextual factors that influence ALN effectiveness. *Learning together online: Research on Asynchronous Learning Networks, 1*, 123–144.
- Arguello, J., Butler, B. S., Joyce, E., Kraut, R., Ling, K. S., Rose, C., et al. (2006). Talk to me: foundations for successful individual-group interactions in online communities. In *Proceedings of the SIGCHI conference on human factors in computing systems*, New York, NY.
- Artz, J. (2011). *Online Courses and Optimal Class Size: A Complex Formula*. <http://files.eric.ed.gov/fulltext/ED529663.pdf>
- Berry, G. (2008). Asynchronous Discussions: Best Practices. *24th Annual Conference on Distance Teaching & Learning*.
- Bishop (2010) Commentary on 'Family obligations in Micronesian cultures: implications for educators.' *International Journal of Qualitative Studies in Education, 23*(6), 691–698.
- Boettcher, J. V. (2013). Ten Best Practices for Teaching Online Quick Guide for New Online faculty. *Designing for Learning 2006 – 2013*. <http://www.designingforlearning.info/services/writing/ecoach/tenbest.html>
- Caspi, A., Gorsky, P., & Chajut, E. (2003). The influence of group size on mandatory asynchronous instructional discussion groups. *The Internet and Higher Education, 6*, 227–240.
- Cochran, J. D., Campbell, S. M., Baker, H. M., & Leeds, E. M. (2013). The role of student characteristics in predicting retention in online courses. *Research in Higher Education*. Advance online publication. doi:10.1007/s11162-013-9305-8
- Fain, P. (2019). Takedown of Online Education. Inside Higher Ed. <https://www.insidehighered.com/digital-learning/article/2019/01/16/online-learning-fails-deliver-finds-report-aimed-discouraging>
- Fox, S. (2020). *Culture & Psychology*. Thousand Oaks, CA: SAGE.
- Fisher, K. (2005). Research into identifying effective learning environments. In *LEaRN*. OECD Publications.
- Francis, M. K., Wormington, S. V., & Hulleman, C. (2019). The costs of online learning: Examining differences in motivation and academic outcomes in online and face-to-face community college developmental mathematics courses. *Frontiers in Psychology, 10*, Article 2054. <https://doi-org.eres.library.manoa.hawaii.edu/10.3389/fpsyg.2019.02054>
- Gaskell, A. (2006). Rethinking access, success, and student retention in Open and Distance Learning. *Open Learning, 21*(2), 95–98. doi: 10.1080/02680510600712997
- Gering, C. S., Sheppard, D. K., Adams, B. L., Renes, S. L., & Morotti, A. A. (2018). Strengths-based analysis of student success in online courses. *Online Learning, 22*(3), 55–85.
- Glenn, L. M. and Berry, G. R. (2006). Online Best Practice: Interaction Matters. *Journal of Business Inquiry*.
- Hanover Research Group (2009). Best Practices in Online Teaching Strategies. <http://www.uwec.edu/AcadAff/resources/edtech/upload/Best-Practices-in-Online-Teaching-Strategies-Membership.pdf>
- Higgs, A. (2012). E-learning, ethics and 'non-traditional' students: Space to think aloud. *Ethics and Social Welfare, 6*(4), 386–402.

Micronesian Educator #30

- Hixenbaugh, P., Dewart, H., & Towell, T. (2012). What enables students to succeed? An investigation of socio-demographic, health and student experience variables. *Psychodynamic Practice: Individuals, Groups and Organisations*, 18(3), 285–301.
- Hrastinski, S. (2009). A theory of online learning as online participation. *Computers & Education*, 52, 78–82.
- Jones, Q, Ravid, G., & Rafaeli, S. (2004). Information Overload and the Message Dynamics of Online Interaction Spaces: A Theoretical Model and Empirical Exploration. *Information Systems Research*, 15(2), 194–210.
- Kerr, R. A. (2017). *Identifying Factors for Student Success in Micronesian Populations* (Doctoral dissertation, Creighton University).
- Kim, J. (2013). Influence of group size on students' participation in online discussion forums. *Computers & Education*, 62, 123–129.
- Lee, K. C., Chung, N., & Lee, S. (2011). Exploring the influence of personal schema on trust transfer and switching costs in brick-and-click bookstores. *Information & Management*, 48(8), 364–370.
- Lewis, J. S., & Harrison, M. A. (2012). Online delivery as a course adjunct promotes active learning and student success. *Teaching of Psychology*, 39(1), 72–76.
- Lin, C.-H., Kwon, J. B., & Zhang, Y. (2019). Online self-paced high-school class size and student achievement. *Educational Technology Research and Development*, 67(2), 317–336. <https://doi.org.eres.library.manoa.hawaii.edu/10.1007/s11423-018-9614-x>
- McCarthy, J. W., Smith, J. L., & DeLuca, D. (2010). Using online discussion boards with large and small groups to enhance learning of assistive technology. *Journal of Computing in Higher Education*, 22(2), 95–113.
- Meredith, B. P. (?). Online Course Class Sizes: A Review of Current Research on the Optimal Size of the Online Classroom. http://wiki.utep.edu/download/attachments/39191673/Online+Course+Class+Sizes_A+Review+of+Current+Research+on+the+Optimal+Size+of+the+Online+Classroom.pdf
- Oestmann, E., & Oestmann, J. (2006). Significant difference in learning outcomes and online class size. *Journal of Online Educators*, 2(1), 1–8.
- Orellana, A. (2006). Instructors' Perceptions of Optimal Class Sizes. <http://www.fischlerschool.nova.edu/resources/uploads/app/72/files/pdf/2007-fall/BPOL-fall07-orellana.pdf>
- Podsiadlowski, A., & Fox, S. (2011). Collectivist value orientations among four ethnic groups: Collectivism in the New Zealand context. *New Zealand Journal of Psychology*, 40(1), 5–18.
- Protosaltis, S., & Baum, S. (2019). Does online education live up to its promise? A look at the evidence and implications for federal policy. *Center for Educational Policy Evaluation*.
- Reonieri Sr, D. C. (2006). Optimizing the Number of Students for an Effective Online Discussion Board Learning Experience. *Online Submission*.
- Qiu, M., Hewitt, J., & Brett, C. (2012). Online class size, note reading, note writing and collaborative discourse. *International Journal of Computer-Supported Collaborative Learning*, 7(3), 423–442.
- Ratliffe, K. T. (2010). Family obligations in Micronesian cultures: Implications for educators. *International Journal of Qualitative Studies in Education*, 23(6), 671–690.
- Stoicovy, C. E. (2018). Culturally responsive online learning for Asian/Pacific islanders in a Pacific Island University. In *Online Course Management: Concepts, Methodologies, Tools, and Applications* (pp. 1069-1086). IGI Global.
- Tomei, L. (2006). The impact of online teaching on faculty load: Computing the ideal class size for online courses. *Journal of Technology and Teacher Education*, 14(3), 531–541.
- Trieu, Q., & Jayakody, R. (2019). Ethnic minority educational success: Understanding accomplishments in challenging settings. *Social Indicators Research*, 145(2), 663–701.
- Vogt, L. A., Jordan, C., & Tharp, R. G. (1987). Explaining school failure, producing school success: Two cases. *Anthropology & Education Quarterly*, 18(4), 276–286.
- Waters, J. K. (09/03/13). SJSU MOOC Study Reveals Achievement Gains but Low Retention Rates. *Campus Technology*. <http://campustechnology.com/articles/2013/09/03/sjsu-mooc-study-reveals-achievement-gains-but-low-retention-rates.aspx>
- Wang, Y., & Chen, D. (2003). Catching the Wave: Online Learning in Higher Education on Guam. *Educational Technology*, 43(3), 54–59.
- Zheng, B., Lin, C.-H., & Kwon, J. B. (2020). The impact of learner-, instructor-, and course-level factors on online learning. *Computers & Education*, 150, Article 103851. <https://doi.org.eres.library.manoa.hawaii.edu/10.1016/j.compedu.2020.103851>

**Complicating the Mother(land) in Mia Alvar's *In the Country*:
A Critique of Power and Performance in the Filipino Household**

NIKKO CAPATI, University of Guam

~~

Due to the global circulation of romantic dramas through various streaming services, the media's interpretation of specific cultural forms may warp the general perception of reality among televisual consumers. In countries like the Philippines, these portrayals take on a dominating force. For the average *teleserye* watcher or Filipino drama consumer, much of the attitudes and ideas regarding the country may be influenced by idealistic and romantic programming. As a result, the unpleasant realities are often overlooked, such as poverty, domestic abuse, and political corruption. Aside from blurring or cleansing the dirty realities, televisual media forms are often weaponized to maintain a specific order of things. One way of controlling collective awareness is through the formulaic scripts and social structures embedded within popular melodramas. Since Catholicism is practiced by most Filipinos, its religious values and expectations are reified by the media. It follows that the protagonist of a story will be very prudent, kind, and selfless while the antagonist will likely be seductive, cunning, and devious. Simplistic moral binaries (good/bad, heaven/hell, and hero/villain) are reinforced according to religious ideology and politics. By constantly consuming these melodramas and the formulas embedded, the audience will unconsciously adopt the binaries set in place.

Despite these melodramas and their influence within the community, there are texts and other forms of expression that go against the grain of mainstream media and the institutional powers that control them. In Mia Alvar's collection of stories, *In the Country*, lifeworld details of the Philippines are concretely depicted through dirty realism, a style of writing that Robert Rebein (2001) characterizes as granular and unglamorous, minimalist and unadorned. Unlike the idealistic images constructed through numerous Filipino *teleseryes*, Alvar demythologizes these interpretations as she continues to subvert common tropes. Within her stories, normative beings such as a mother or a wife become entities that must be unpacked, for they provide insight to a larger systematic problem. In Alvar's "The Kontrabida" and "In the Country," both stories pay close attention to the woman's role in the household, for they also deconstruct and challenge the myths attached to marriage and motherhood.

For the first story of the anthology, "The Kontrabida" is told through the perspective of a nurse as he visits his parents in the Philippines. With his father, Esteban, suffering from the terminal stages of liver cancer, the son smuggles illegal medicine, Succorol, into the country to alleviate his father's pain. The son must also endure the memories attached to his father's abuse, especially towards his mother, Lorretta. As the father dies in his sleep, his mother takes on a disturbing form. Thus, the son is defamiliarized from his past as his loving mother transforms into a devious woman with questionable intentions. Whereas "The Kontrabida" is contained within a single household in Manila, the last story of the anthology, also the title of the collection, "In the Country," is positioned closer to the political turmoil that sparked violence throughout the Philippines during the seventies and eighties. Told through Milagros's perspective, the reader is exposed to civil protests regarding the wage gap, media censorship, and political corruption. However, what is also compelling in her narrative is her inability to perform as a mother once her son is abducted and later murdered.

Marriage

Within these two stories, marriage is deconstructed, upended to show its hidden antinomies. As readers follow the two wives in their separate stories, the text reveals the realities that popular media ignores or normalizes. Through the text's realism, Alvar brings to light the subserviency that is often institutionalized through matrimony. In the context of the nurse's parents in "The Kontrabida," their relationship lacks reciprocity since Lorretta places all of her attention and energy toward Esteban. She forgets herself and her desires; the narrator states, "Even bedridden and in pain, my father had managed to preserve their old arrangement: when he called, she was there to wait on him" (p. 5). From this exchange, the *teleserye* tropes are placed: Esteban becomes the *kontrabida* (villain), the son

becomes the *bida* (hero) and the mother becomes the damsel in distress. This structure forms the foundation within this family.

However, rather than holding Esteban accountable for his abusive behavior, the community allows the abuse to manifest. From the son to the extended family members, Esteban's behavior is tolerated. Due to his condition, the guilt surrounding terminal cancer protects him from any criticism. For the son, he spends most of his energy as a nurse funding his father's treatment because of the pressures attached to familial obligation. However, as Esteban gains all this medical attention, Lorretta is nearly disregarded; the narrator states, "My money turned from doxorubicin and radiotherapy to oxygen tanks, air-conditioning, the dark brown bottle of morphine. Still, I expected my father to survive. For all the years I'd spent wishing him dead, it was my mother's role in the family drama, not his, to suffer" (p. 7). Aside from the son, Esteban's pitiful condition also shields him from the extended family and their criticism: "Esteban has got some heavy hands, the family always said. Lorretta is saint" (p. 7). The son and the extended family's lack of initiative to approach Esteban makes them complicit to Lorretta's misery. However, because this behavior is considered normative within this community, violent husbands continue to be privileged while their wives suffer silently.

Agency and Power

In terms of agency and power, "In the Country" takes a different route. Unlike the previous husband who suffers from cancer, Milagros's husband, Jim, is arrested for critiquing the Filipino government or committing "rumormongering" (p. 301). And because of his passionate ideology, Milagros is compelled to support her husband by following his demands. Unlike the fear and domination that form the dynamic between Lorretta and Esteban, ideology becomes a major factor between Milagros and Jim's marriage. Similarly, much of the devotion that these women display is rooted within familial obligation. Both women are motivated by the community around them to be "good" wives and to not challenge their husband's authority, but this responsibility comes at the price of their own sense of agency. However, Milagros's sense of obligation is taken at a much extreme scale. Since "In the Country" is surrounded by political turmoil caused by a questionable government and a paranoid president, Milagros's concerns are not limited to just the household. Since her husband is a journalist, much of the writing he produces opposes the president's actions. Through him, the public is informed and educated. If Milagros were to be apathetic to the situation around her, she not only neglects her family, but the guilt of disregarding the country and her people adds to the pressure. Thus, she spends most of her time outside of work decoding her husband's letters:

"Code sentences began to surface in Jim's letters. He would drop them, oddly worded, apropos of nothing, into otherwise plain paragraphs. According to Mario Lopez, duck eggs are good for pregnant women. When the duck-egg vendor comes, buy at least a dozen. And so the duck-egg vendor came, with pulleys and ink rollers in his cart" (p. 289).

As this obligation consumes most of her time and energy, Milagros willingly takes on a subservient position, making her role as the wife synonymous to that of a servant. Not only is Milagros expected to support her household, especially with her husband in prison, but she must also maintain her job as a nurse and keep her husband's mission alive. Even though her own mother questions her ambition as a nurse early in the story, she does put into question Milagros's decision to be "obedient." As Milagros spends her night typing her husband's message, her mother states, "You worked how hard on your degree, only to become his secretary?... You worked late and studied early... so you wouldn't spend your life doing this" (p. 298). Even though Milagros is not beaten into submission like women in abusive relationships, her submission is much more discreet and unconscious.

Lorretta the Saint

With "The Kontrabida" and Lorretta, Alvar deconstructs the weight attached to the "damsel in distress." Initially, the text paints Lorretta as a frail mother; her son states, "I only half-embrace her, afraid she might break if I held too tight. She hadn't been able to collect me from the airport herself... To my eyes she seemed not older but more. More frail; more tired..." (p. 3). From this observation, Lorretta seems incapable of devious behavior. However, once it is discovered that Lorretta murdered Esteban, the character has submerged her "damsel in distress" trope,

Micronesian Educator #30

contradicting the good/evil binary common in *teleseryes*. The act of overdosing Esteban stems from Lorretta's gradual individualization. And through her limited powers as a mother and wife, Lorretta utilizes her resources and overcomes her master and villain.

The *sari-sari* store becomes a source of empowerment for Lorretta. The narrator states, "My parents had cemented over the grass and built this sari-sari compromised what I imagine was the dream of my parents, who grew up poor: a green buffer between the world and their world" (p. 8). Although this store is a source for money, it has also become a barrier from the outside community. With Esteban forcing Lorretta to spend most of her energy into the store, she now has less time to wander off outside of the home and by extension, her husband's control. However, according to the son, "[the] *sari-sari* gave her a loophole, at least, in [Esteban's] law against her working outside the house" (p. 8). Essentially, by being in a productive state of not just only providing products for her community, but being compensated for her efforts, Lorretta develops a sense of purpose and is recognized by other people. Since her *sari-sari* sells food, hair products, cold medicine, detergent and other goods, a multitude of people will seek her services. As a result, she becomes a master of her limited craft. In Tagalog, *sari-sari* translate to "variety." Thus, Lorretta is able to deal with a variety of problems and people, making her into a dynamic individual:

"Unlike me, she had no trouble hearing her customers. No sooner had a face appeared at the wicket than she was reaching for the shoe polish or cooking oil. Her right hand could open a bottle cap while her left tore a foil packet from the shampoo reel" (p. 10).

To maintain a convenient store, Lorretta has adopted a temperament for multiple demands. And though that might make her quick to serve other people's wishes, establishing her as an ideal housewife in this culture, Lorretta's swiftness has also made her quick to solve problems and adapt to her situation. Ultimately, this swiftness has also enabled her to murder Esteban days later.

Esteban and His Heavy Hands

Aside from her quickness to maneuver and coordinate within her environment, Lorretta's progression is also possible because of her husband's slow deterioration. Since Esteban is more dogmatic and unwilling to conform to the conditions of his environment, he fails to adapt and survive; the narrator states, "My father had called himself an import-export businessman before sliding, through the years, down a spiral of unrelated jobs, and each more menial than the least, and harder for him to keep" (p. 3). Although readers can attribute this struggle to the competitive economy, Esteban's character is also a major factor of his unemployment. Whereas Lorretta is able to ground and individuate herself through the process of her work, Esteban, however, alienates himself from job opportunities and personal development. This lack of productivity and development on his part indirectly establishes Lorretta as the benefactor within their marriage. Furthermore, Esteban's self-imposed alienation is also linked to a strong disposition to be unresponsive and uncollaborative. For instance, the text states, "'[Esteban] isn't built to work under someone,' my mother had said. 'It's just not his nature, answering to another man.'" (p. 8). From Alvar's characterization of Esteban, he epitomizes the fragile and toxic masculinity that plagues the household and by extension, the community. Not only does Alvar call attention to these features, but she also demythologizes the paternal role that is typically venerated in religious institutions and communities. Instead of symbolizing greatness and stability, Esteban represents decadence and instability.

As the reader witnesses Esteban's crippling habits, for he also inhibits undesirable elements attached to overconsumption, Alvar continues to defamiliarize the paternal role. Unlike Lorretta, Esteban is impulsive and falls victim to his desires. Slowly, Esteban's alcoholism places him in a state of abjection, a vortex of disindividuation that not only obscures his consciousness, but also destroys his subjecthood and individuality. According to Julie Kristeva, "The object has only one quality of the object- that of being opposed to I" (1982, p. 2). Readers see this transition to abjection as Esteban loses his autonomy. In order for Esteban to breathe smoothly, he must be attached to machines, such as "[two] oxygen tanks [that] stood beside [his] bed" (p. 4). As his deteriorating condition continues, Esteban's body takes on a metamorphosis. His once daunting disposition disappears as he becomes more abject and lifeless. The narrator notes this change, stating:

Micronesian Educator #30

“My father no longer resembled me. The short boxer’s physique, a bullish muscularity I’d always detested sharing with him, was gone. In fact, he no longer resembled anyone in the family; he belonged now to the transnational tribe of the sick and dying. Without the dentures he’d worn most of his adult life, my father’s mouth was a pit, a wrinkled open wound below the nose. What I could see of his eyes, under lids that were three-quarters closed, did not appear to see me back” (p. 5).

In Kristeva’s articulation of the dead, “[the] corpse (or cadaver: *cadre*, to fall) that which irremediably come a cropper, is cesspool, and death: it upsets even more violently the one who confronts it as a fragile and fallacious chance” (p. 3). Even during his death, Esteban does not die peacefully, for his body epitomizes the horrors attached to human deterioration; his son states, “In forty, fifty, sixty years this was how I might die: with my worse impulses petrified on my face” (p. 18). Ultimately, Esteban not only represents fragile masculinity, but he also embodies the hopelessness attached to both life and death.

The Kontra(bida)

As Lorretta ignores her son’s careful instructions, she intentionally kills Esteban by overdosing him with the Succorol patches. From here, the reader’s perception of Lorretta turns for her true intentions are revealed. By stripping her position as the damsel in distress or the martyr, Lorretta actively vanquishes the villain and becomes her own hero. However, by applying her actions within the rules that structure a *teleserye*, her devious behavior also classifies her as the new villain. Audiences could recognize her as an “anti-hero,” but then again, the strict binaries within the environment refuses to recognize this ambiguous behavior that straddles both sides. According to Judith Butler, the community performs a set of scripts that are institutionally constructed for others to follow. Butler states, “gender is no way a stable identity or locus of agency from which various acts proceed; rather, it is an identity tenuously constituted in time- an identity instituted through a *stylized repetition of acts*” (1988, p. 519). Instead of performing how she usually would in front of an audience, Lorretta is able to unwind and act freely regardless of gender expectations. For instance, Lorretta’s laughter signals her ambiguity:

“Nothing about my mother- not her voice, soft as a lullaby, when I could hear it; not her hands, drying themselves on her lap; not her posture, a constant curtsy- squared with the woman in the *sari-sari*. I had to erase that strange laughter from my mind, the tongue that wet her thumb before it counted out the money” (p. 23).

Since the binaries connected to melodramas have influenced the son at an early age, allowing him to view his father as the *kontrabida* and his mother as the damsel in distress, he cannot comprehend characters that obscure labels. Regardless, Lorretta becomes both the *bida* and *kontrabida* as she saves herself by terminating the threat in her household. Aware of this change, the son is horrified by his mother’s presence. The comfort he attached to his mother disappears. In the end, he no longer knows how to position himself within the space of his childhood home for “[even] the windows and the wicket came alive with scenes of *bida*, *kontrabida* and the woman they both claimed” (p. 23).

The Slice of Pie

Within the other story, Milagros’s progression takes a different route. Whereas Lorretta gains dominion of her life many years after her marriage, Milagros’s development is inverted. At an early age, Milagros wields her agency, but she eventually loses her power. For instance, “In the Country” begins with Milagros protesting against the wage gap between Filipino and American workers. According to her, regardless of her “education and experience, skill and seniority” she is not as valued as her white counterparts (p. 262). For instance, when Milagros requests for better wages, her boss belittles her:

“‘I know it looks bad,’ said Milagros’s boss. ‘But we’re talking two different standard of living. Take transportation. You ride the jeepney to work correct? Four pesos round trip? Americans love their cars and they’re too tall to stoop under the jeep entrance. Gas costs a fortune these days, and what about Christmas time? You’re where you need to be; they fly seven thousand miles or more’” (p. 262).

Micronesian Educator #30

Since Milagros is embedded in a community that privileges white bodies over brown bodies, it is easy for those around her to fall into a state of complacency like her boss. Aside from her work environment, her household also instills this common mentality. Furthermore, as the community essentializes deep Catholic ideals of being grateful and satisfied with the resources that they are already “blessed” with, Milagros is shamed by her mother for wanting the same wage as the American nurses. Her mother states, “‘You have a job.’ ([Milagros’s] own brothers should be so lucky) ‘Don’t waste your time wanting somebody else’s slice of pie. Be happy’” (p. 263). According to her mother, it is considered admirable to want less because overconsumption is seen as sinful and gluttonous. However, her mother continues to also perpetuate the double standards imposed upon brown workers, especially Filipino women. For Milagros, based on this economic mentality, she should be content to have a career whereas her brothers and father failed to sustain one. Therefore, the “slice of pie” that Milagros desires is considered too great for a person of her gender, racial identity, and class position.

However, regardless of the lack of support from her family, Milagros continues to challenge this perspective for she understands the power of individualization. Although she sees the rational thought behind her mother’s demeaning response, for the economic risk can consume her, Milagros tries to transcend the boundaries by asking more question: “What if she *wanted* to drive a car to work? Travel at Christmastime? Live in a place of her own?” (p. 263). Even though she continues to experience ridicule by the powers formed against her, Milagros continues to maintain a passionate disposition against inequity. But despite her strong sense of agency, the environment that she is embedded in will continue to test her will.

The Mother Country and Motherhood

While “The Kontrabida” deconstructs the formula within *teleseryes*, “In the Country” defamiliarizes the idealistic portrayal of the Philippines. Due to the overcrowded state of the country, the Philippines being one of the most populated places in the world, resources and opportunities become scarce. One way for workers to overcome the disparity is to search for opportunities outside of the country. Thus, the Filipino diaspora is formed. According to her husband, Jim, who she meets in her protests, “Saudi Arabia needs nurses... So does America. It’s a booming market abroad. People making three, four times what even Peggy Ryan does here” (p. 267). To the average Filipino nurse, these news are promising, especially when the wage gap devalues brown bodies. However, Milagros refuses to seek opportunities outside of the country; the text states, “In the same way she had ridden out high school calculus and college chemistry: she thought that she could crack Manila, that if she worked at it hard enough the city would reward her; only sissies quit” (p. 267). Milagros’s intentions are rooted in the ideology that honest and strenuous work are always rewarded. However, in urban jungles that are filled with competitive and capitalistic mindsets, noble work is almost never regarded, but instead, seen as a commodity. Thus, the Filipino diaspora and its connection to capitalism have commodified its workers. The president pushes this consumeristic mindset, stating,

“We encourage the migration. I repeat, this is a market we should take advantage of. What was good for Melbourne and Dubai was good for Manila. ‘Instead of stopping them from going abroad, why don’t we produce more? I repeat, if they want one thousand nurses, we produce a thousand more’” (p. 295).

By using the word “produce,” Filipino workers are reduced from their state as individuals with their own set of skills and talents. They are now viewed as products to be assigned an exchanged value and to be consumed by other countries for a price. Ultimately, regardless if Milagros chooses to stay in Manila or not, the big institutions will continue to challenge her authority and commodify her based on her value within the economy.

Although her hardworking behavior allows her to succeed as a student and nurse, it is this same productive mindset that destroys Milagros when she is unable to succeed as a mother. Unlike “The Kontrabida” where Lorretta adapts to the expectations imposed onto her as a housewife and mother, Milagros struggles to perform after marrying Jim. Although much of her troubles are rooted into the uncertainty that Jim has entered into as a journalist, leading to his imprisonment and their son’s abduction and death, Milagros also projects sentiments that contradict motherhood and its myths. Because of her inability to be a naturally dutiful and nurturing mother, Milagros considers herself as a failed parent. For instance, the text states, “If mothering were an official job, someone would

Micronesian Educator #30

have docked her pay or fired Milagros months ago. She avoids her own daughter- bathes while Jackie's at school, pees while she is asleep- the way a late-arriving worker ducks the boss" (p. 282). Based on this mentality, the workplace and its hierarchal structure forms how Milagros understands the world. Since she is brought up in a capitalistic machine that prioritizes productive members of the community, her decline as a mother holds extra emotional weight. In the end, she unconsciously terminates her self-worth when she as a mother fails to maintain the expectations imposed onto her.

Despite this inability to perform, Milagros's failure is also an indication that motherhood is not innate, but rather conditioned and performed. This thought becomes evident as the pressures of motherhood slowly destroy Milagros. When she is alone with her daughter, Jackie, Milagros is too preoccupied by the torment regarding her missing son: "she can't be both grieving parent and sensible nurse. *Tama na! Sobra na!* crowds are chanting at the palace. Enough already! It's too much! So she feels at home, with Jackie. Enough questions, too many needs. Milagros wants to shake the girl by her small shoulders" (p. 282). Through this perspective, Alvar describes a thought that could be considered shameful for a mother to have, since the culture prioritizes women upholding family life above all. However, the mythos attached to the maternal instinct is eradicated as Milagros grows more frustrated and crippled by her predicament. Bothered by her daughter's constant innocence and inability to understand death, Milagros continues to breakdown, for "[the] only words Milagros wants to say would harm her: Mama doesn't want to see you. I can't be your mother right now. You don't understand! Come back when you are older, and finally intelligent" (p. 282). Unlike Lorretta, Milagros is unable to respond effectively, for she becomes undone when news of her son's death soon follows. And from that moment, she continues to internalize the guilt and shame of having a deceased child, for "Jim is not the one- at least, he's not primarily the one- Milagros blames" (p. 347). Thus, Milagros loses her drive for power and agency, for the realities of motherhood traps her into a perpetual state of misery.

Conclusion

Overall, "The *Kontrabida*" and "In the Country" defamiliarize the preconceived notions regarding Filipino women. Through her stories, Alvar deconstructs these ideas through two different methods. From Lorretta's narrative, the reader witnesses the deviation from the standards not just in melodramas and romances, but also in social norms. As Lorretta murders her husband for the sake of her agency, Alvar positions her in an ambiguous state, contradicting the ideology and morals embedded in her community. For Milagros, as she succumbs to the pressures forced upon her, the mythos surrounding motherhood and the household is demythologized, for familial obligation relegates women like Milagros into a subservient position. Through these two narratives, the singular template imposed onto women is challenged. Due to Alvar's approach to these Filipino women and their individual take on motherhood, the formula constructed by the media is false, for that standard fails to consider all types of women and the circumstances that shape their lives. Although Alvar's anthology refuses to uphold a naive portrayal of the mother country, the narratives are provoking for they interpret women capable of perverse intentions and crippling vulnerability.

Works Cited

- Alvar, M. (2015). "In the Country." *In the Country*. Alfred A. Knopf, pp. 262-347.
- Alvar, M. (2015). "The Kontrabida." *In the Country*. Alfred A. Knopf, pp. 3-27.
- Butler, J. (1988). "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal*, 40 (4). The John Hopkins University Press, p. 519.
- Kristeva, J. (1982). *Powers of Horror: An Essay on Abjection*, translated by Leon S. Roudiez. Columbia University Press, pp. 2-3.
- Rebein, R. (2001). *Hicks, Tribes, and Dirty Realists: American Fiction After Postmodernism*. University Press of Kentucky.

God's Song: G.M. Hopkins and the Poem as Prayer

DAVID GUGIN, University of Guam

Pied Beauty

Glory be to God for dappled things –

For skies of couple-color as a brindled cow;

For rose-moles in all stipple upon trout that swim;

Fresh-firecoal chestnut-falls; finches' wings;

Landscape plotted and pieced – fold, fallow, and plough;

And all trades, their gear and tackle and trim.

All things counter, original, spare, strange;

Whatever is fickle, freckled (who knows how?)

With swift, slow; sweet, sour; adazzle, dim;

He fathers-forth whose beauty is past change;

Praise him.

1.

As Covid-19 lays its heavy hand upon the world, as environmental problems in general continue to proliferate, and a pervasive, seemingly permanent sense of crisis permeates the social and cultural fabrics of our time, one could question how and why the poetry of Gerard Manley Hopkins, "Pied Beauty," in particular, would have any relevance to what we face today or offer any meaningful path forward. In other words, what hope, what solace, might "Pied Beauty" bring? More specifically, why should such a poem be read and taught in Micronesia in the year 2021 and how should such a poem be read and taught? I would answer that if indeed "Pied Beauty" no longer has relevance, no longer has value, then we truly are in trouble, and there truly may be no exit. For the response to the ugly must be the beautiful, the response to pain must be pleasure, the response to physical and mental anguish must be joy, and "Pied Beauty," as a poem that celebrates and invokes the beautiful, the pleasurable, the joyful is thus exactly what we need, more importantly, what our students need. Speaking more prosaically, science and the empirical method, linear thinking itself, clearly have a role to play in resolving environmental problems, to include future pandemics. In fact, it is safe to say that science has and will have the primary role to play in leading us out of the morass we find ourselves in. But science will not be enough. We must also create space for non-linear thinking, for the spirit, for an Aesthetics of the Soul. And "Pied Beauty" is a good place to start.

Hopkins' place in the pantheon of the great English nature poets is well-earned and well-established. However, the singularity of his sacramental approach can seem archaic, even reactionary, to contemporary readers, while the apparent difficulty of his style can make his poems challenging, perhaps too challenging, for his readers to absorb. When encountering Hopkins for the first time, one can legitimately wonder – is the game worth the candle? For me of course, the answer is yes. And I would suggest that the surface difficulties of his style begin to disappear when one begins to accept and understand that the entryway into any poem, most especially Hopkins' poems, is not cognitive but aural. At least initially, the meaning should not be objectively analyzed, or intellectually dissected, it must be felt, experienced, embodied. Poetic response should be subjective and thus biological. Because for Hopkins

Micronesian Educator #30

there is no Cartesian dichotomy between the physical and the spiritual, the body and the soul. In short, “Pied Beauty” is best read by the ear, as opposed to the eye. Hopkins is making music, writing melodies, songs of devotion.

Hopkins had a vital interest in the wonders of the natural world from the very beginning of his career as a writer and as a Jesuit priest. He used his creative explorations of nature to reconcile the tension (at times severe) he often felt between the two vocations. In his mind the pride he took in his ability with words, and his need for public recognition as a poet, was in direct conflict with the humility before God required of any member of the Jesuits. By celebrating God in nature and nature in God, he was able to resolve that tension, to humble himself before God and to put his creative genius at the service of God. As W.H. Gardner points out, in his excellent Introduction to *Gerard Manley Hopkins: Poems and Prose* (1985), Hopkins early on and throughout his adult life made “carefully written observations on natural phenomena – on colour, organic form, movement, in fact the intrinsic quality of any object which was capable of striking through the senses and into the mind with a feeling of novelty and discovery.” Eventually, as a name for this concern with the intrinsic quality of the thing itself, this “individually-distinctive form [. . .] which constitutes the rich and revealing ‘oneness’ of the natural object,” Hopkins coined the word *inscape*. And for that “energy of being by which all things are upheld, for that natural (but ultimately supernatural) stress which determines an *inscape* and keeps it in being,” he coined the word *instress* (xx). Inscapiness then is the instantiation of the object, while instress is not only the force that unifies the object, it is also the spirit that actualizes the object in the mind and soul of the perceiver. It is an epiphany of the Eternal, of the Divine.

Hopkins is in pursuit of the underlying, overarching, internal pattern and order that makes the external meaningful. In this, as Gardner notes, he follows Shelley, who himself was following Plato, though of course Hopkins was walking a uniquely (and unapologetically) Catholic path. He is primarily interested in “all those aspects of a thing which make it distinctive and individual. He is always intent on examining that unified complex of characteristics which constitute [. . .] its individual essence [. . .] always looking for the law or principle which gave to any object or group of objects its delicate and surprising uniqueness” (xx). Strongly influenced by the writings of Duns Scotus, in contradiction to St. Thomas Aquinas, Hopkins believes that the universal can only be known through the individual, and that the individual is “immediately knowable by the intellect in union with the senses” (xxiv). We come to God, we come to the experience of God, we achieve God through each and every individual encounter we have with each and every individual manifestation of God. Through inscapiness we reach instress. And through instress we reach inscapiness. This is “significant form” in its purest connotation, simultaneity in its highest manifestation. And this is what makes Hopkins so much more than just a poet of nature.

Which brings us back to “Pied Beauty” – because a poem can be an inscapiness too, animated by its own instress. Its more famous companion-piece, “The Windhover,” (dedicated to *Our Christ the Lord*) a poem that takes a single falcon in flight as its subject, is often viewed as the quintessential example of the characteristic trajectory in Hopkins’ poetry from the individual to the universal, the physical to the spiritual, the natural to the heavenly. This trajectory defines “Pied Beauty” as well, though on a broader, more breathtaking scale, because here the individual, the “individually-distinctive form” is the world itself, in all its fecundity, an inscapiness of inscapinesses that I would suggest has a profuse richness of language and a compressed intensity of feeling that make it one of the finest poems ever written in English. I would also suggest that given the basic meaning of *pied* as “having two or more colors” and the manner in which Hopkins celebrates that which has two or more colors – skies, cows, trout, finches, fields, tools – it is also a poem that has much to say to the world today. Even more so to the world of religion, since the God who created these multi-colored things, this diversity, who is the originator of all such *pied* beauty is a God “whose beauty is past change,” a God of perfection. And the poem speaks to the world of science, too, arguing as it does for a fundamental ethics, an ethics based not just on hypothesis and study, observation and proof, but an ethics that is also based on spirit and soul, love and faith.

2.

Hopkins’ poetic technique in “Pied Beauty” is central to his thematic concerns with the source, presence and varieties of joy to be found in the natural world. The poem is iconic in the fullest sense in that he achieves a rare immersion

Micronesian Educator #30

of form into content and content into form, eliminating any separation between the two. The external (end) rhymes – *things, wings; cow, plough, how; swim, trim, dim, him; strange, change* – produce an unorthodox ABCA, BCE, BCE, C rhyme scheme that maximize the powerful symphonic effect of the poem and gives added impetus to the final imperative “Praise him.” In addition, in the first six lines those external rhymes are woven into a sophisticated set of internal (medial) rhymes, as well as half-rhymes: *Pied, skies, fire; brinded, stipple, finches* (and then *finches’ wings; moles, firecoal*). Those internal rhymes then disappear in the last five lines as he compresses the syntax even further, again pushing the poem towards its final injunction. The overall effect is a poem unified horizontally through the external rhymes and vertically through the internal rhymes. And lexically, since *dappled, brinded, stipple*, and *freckled* are all synonyms for *pied* and finches are known for their multicolored wings, Hopkins achieves semantic unity as well.

The abundant use (some might say overuse) of alliteration is a stylistic marker of Hopkins’ poetry. It can be at times gratuitous, or rather, alliterating just for the sake of alliterating, Hopkins simply playing with the language. But in “Pied Beauty” it is carefully done, strategic, and integral to the overall pattern of the poem. In line 5 we get the virtuoso “Landscape plotted and pieced – fold, fallow and plough.” Here the matrix alliteration is with the voiceless bilabial /p/ repeated three times, interrupted after *pieced* by both the hyphen and the subsequent alliteration of the voiceless labiodental /f/. Also interesting is that the matrix alliteration is actually /p/ . . . /p/ . . . /p/. In other words, Hopkins interrupts that alliterative sequence as well. This is followed by line 6, where he writes, “And all trades, their gear and tackle and trim.” Here the matrix alliteration is with the voiceless alveolar /t/, interrupted (or delayed) in this case by the voiced velar /g/ of *gear*, but reinforced by the repetition of *and*, which is itself a vocalic alliteration. Again, following line 5, the matrix alliteration is actually /tr/ . . . /t/ . . . /tr/, so the sequence is slightly altered once more. Hopkins then echoes line 5 with the “fickle, freckled” alliteration of line 8, which he chooses not to compound as “fickle-freckled,” though using the intervening comma to get the same effect, exactly as he did with the preceding “fold, fallow.”

Hopkins believed that as the 19th century neared its end, a new English language needed to be born in order to address the new industrial and urban materialist realities of late-Victorian England. Such a reinvigoration of the language also complements his spiritual and theological goals and agendas. As “Pied Beauty” indicates, he is a master of neologisms, and his preferred method of creating these new words was through compounding, often in combination with alliteration. Compounding is also a process of compression, and syntactic compression defines Hopkins’ linguistic approach to poetry. Thus in “Pied Beauty” skies of two or more colors become “couple-colour,” moles that look like red roses become “rose-moles,” fresh coals in a fire become “Fresh fire-coal,” and falling chestnuts become “chestnut-falls.” But the most remarkable compound in “Pied Beauty” has to be the “fathers-forth” of line 10’s “He fathers-forth whose beauty is past change,” which echoes and completes the /f/ alliterative trinity of the previous “fold, fallow” and “fickle, freckled.” A perfect example of felt meaning, it is unclear what the uncompounded translation, or root, would be, perhaps something like “He who goes forth as a father.” With his compound though, now operating also as the main verb of the line, Hopkins transforms that rather tame statement into a powerful declaration of a mobile, emotive, omnipotent God the Father who as perfection incarnate is beyond change and therefore worthy of worship. This is the poetry of awe at its finest.

As part of his lexical and syntactic compression Hopkins tends to omit conjunctions, prepositions and articles/determiners. By doing so he leaves, for example, adjectives to stand alone, in progression, as in line 7 – “All things counter, original, spare, strange” which not only describes his poetic style but also slows down the cadence of the poem, thereby encapsulating the natural world’s and God’s inscape, their individuated grace and beauty. However, what he does in line 10 with this technique of omission is even more profound, connecting back to neologisms in a more mystical, metaphysical sense. Again alliterating, in this case /w/, /s/ and /d/ the line reads “With swift, slow; sweet, sour; adazzle, dim,” leaving us with what appears to be three pairs of antonyms. However, by sequencing the adjectives in this manner, stacking them like this, the end result is to break down the structural binaries of the three pairs, creating three new words, or compounds, or sense perceptions – neither swift nor slow, but somehow both, at the same time. And the same is true for the remaining two pairs. If *swift* is the thesis, then

Micronesian Educator #30

slow is the antithesis and *swift*, *slow* is the subsequent synthesis. To put it in more Catholic terms, what Hopkins gives us is the Father, the Son, and the Holy Ghost inserted directly into the grammar of the line. In “Pied Beauty” the mirror image of the Aesthetics of the Soul is the Syntax of the Soul. Hopkins provokes the reader into his or her final epiphany – the linguistic basis of God, the poem as prayer. As he says, “Praise him.”

3.

Pedagogically, what I am proposing, and seeking to demonstrate in this essay, is that all poetry can and should be approached from a macro, “big picture” point of view working in tandem with a micro, closely analytical perspective. Thematic discussions emerge out of and feed into close readings of phonological, syntactical and lexical choices. Focusing solely on the synchronic – the poem and poet at a particular moment in time – while neglecting the diachronic – the poem and poet across or through time – is too limiting, too restrictive. However, the reverse is also true. Remaining in the diachronic without ever venturing into the synchronic, never grappling with the language itself, will leave any interpretation incomplete. More specifically, I am arguing that such a coupling of the synchronic and diachronic is vital when reading and/or teaching Hopkins in general, and “Pied Beauty” especially, because in this poem he is so committed to finding, exploring and revealing that connection between the individual and the universal, the natural and the supernatural, the instantiation and the eternal. For Hopkins, there cannot be one without the other. Indeed for Hopkins it is impossible to speak of either without speaking of both. This is why, along with Walt Whitman, Hopkins in my opinion remains the greatest poet of union in the Anglo-American tradition. Whitman’s flood-like expansionism, his pantheism, and Hopkins’ tightly controlled, contracted, compounded style, his devout Catholicism, may seem radically different on the surface. But out of one, many, and the two poets actually have much in common. They both advocate an assertive individuality as the starting point for any metaphysical journey. They are both searching for the Godhead, for the fountain of truth. In “Pied Beauty” Hopkins has found it.

Still, two not unrelated questions need to be asked. First of all, does this poem or any poetry of G.M. Hopkins, or any such deeply Catholic writer, have anything to say to readers, teachers and students who are not Catholic? In other words, can he speak to a wider audience? Clearly, I think he can. From a personal standpoint, I bear no allegiance to any organized religion, Catholic or otherwise, yet “Pied Beauty” has always resonated with me and will always do so. Speaking more broadly, Hopkins touches a chord in anyone who believes in, has faith in, some kind of spiritual life. He reminds us that faith is not possible without doubt, and he directs us back to a contemplation of, an intense involvement in the natural world in order to help us work through and overcome those moments of doubt. In so doing, he answers the second, more earthly question that his poetry invokes. Is there a place today for poems like “Pied Beauty” in secondary or post-secondary education on Guam and in Micronesia? Again, my answer is yes. More specifically, I will conclude by arguing that any environmental studies program at any level should not just be science-based, should not just be empirical in orientation. To be truly effective, to be instrumental and integrative, they must be subjective as well as objective. They must make a place for the spirit, for the soul. They must speak to the heart as well as the mind. An environmental studies program that makes no room for the artistic sensibility, that ignores or denies its validity will remain incomplete and less effective than it could be. What is needed is union.

REFERENCE

Gardner, W.H. (1985). *Gerard Manley Hopkins: Poems and Prose*. London: Penguin Classics.

Woe Betide You the Truth Be Told: Linguistic Corruption as Pedagogical Tool

JOFF P. N. BRADLEY, Teikyo University, Hachioji Campus

It is the responsibility of intellectuals to speak the truth and to expose lies. This, at least, may seem enough of a truism to pass over without comment. Not so, however. For the modern intellectual, it is not at all obvious. Thus we have Martin Heidegger writing, in a pro-Hitler declaration of 1933, that “truth is the revelation of that which makes a people certain, clear, and strong in its action and knowledge;” it is only this kind of “truth” that one has a responsibility to speak. (Chomsky, 1967)

Introduction

What does it mean to rise above the corruption of language to teach the corruption of corruption itself? What does one become as a consequence? Is it conceivable or merely the conceit of the pedagogue? I am going to draw on several resources from literature and philosophy to think about corruption as a pedagogical tool and will think about this in the sense of undermining one own’s position or right precisely through the undermining of one’s own language.

I am keen to think about the nature of the corruption of language, especially the English language, and how one can come out of trauma and grief to find a path to reconciliation, because, simply, I am faced with this question, is English the right language to reach truth and reconciliation? With the role of the teacher in mind, I am to discuss corruption as a pedagogical tool concerning young people and the desperate need to “corrupt the corruption” as Badiou says in *The true life* (Badiou, 2017). I am looking at the language of grief, violence, the violence of words and the dangerous, malignant, venomous, infective, virulent affects that sometimes enshroud or cloak words, and by which and through which words transform into weapons with sharp, penetrating, piercing and deadening or malignant effects. Not to think this way, seems a betrayal of one’s duty as a teacher and a disavowal of one’s position of power.

On the Master’s Dominant Narrative

Truth be told, I have peered long and hard into the dark, loathsome abyss of my language, its history and culture, to look at words and their apparent meaning, to understand what envelops them and to know what sticks to them like *tar*. Since these words are English words, I draw on Nobel Laureate and British playwright Harold Pinter (1930-2008) to understand the corruption and *the rot of words* (see “Pinter: Held Incommunicado on the Mobile” in Bradley & Kennedy, 2020) and ask a range of questions: What does it mean to speak the master’s dominant narrative? What is the nature of the complicity with this tactic? Is English – a language battered black and blue by its own historical violence and legacy - the right language to teach peace, empathy, cosmopolitanism and global citizenship? What does it mean to use English to respond to a world in strife and violence? (see Bradley’s essay “Deleuze and Globish” in Bangou, Waterhouse, & Fleming, 2020). What can or should be another *lingua franca* for global citizens within this catastrophic morass? Must protest, resistance and refusal always be in the master’s dominant voice? How can trauma be expressed otherwise than the dominant code and how can barriers be overcome and empathy spread in a language of not one’s own belonging?

Addressing this admittedly long series of questions, it is instructive to consider Pinter’s thoughts on menacing silences and precarious resistances alongside the phenomenology of American philosopher Alphonso Lingis in which we find an understanding of reconciliation and hospitality and perhaps a fitting response to the hell of worlds or spaces excluded by the hyper-order of urban technopoles, that is, those spaces in-between languages where nothing is said but everything is nevertheless understood (Lingis, 2008). Again, I concern myself with telling the truth, with fearless speech, with the Greek notion of Parrhesia (παρρησία) [*franc-parler* in French] and the question of

Micronesian Educator #30

corruption as such as I am interested in exploring the uses of truth-telling as a Foucauldian-, Badiouan-, Deleuzian-inspired pedagogical tool. Here I ask myself and with these resources to hand: What is my own truth telling? What does it mean to speak authentically against a backdrop of trauma and violence? How can one situate truth-telling in terms of social justice and what is the nature of virtue in this truth-telling?

Those interested in the structural violence inherent in language should and must be concerned with the imperialism of words and speech, the “language of the capital” (Chiasson, 2017, p. 50), the language of military might, the dominant code of order-words (*mots d'ordre*) and passwords. English, the language of planetary capitalism, the *de facto* instrument of imperialism, is the war machine of communication. Bearing this in mind, it is a fair question to ask whether English is the right language to teach peace, empathy, cosmopolitanism or global citizenship. What does it mean to use English to respond to a world suffering war and violence if one is deeply concerned with the telling of truth, with *fearless speech* (Foucault, 2001)? Faced with these questions, It seems to me that what I am searching for is a new pedagogical sense of self-subverting authority, a self-subverting exposure and subversion of power relations and structures, a way to constantly undermine one’s own person as a legitimator of power/knowledge. How does one renounce one’s own dominating trend?

I agree with Gilles Deleuze that we must hijack speech, corrupt speech, to create “vacuoles of noncommunication” or circuit breakers that elude control but how to do it? I shall use Pinter’s work to explore this. In any event, and as a constant refrain, I ask myself what is my own truth telling? Should I and how do I corrupt others to take a risk, to speak truth to power? Do I reproduce power relations in this act and what is changed as a consequence? Against a continuing backdrop of war, trauma and violence, how can I undermine myself and my role if, by definition, by speaking English I am acting in bad faith? To answer these questions, I draw on philosophy and literature to understand my own lot, my own station, my own furrow of thought, as it seems to me profoundly clear that not to think about language without this repertoire of self-subverting tools is tantamount to a dereliction of duty.

Performative uncomfortable utterance

My refrain:

I'm English. I'm from England. I speak English, you speak my language. I mean I'm English but I'm not in England. But I'm English. I often don't feel very English and in fact I don't think I've ever felt very English, I mean English English. You know what I mean, don't you? But I teach English. I know English. People expect me to be English. I'm English period (assertive). Maybe not. Maybe I'm not English English.

The frustration of being different or of speaking another language or having to learn this imperial tongue of mine must be maddening for *you*. It's maddening for *me* to tell the truth as the world in the last few years has heard much of Donald Trump who speaks “degenerate” statements or *énoncés* (Guattari, 2000, p. 43). His world of Twitter digests is English but not English English. The late Bernard Stiegler follows and recognizes Félix Guattari in *The Three Ecologies* in the 1980s for understanding presciently the dangers of toxic power and its ecological effects, and speaks of Donald Trump in the following critical manner:

[L]e président Trump incarnant le destin suicidaire global que se révèle être l'ère Anthropocène lorsqu'elle atteint ses limites, à savoir: maintenant.

President Trump embodies the global suicidal destiny that turns out to be the Anthropocene era when it reaches its limits, namely, now.

Guattari writes of Trump and the like and their “degenerate” statements:

Just as monstrous and mutant algae invade the lagoon of Venice, so our television screens are populated, saturated, by 'degenerate' images and statements. In the field of social ecology, men like Donald Trump are permitted to proliferate freely, like another species of algae, taking over entire districts of New York and Atlantic City; he 'redevelops' by raising rents, thereby driving out tens of thousands of poor families, most of whom are condemned to homelessness, becoming the equivalent of the dead fish of environmental ecology. (Guattari, 1989)

Truth be told, I think such English cannot be a fitting medium for the language of reconciliation. And even more than this, I wonder if *English English* is the right tool for reconciliation. *My English English is not a tool for reconciliation*. I am sure there are other languages which have qualities more suitable for reconciliation. It might be Urdu, a beautiful language. It might be Japanese with its exquisite elements of keigo or honorifics. It might be Tamil, one of the world's oldest languages. It might be the Korean language or the Chinese language, which at their most lofty, you might say, do not take to direct antagonism easily, preferring instead subtly, evasion and circumspection, that is implicit communication which avoids confrontation.

Performatively, and to confound matters, do allow me to continue this ever so slightly uncomfortable Pinteresque anecdote. I am here speaking my tongue, speaking a "performative contradiction of enunciation" (Derrida, 1998, p. 3) in a language, which is not my own. I speak a monolingualism which is not my own. "I only have one language, yet it is not mine." Derrida writes:

Because language is not [the master's, or the colonist's] natural possession, he can, thanks to that very fact, pretend historically, through the rape of a cultural usurpation, which means always essentially colonial, to appropriate it, to impose it as 'his own.' That is his belief; he wishes to make others share it through the use of force or cunning; he wants to make others believe it, as they do a miracle, through rhetoric, the school, or the army. (1998, p. 23)

I think there is something important at work here in this existential and linguistic *aporia*. Let me put it like this drawing on my own experience. As a boy, I was told by numerous teachers not to speak my dialect, a dialect that I grew up with as my parents, working-class parents, are from Northern England, from Lancashire to be exact. In Northern England, my teachers since I was a wee boy scolded me for speaking the way my parents spoke. The dialects found in Bolton and Burnley and those industrial towns in-between are raucous, playful and beautiful, cocky and splendid, but teachers told me not to speak with a dialect, told me to speak a master language, a master argot, if you like, the artificial and fabricated language of the BBC, the dialect of the British Raj – now the dominant mode of planetary-wide communication. Again, and performatively, I repeat, I only have one language, and yet it is not mine.

The English language itself is being taken away from the English

At this juncture, it is worth exploring Slovenian philosopher Slavoj Žižek's argument on the use of English as it has an interesting twist connected to the above declaration. Exploring the ambiguities and paradoxes of the dialectic of linguistic and cultural colonization and challenging the notion that to win power one must imitate and adopt the code of the colonizers, Žižek contends that a space of liberation is precisely cleaved open from the social disintegration which ensues from the colonization process. Against the complaint that resistance to colonization is formulated detrimentally in the language of the colonizer, we could say that the glottophagy of "English" (Calvet, 2005; Chiti-Batelli, 2003, Lecercle & Riley, 2005) does not so much imperil local and cultural identities but rather offers a tool of resistance, a pedagogical and pharmacological tool – a poison and a cure. Speaking on India's experience of colonization at the hands of the British Empire, Žižek insists that in the very use of an imposed alien tongue there inheres the spectre and possibility of a new universalist, democratic state, a new radical possibility in contradistinction to a pre-colonial, mythical or pristine past. In other words, there is a kind of futural utopia of language at work. This possibility is created through colonization itself as the adopted new language symbolizes the absence of a primordial, autochthonic identity. In the long search for origin, there is no more mythical "India" or mythical "England" to be found. The universalist language and like global capitalism itself means there are no roots, places, originary pure, virgin identities or territories – no belonging or origin or nationhood.

Against critics who question any sense of a priori alienation which manifests in the use the language of the colonizers, and other forms of cultural colonization, Žižek (2015) outlines what he designates as the Malcolm X factor, the Hegelian "absolute recoil," which is to say, in the very loss of something one creates a lost dimension. In Hegelian-Žižekian terms, there is parallax "shift in perspective," a way to perceive the uncanny in the everyday field of vision. The overcoming of a crisis is a shift of perspective, a passage from what has gone to what will become. For Žižek,

Micronesian Educator #30

reconciliation can be radically immanent in that a shift of perspective occurs vis-à-vis what first appears as disintegration. Immanence emerges as the shifting of transcendence. In the shift of perspective, we find what previously appeared as conflict or a problem already appears as its own solution, its own reconciliation. This is not taken in the sense of a pure, unadulterated, reclaimed pristine past, a nostalgia for the good old days, for roots, for imperial domain and its codes, but rather the possibility of something new to come into being.

As a universal language, English is “stolen from British people themselves” whose own claims to universality are exposed as particular interests of the ruling imperialist class (*English English*). Instead, we must search for a new universality as Žižek says (2013):

[C]olonialism is not overcome when the intrusion of the English language as a medium is abolished, but when the colonizers are, as it were, beaten at their own game—when the new Indian identity is effortlessly formulated in English, i.e., when the English language is ‘denaturalized’ when it loses its privileged link to ‘native’ Anglo-Saxon English-speakers.

And again:

This is what is beautiful in global capitalism, what I really love: Even the English language itself is being taken away from the English.

That English is being taken away from the English themselves suggests a new dimension to the question of reconciliation and the overcoming of trauma. It suggests a shared language or code for the overcoming of particular interests. It suggests a way out of the *aporia* myself and others toil from within. From the disruptive and transformative experience of trauma, there is a self-subverting of the meaning of history, memory, and language. A new series of affects emerge.

The language of the capital

To examine war narratives which depict violence and trauma, I chose Pinter’s play *Mountain Language* (2013) as it explores the psychological factors of both victors and victims. The play was arguably inspired by Pinter’s trip to Turkey with Arthur Miller and concerns over the torture and the fate of the Kurdish people. But Pinter insists the play is not solely about the Turks and the Kurds but the banning of languages throughout history, such as Irish, Welsh language, Urdu or the Estonian language. In the distortions of everyday language Pinter, throughout his career, questioned whether permanent peace is possible when the language used remained coded with violent affects. I agree with him that the exploration of hostility, fear and violence remains timely and urgent. Why? Our time is pockmarked by a sinister, fascistic, corrupting micropolitics, a politics of distortion and fragmentation of desire, an implosion of meaning. Our time is tainted by an oppressive and authoritarian operation of state power both in reality and in our mental life. Pinter is essential for understanding the corrosive effects of power and the affects which insinuate themselves stealthily within the language games of legitimacy of both the dominant and the dominated.

In the play *Mountain Language* women from the mountains have been granted permission to visit their imprisoned relations, inmates one surmises who have resisted state or military authority. A dehumanizing regime denies oppressed groups the right to use a native tongue, a language which would ground their subjectivity. The women are imprisoned and tortured. A prison officer announces they are not allowed to speak in their language to their men. It is a military decree that their language is outlawed and forbidden, their language no longer exists. The “language of the capital” is imposed on mountain people to impose cultural hegemony and homogeneity.

Now hear this. You are mountain people. You hear me? Your language is dead. It is forbidden. It is not permitted to speak your mountain language in this place. You cannot speak your language to your men. It is not permitted. Do you understand? You may not speak it. It is outlawed. You may only speak the language of the capital. That is the only language permitted in this place. You will be badly punished if you attempt to speak your mountain language in this place. This is a military decree. It is the law. Your language is forbidden. It is dead. No one is allowed to speak

Micronesian Educator #30

your language. Your language no longer exists. Any questions? I do not speak the mountain language. (Pinter, 2005, pp. 255–256)

At the end of the play and without rhyme or reason a new law comes into force allowing the suppressed language the permission to utter its own code. Here Pinter shows us the precarious, arbitrariness and absurdity of power. The guard tells the mother and daughter to speak their own language which they refuse to do. But why refuse? On whose orders must one refuse? The mother's ambiguous silence could stem from the trauma and terror at the hands of the guards or it could be an act of resistance, a refusal to speak a language now granted official recognition but allowed by those who are without an ethical mandate; in other words, it could be a subversive refusal to respond to the ideological coercion of the master language. This for me offers a transferable pedagogical tool for understanding the relay of hegemony and resistance. Pinter explores how language games are indeterminable and interminable.

Mountain Language lasts only 20 minutes, but it could go on for hour after hour, on and on and on, the same pattern repeated over and over again, on and on, hour after hour. (Billington, 2007, p. 794)

The final *dénouement* to the play is striking because it shows that fearless speech cannot be ordered but itself must arise from the subject itself, from the swelling of subjectivity itself, from subjectivation, that is, the coming into being of the subject. One cannot demand that the Other must speak fearlessly, one cannot demand that the Other be free. We can say that the words of the guards “shock, strike, jab, bite, pick on, harass, lacerate” bodies (Lingis, 2019, p. 14). Lingis says of words that we subject ourselves to them, to those “oppressive, words, abrasive words, stinging words, biting words, cutting words.” Such words “construct us, lacerate us, humiliate us, sicken us, mortify us” (see Lingis in Jones, 2019, p. 88). Words are said not for their representational form but their condensing, intensifying force. Lingis describes the relationship with alterity as a bond, of being “commanded, contested, having to answer to another for what one does and for what one is. It is also finding oneself addressed, appealed to...” (Lingis in Lévinas & Lingis, 2002, p. xxii) but in the dialogue between the prisoner and the guard, one senses the limits of the phenomenological description as those affects enveloping the words take on a more material reality and force. The affects generated by the words of the guards mean there is great risk in rising against them. A striking dialogue proceeds:

Prisoner: Mother, you can speak, Mother, I'm speaking to you. You see? We can speak. You can speak to me in our own language. You can speak. Mother, can you hear me? I am speaking to you in our own language... Do you hear me? It's our language... Can't you hear me? Do you hear me? Mother?...

Guard: Tell her she can speak in her own language. New rules. Until further notice.

Prisoner: Mother?

Sergeant: Look at this. You go out of your way to give them a helping hand and they f**k it up. (Pinter, 2005)

Alphonso Lingis wonders how truth is held by people whose different perceptions and judgments led them to war. He asks: “What kind of truth can be established? How much of the truth about their violent past is necessary for communities to begin to coexist and build a common future?” (p. 145). He writes:

Greatly traumatic events are not simply retained by memory; they are integrated in a course of mental life that continually opens upon a future of new events and actions. In some cases they block access to the future: the victim lives in his or her trauma and cannot live in a now that is different and envision a future that arrays new possibilities. In other cases the reverse happens: the trauma is closed off to consciousness, cannot be recalled, cannot be understood or interpreted. In every case, as the years pass, what one has undertaken and lived through modifies what one remembers of a traumatic aggression and how one remembers it. (2019, p. 146)

In *First Person Singular*, Lingis insists that the duty to speak in one's own name is demanded by the rational collective (2007a, p. 91). The duty to speak in our own name is imposed under threat of exclusion or effacement by a specific social machinery. Summoned to speak, we are circumscribed, called to account, by a force within discourse, a death within language, a death sentence. Lingis says: “The order, prompt, or cue that orders us to speak in our own name

is already... a verdict, a death sentence" (2007a, p. 91; see George & Sparrow, 2014). This summons is a subjectification, a subjection, a death sentence. What the phenomenology of Lingis renders clear is how the "cues, watchwords, and passwords order how we are to speak and when we are to speak" (2007b, p. 115) are enveloped and penetrated within by power relations and therefore resistance to them carries its own dangers of seduction, collusion and complicity. He writes: "If the constitution of a subject, subjected to and subjugated by the face that orders us to stand on our own and speak in our own name is a death-sentence, the release of becomings in all directions could well become destructive and self-destructive" (2007b, p. 119). This is where Lingis and Pinter work together well for it is Pinter's dialogue which demonstrates how power corrupts the articulation of the truth – and there lies its pedagogical lesson. In his essay Truth and Reconciliation, Lingis asks how truth is determined among people whose different perceptions and judgments led them to war.

He asks to what extent is truth required for reconciliation of peoples in conflict: "What kind of truth can be established? How much of the truth about their violent past is necessary for communities to begin to coexist and build a common future?" (Lingis, 2018, p. 437). It is worth quoting Lingis in full and he clarifies Pinter's point brilliantly:

And there are times when we are to speak in our own name. We are enjoined under oath to tell the court just why we kept pit bulldogs and what we did when they attacked the victim. The paramedic is required by the medical staff to say just how he saw the accident victim when he arrived on the scene and how the victim reacted in the ambulance on the way to the hospital. The student is asked to write down on the exam just what he has understood. The researcher is required to report exactly her methodology, her data, her verifications, or her work will be rejected by the journal and she may be dismissed from her position and from the profession. The prisoner is ordered to identify himself and recount his activities under threat of torture. It is not some inner compulsion to authenticity, but a collective, a social machine, that orders me to speak in my own name. (2007b, p. 115)

And in Deleuze's work, in his critique of the dominant image of thought, we find a sustained critique of the philosophical practice of representation, of the majoritarian thought that functions as representative of, that speak for, that speaks the truth of every minor, babbling, stuttering or immigrant tongue. This is the indignity in speaking for others which Pinter's play *Mountain Language* exposes so brilliantly. The idea of fearless speech and the act of parrhesia, that is "to speak candidly or to ask forgiveness for so speaking," for me raises the question of the task of philosophy, namely the corruption of youth. Badiou writes profoundly on this matter:

Philosophy is a movement, the goal of which is to transform subjectivity, a subjectivity which is corrupted by dominant opinions. [T]he definition of philosophy must be, effectively, the corruption of the youth: to destroy the true corruption of youth by the ordinary world and to corrupt the corruption. That is, to save the youth from the heavy presence of the corrupted world. (Badiou, Bartlett, & Clemens, 2018, pp. 33-34)

Žižek, a fellow traveller with Badiou, also speaks of the task of a philosopher as one of corrupting the youth of today, which is to say to make them understand their freedom in capitalism is not what it seems:

[T]he task of a philosopher is no longer to undermine the hierarchic symbolic edifice that grounds social stability but... to make the young perceive the dangers of the growing nihilist order that presents itself as the domain of new freedoms. (Žižek, 2019)

To be young is to be caught in an aporia, a difficult quandary, "a principal contradiction" insists Badiou. To be young is to prepare for integration into society, yet, all the while the social itself is imploding. In this context, it is fair for youth to ask why they must defer gratification, why study, why undergo an apprenticeship, why waste youth. Why speak the master's argot? Badiou speaks to youth from the perspective of an old man. He tells them it is necessary to change the world, to take risks and confesses his aim is also to corrupt youth, to make youth think of another way of living; he suggests they look for something worthwhile, something to live for, something that may break, one may say, the bad infinity of capital (money, pleasure, and power), perhaps even search out a new universality and language. In his book *True Life*, Badiou explicated upon the meaning of corruption further: "to corrupt youth means only one thing: to try to ensure that young people don't go down the paths already mapped out, that they are not

just condemned to obey social customs, that they can create something new, propose a different direction as regards the true life" (Badiou & Spitzer, 2017, p. 8). Elsewhere, in a discussion on the question of the rupture, Badiou says that "[t]o corrupt the youth is to become a part of an immanent exception" (Völker, 2019, p. 16). He explains:

In fact, a great work of art, an invention, a creation, is something that, within particular conditions, necessarily transcends those particular conditions. This is what I've called an immanent exception. It's an exception that's internal; it's not an external exception. And so if particular works are capable of having a universal value it's because they are not entirely reducible to the particular conditions of their creation but are also an immanent exception within these conditions. (Badiou, Engelmann, & Spitzer, 2015, p. 63)

This "immanent exception" is when the truth wells up and bursts forth, when it emerges from the depths of one's own subjectivity or collectivity. This is when one speaks in one's own name but in a language which is not one's own but a universal and futural language.

Conclusion

After all what has gone on, I remain doggedly interested in English words and their apparent meaning. I remain a student of what envelops them and belongs to them like cancerous wounds. In this respect, Pinter is vital to understanding the corruption and the decay of words. He is important for understanding the exhaustion of everyday speech and its pathological depths. From studying his work we can better grasp the affective impact of invective, misogynous words, homophobic slurs, hate speech, injurious slander. One finds that language is a kind of regime of order-words (*mots d'ordre*), cliché and hearsay, often deployed to keep thought at bay, to maintain the status quo. Here, there is much work to do to understand the pragmatics of illocutionary speech acts (acts which subtend the locutionary) and their perlocutionary effects, that is, effects which persuade, cajole, frighten and inspire (Lecerle, 2002, 2006). And for Lecerle (Lecerle & Riley, 2005, p.74), interlocution is agonistic and expressive of rapport de forces (power struggle or differential relation between forces). Indeed, for Lingis, it is when we speak in our name (Lingis, 1997; see Bradley, 2013, 2014), when we take responsibility for what is said and connect with intensities and the otherness of the other, that we set in motion passwords which evade control. In this respect, it is important to ask the following questions: How can one speak otherwise than everyday chatter of "the they" (*Das Man*) and of everydayness? How can one resist? How can one perform the act of truth-telling because thoughts and counter-thoughts occur imperceptibly as language hides them from exposure? This is a play of truth and the maintenance of power. We are not innocent in this and there is much disavowal at work to conceal the real state of affairs. Indeed, the public, for Pinter, is acquiescent in the maintenance of this status quo. What surrounds us, he insists, "is a vast tapestry of lies, upon which we feed."

Political language, as used by politicians, does not venture into any of this territory since the majority of politicians, on the evidence available to us, are interested not in truth but in power and in the maintenance of that power. To maintain that power it is essential that people remain in ignorance, that they live in ignorance of the truth, even the truth of their own lives. What surrounds us therefore is a vast tapestry of lies, upon which we feed. (Pinter, 2013, p. 288).

It seems to me that to write a Marxist philosophy of language one must take up the everyday world that for the young is not only putrefying, poisonous and overcome with existential doubt, but desperately pervaded by a deep sense of ecological trauma and grief. Such a philosophy would demand *praxis*, to transform the world for the better, for youth coming into the world of power and its abuses, for it is youth we must guide in earnest. Yet, performatively, what language should I use to express this? Resistance to domination begins in the intersection between trauma and world-making. That is why we too must speak of that emotion which wells up within. And we must let it come out. This is not to serve the rich and spoilt who clamour to polish off their upbringing and to protect and continue their privilege and interests but to call the present to account, to call to account those who deny and blemish the world; in so doing we have a duty to *fabulate* the world afresh for the sake of youth, for the sake of a youth to come. This is to corrupt youth and corrupt the corruption. This is the perennial response to the "intolerable" and shame of

the present as Deleuze says. In the broken middle of our times, our task is to find in utopias and heterotopias, imagined spaces and inaugural sites of voyage, journey and transformation – a new universal language of liberation. One task is to cut through the reifications of cliché, stereotype and habit in everyday speech to regain the intensity and warmth of words, to enhance the capacity to live, to reconcile ourselves with others. We are tasked with putting ourselves in question, of subverting ourselves, because we, in our most desperate of ages, simply must offer answers to youth who see the world without future or open horizon (Stiegler, 2018, 2020). I suspect what we are aiming for is the corruption of power by and through the corruption of youth. This would be an act of counter-power to burst asunder the protective chatter and hypocrisy that enshrouds social corruption.

**

This is a substantially reworked version of the invited lecture “Woe betide you the truth be told’: Corruption as pedagogical tool” delivered at the “English Language & Literature Association of Korea (ELLAK) International Annual Conference” in Daejeon, South Korea, in December 2019. The conference was led by the theme of “Nurturing Global Citizens within War and Violence Narratives.”

REFERENCES

- Badiou, A., Engelmann, P., & Spitzer, S. (2015). *Philosophy and the Idea of Communism: Alain Badiou in conversation with Peter Engelmann*. Oxford: Wiley.
- Badiou, A., & Spitzer, S. (2017). *The true life*. Cambridge, UK; Malden, MA: Polity Press.
- Badiou, A., Bartlett, A. J., & Clemens, J. (2018). *Badiou and his interlocutors. Lectures, Interviews and Responses*. London: Bloomsbury Academic.
- Bangou, F., In Waterhouse, M., & In Fleming, D. (2020). *Deterritorializing language, teaching, learning, and research: Deleuzo-Guattarian perspectives on second language education*. Leiden; Boston: Brill Sense.
- Billington, M. (2007). *The life and work of Harold Pinter*. London: Faber.
- Bradley, J.P.N. & Kennedy, D. (2020). *Bringing forth a world: Engaged pedagogy in the Japanese university*. Leiden; Boston: Brill/Sensey.
- Bradley, J.P.N. (2013). On the materiality of thixotropic slogans. *Dialogos* 12.
- Bradley, J.P.N. (2014). On imperatives of coexistence and communication. *Dialogos* 13.
- Calvet, L.-J. (2005). *Language wars and linguistic politics*. Oxford: Oxford University Press.
- Chiasson, B. (2017). *The late Harold Pinter: Political dramatist, poet, and activist*. London: Palgrave Macmillan.
- Chiti-Batelli, A. (August 20, 2003). Can anything be done about the “glottophagy” of English?: A bibliographical survey with a political conclusion. *Language Problems and Language Planning*, 27, 2, 137–153.
- Derrida, J. (1998). *Monolingualism of the other, or the prosthesis of origin*. Stanford, Calif: Stanford Univ. Press.
- Foucault, M. (2001). *Fearless speech*. Los Angeles: Semiotext.
- George, B., & Sparrow, T. (2014). *Itinerant philosophy: On Alphonso Lingis*. Brooklyn: Punctum Books.
- Guattari, F. (2000). *The three ecologies*. London: Athlone Press.
- Jones, D. E. (2019). *The philosophy of creative solitudes*. London; New York: Bloomsbury Academic.
- Lecerle, J.-J. (2002). *Deleuze and language*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- Lecerle, J.-J., and Riley, D. (2005). *The force of language*. Basingstoke, Hampshire: Palgrave Macmillan.
- Lecerle, J.-J. (2006). *A Marxist philosophy of language*. Leiden: Brill.
- Lévinas, E., & Lingis, A. (2002). *Otherwise than being or beyond essence*. Pittsburgh, Pa: Duquesne University Press.
- Lingis, A. (2007a). *The first person singular*. Evanston (Ill.): Northwestern University Press.
- Lingis, A. (2007b). Subjectification. *Continental Philosophy Review*, 40, 2, 113–123.
- Lingis, A. (2008). Conflict resolution and reconciliation of peoples. In P. Rothfield, C. Fleming & P. A. Komesaroff (Eds.), *Pathways to reconciliation* (pp. 41–52). Hampshire: Ashgate.
- Lingis, A. (2018). *The Alphonso Lingis Reader*. University of Minnesota Press.
- Lingis, A. (2019). *Irrevocable: A philosophy of mortality*. Chicago: The University of Chicago Press.
- Pinter, H. (2005). *Plays 4*. London: Faber and Faber.
- Pinter, H. (2013). *Various voices: Sixty years of prose, poetry, politics, 1948-2008*. London: Faber & Faber.

Micronesian Educator #30

Stiegler, B. (2018). *Qu'appelle-t-on penser?: 1*. Paris Éditions Les liens qui libèrent.

Stiegler, B. (2020). *Qu'appelle-t-on penser?: 2*. Paris Éditions Les liens qui libèrent.

Völker, J. (ed) (2019). *Badiou and the German Tradition of Philosophy*. London: Bloomsbury Academic.

Žižek, S. (2013). Love as a political category. Subversive Festival, 6. Zagreb, Croatia. <http://www.youtube.com/watch?v=b44IhiCuNw4>

Žižek, S. (2015). *Absolute recoil: Towards a new foundation of dialectical materialism*. London: Verso.

Žižek, S. (2019). *Like a thief in broad daylight: Power in the era of post-human capitalism*. New York: Seven Stories Press.

Underhill Academy: An Anecdotal History of the Future

By C. S. SCHREINER, University of Guam

The distinction between information and wisdom is old, and yet requires constantly to be redrawn. Information is knowledge which is merely acquired and stored up; wisdom is knowledge operating in the direction of powers to the better living of life. Information implies no special training of intellectual capacity; wisdom is the finest fruit of that training. In school, amassing information always tends to escape from the ideals of wisdom and good judgment. —John Dewey

Decisions by a society over its future leaders and its laws require a citizenry prepared to think through and with complexity. —Maryanne Wolf

Trump had good reason to love the poorly educated. They helped make him president. —Philip Bump

Existential Preamble on Complicity

When something catastrophic befalls us, it is difficult but necessary to retrace our possible complicity in the sequence of events which precipitated the devastation. The larger the catastrophe, the more does personal responsibility feel at a loss to situate itself anywhere but near the exit ramp of the investigation. Take the forest fires which engulfed communities in California—and still do. Although evidence often suggests a natural catalyst, such as lightning in severe drought conditions, the demands of forensic and ecological thinking force us to reflect on the feasibility of arson, but also on procedures of forest management, individual farming practices, and patterns of residential development and land use in rural areas, such as the illegal burning of rubbish. We secretly wonder: did any of our uncritical habits and customs contribute unknowingly to this terrible outcome? We soberly consider what happened, and if we were involved, and if this sort of tragedy can be prevented in the future. Even the most innocent among us feel relieved—our culpability temporarily absolved—when technical consultants and forestry experts provide a simple answer: *the devastation was caused by an insufficiently extinguished campfire*.

Alas, no educator should hope for such a convenient exculpation from events in the United States since November 2016, including the *Annus horribilis* of 2020 that ended with Biden's election and Trump's appalling refusal to accept defeat. Ever since the American presidential election of 2016, I have until now privately pivoted between blaming social media and the American educational system for the benign neglect and erosion of collective norms that set the preconditions for cultural catastrophe with global consequences—namely, the rise of a populist autocracy in the United States which anticly and diabolically sought to overturn the subsequent, entirely legitimate, national election of 2020. We have witnessed a dangerous imbalance in cultural ecology, at the roots of which is a deficit of critical thinking and civil understanding—not to mention solidarity. Even in literature departments the sting of critique has been disarmed by Rita Felski and others in favor of less suspicious and more hospitable modes of explication. This recent attenuation of critique, which in its rigorous form has an inner relation to ecological vigilance, has had consequences beyond the campus, as Anna Kornbluh has convincingly argued. She says that “since we put down critique, climate denialism has become full-throated, full-throttle climate nihilism” (768).

In the months leading up to the insurrection on January 6, but likewise before the 2016 election, there was no firewall of critical capacity in place to disconfirm lies and conspiracy theories. If most of the general population were critically *aware*, critically *capable*, if citizens could distinguish empirically valid *knowledge* from ubiquitous *hearsay*, the rhetoric that falsified facts and undermined the veracity of journalism and science, steering millions of gullible people to bogus sources of information, would *never had gained the traction it did*. John Finn cites a passage from Alexander Hamilton's *Federalist Paper #1* in which the latter was perfectly clear—if not entirely confident—in assigning critical responsibility to the voting population, as stated in his essay:

Micronesian Educator #30

It seems to have been reserved to the people of this country ... to decide the important question, whether societies of men are really capable or not of establishing good government from *reflection and choice*, or whether they are forever destined to depend for their political constitutions on accident and force. [emphasis added]

In this passage, “reflection and choice” means critical thinking and perspicuous selectivity among American voters. John Dewey uses the term *reflective thinking* as a synonym for critical thinking in his unjustly ignored treatise, *How We Think*. Another Dewey synonym is *thoughtfulness*:

Reflection is turning a topic over in various aspects and in various lights so that nothing significant about it shall be overlooked—almost as one might turn a stone over to see what its hidden side is like or what is covered by it. *Thoughtfulness* means practically the same thing as *careful attention*; to give our mind to a subject is to give heed to it, to take pains with it. In speaking of reflection, we naturally use the words *weigh, ponder, deliberate*—terms implying a certain delicate and scrupulous balancing of things against one another. Closely related names are *scrutiny, examination, consideration, inspection*—term which imply close and careful vision. (56)

This all seems like sound, sober thinking—nothing methodologically complex. Remember, Dewey was a pragmatist, not a metaphysician. Yet, many American politicians are incapable of his critical approach to evidence. In a recent interview conducted by Reid Epstein, the Republican senator from Wisconsin, Ron Johnson, accepts at face value a first-hand report that the January 6th insurrection was largely caused by “provocateurs and fake Trump supporters.” When questioned about the veracity of the biased reporter, Johnson says, “*That’s what he said he thought he saw...I’m not questioning his veracity. I believe he’s probably telling the truth. That’s what he saw.*” When further pressed about whether the senator checked out his source, Johnson said: “*What do you mean, checked out? It’s his eyewitness account. What else is there to check out about it? I read what his credentials were, where he was teaching, at Fort Bragg. I mean, you can see in the article what his credentials are. He seemed to be pretty solid.*”

One is tempted to quit the game and hide somewhere after encountering numerous examples of this sort of confirmation bias among elected officials. It is best for teachers to avert their attention from the ongoing catastrophe of Ron Johnsons leading the government and focus on improving conditions within their zone of competence and responsibility. The American educational system was designed to no small extent to prepare the voting population to make informed and critically aware choices, to inspect evidence objectively, as Dewey explains, before entering the voting booth. And that system has failed. Every time a Ron Johnson or Donald Trump is elected the system fails. Does this failure not encumber every teacher with the personal and professional responsibility to improve instruction and learning to the best of their ability? According to existentialism, this responsibility is irrevocably *for all mankind*. Each teacher is fated--by their own choice--to develop an Atlas complex, and they love their fate. *Amor fati*. When a teacher commits to teaching critical thinking in her classroom, she is responsible for everyone, her own students and everyone else’s, their parents and grandparents, *everyone*, and she is an exemplar of the highest standards, the best practices. “For every man,” Sartre argues, everything happens as if all mankind had its eyes fixed on him and were guiding itself by what he does” (20). What could be more briskly apropos than such responsibility when the U. S. President himself denies all responsibility for the tragic outcome of the pandemic?

A voting pattern that led to Biden’s victory tells us what we need to know. According to Alex Isenstadt, a 27-page autopsy report of the 2020 election shows that in the loss to Biden, former president Trump suffered a “double-digit erosion” of support from “white college educated voters across the board.” If the college educated population was larger and more demographically and racially diverse, Mr. Trump would have suffered an even more crushing defeat. Dylan Riley has confirmed this state of affairs, which he describes as *educational polarization*: “In an historic reversal, which has analogues in other countries, the Republican Party is now the party of those who lack higher education, while the Democrats have a huge advantage among those with college degrees” (35).

Inflated Tuition = Nationwide Voter Suppression

The inference we can make from above-mentioned polling data is that the best way to avert the electoral success of uncouth, illiterate, narcissistic fascists in future elections is to increase the number of college graduates and encourage them to vote. Concerned parties are justified in scrutinizing longstanding voter suppression tactics by Republicans at a local level, but the denial of access to college due to absurdly inflated tuition expenses that are incommensurate with living wages results in *nationwide voter suppression* that will be only minimally alleviated by a federally mandated increase in the minimum wage. At this historical moment, not enough people can afford to attend college, and this deficit plays to the strengths of the parties and platforms that spin untruths, propaganda, and conspiracy theories. Hence, the most audaciously brilliant two pieces of legislation that can be proposed by the Biden administration are (1) to forgive extant student loans and (2) provide universal access to college, such as the plan to offer free tuition at community colleges. Such legislation will ensure that an intellectually and morally bankrupt regime will not regain power in America anytime soon, if ever.

But until such legislative goals are realized, not enough citizens will graduate college, and that means their secondary schooling must refocus to provide some of the critical thinking curriculum primarily taught at the college-level. Moreover, critical thinking courses must be linked to content; the idea of teaching skills-based courses without content has been soundly refuted by E. D. Hirsch and other educational researchers. Hirsch explicitly agrees with the National Academy of Sciences that critical thinking does not function as a free-floating universal skill, but as evidence-based reasoning integral to domain-specific forms of expertise such as biology, history, literary criticism, and so on (85). This viewpoint requires schools to rethink critical instruction so that it is immanent to specific disciplinary practices and no longer a peripheral activity housed in the twilight zone of General Education. One way to accomplish this Gestalt shift using instructors already hired to teach critical thinking is to have the separate academic disciplines inform said instructors of their critical culture and habits, for example, by providing examples of concrete critical practice in written form. These *varieties of critical practice* can then be spliced into the syllabi of the standard critical thinking course (“CT 101”) required of all students. After 2020, there is no way around such urgent curricular reform. These challenges to the status quo are made more difficult by the fact that critical thinking has long suffered from an identity problem even as it becomes an institutional fixture. Thus far, a critical thinking “curriculum” has been a euphemism for one or two critical thinking courses whose program affiliation remains ambiguous if not contested at many institutions of higher learning.

The enlightenment mandate of *rational self-rule* that inspired the authors of the U.S. Constitution can only be achieved politically if each citizen is educated to make cogent, well-informed decisions at the voting booth. The educated citizen has the knowledge and maturity (and *courage* according to Kant) to use her powers of reason and judgement critically, that is, to decide the truth claims and factual validity of a given state of affairs, and she respects the same capacity in her neighbor, and expects the same from governing officials. With knowledge being so highly valued and respected in a democratic system, one expects the culture to bestow a prestigious valuation on teachers, since they are professionally responsible for the mass edification of future voters. But there is no evidence of this valuation in their salaries, from which it is reasonable to infer that rigorous learning is grossly undervalued in American culture. In America, to *have* is more prestigious than to *know*; Mr. Trump is admired by millions for being a millionaire, not a scholar. This deplorable situation explains the growing hostility toward expertise as demonstrated by Trump’s intense disdain for the scientist, Dr. Fauci. In a perverse inversion of our founding enlightenment values, American political leaders are exemplars of disrespect for knowledge and its associated “virtues,” reason and justice. It is left up to teachers and students to carry out a system-wide revaluation of knowledge and learning such that *knowing* is more prestigious than *having*.

In the absence of knowledge and critical acumen, conspiracy theories have flooded collective consciousness. Conspiracy theories! Now, it is so convenient and seemingly inarguable to blame uncritical and uncivil behaviors on technological diffusion via social media and computational capitalism, whose seductive contents circulate continuously while isolating groups in filtered digital networks, reaching into almost every existence no matter how

Micronesian Educator #30

modest or reclusive. On an hourly basis, wherever they go, the thinking of adult citizens and students is captivated and subsumed by an unrelenting torrent of disinformation, commercial ploys, and propaganda. If that all sounds too political or sensationalistic, then replace it with ubiquitous modes of digital entertainment from Netflix and YouTube to online gaming and shopping. Either way, there appears no way of resisting insidiously persuasive attention capture technologies that stimulate citizens into a stupor of consumeristic nihilism.

What Cures Gullibility?

Or is there a way? Well, of course there is, and educators are responsible for inculcating the knowledge, critical skills and civil ethos that comprise forces of resistance to digital hegemony. But the underlying problem is widespread *gullibility* in the general population, not digital networks or corrupt, utterly mendacious politicians who foment insurrection. What cures gullibility? Critical thinking. To be sure, as I emphasized above, critical thinking skills alone are not sufficient to make sound judgments and need to be informed by domain-specific knowledge. I suggested one feasible and inexpensive solution for how to reorient extant critical thinking courses toward greater disciplinary specificity. But the general idea here is that the collective attention of teachers and administrators needs to be directed to expanding the reach and depth of critical learning in the schools. Anyone who teaches critical thinking and observed the insurrection on Jan. 6 against the U. S. government has been saying to themselves, “OMG, it did not have to come to this.” Although they express alacrity about 2020 like everyone else, they whisper to themselves: “Only one course, taught mostly to first-year students--that is not enough!” One course, “CT 101,” is certainly not sufficient to inculcate students with a resilient capacity for critique. Nor would one token course in civics (“CV 101”) be sufficient to instill and encourage sustainable civility and respect for governing and electoral norms in the general population. Such courses must have a secure place in the curriculum extending back into middle school; moreover, they must be integral to the school’s mission statement and institutional learning objectives (ILOs), hence reflected in the SLOs and PLOs across the entire curriculum.

When a teacher, watching acts of barbarism and regressive behaviors among seditious governing officials and their supporters on the evening news, interrogates herself as a representative of the system that employs her, when she anxiously searches for the faces of former students amidst the mayhem, blame is short-circuited, foreshortened, deflected inward; personal responsibility becomes a permanent accusation framed as a question: “Could I have done more?” The answer is, “Not with available resources.” This lack of resources underscores the longstanding underdevelopment of critical culture and civics education in the schools, in both secondary and college-level institutions of learning.

To state the obvious, contemporary students, so-called digital natives, did not constitute the voting block that elected the President in 2016, nor, with few exceptions, the battalion of selfie-taking cartoonish misfits which mobilized for the insurrection of 2021 after hearing Trump’s incendiary call to arms based on the collective phantasm of a stolen election. The imbalance in cultural ecology, at the roots of which is a deficit of civics and critical thinking, set in long before the advent of the internet and social media. As a professional educator who spent many years in school on the way to earning a doctorate in Philosophy and Literature, I never encountered an actual critical thinking course until I taught one as a tenured faculty member at the University of Guam. I more than compensated for the deficit in my own preparation by specializing in critical hermeneutics, but the thousands of students at the schools, colleges, and research universities I attended were not so fortunate, for they had no means of restituting their diverse paths of uncritical learning and professionalization. Within the separate disciplines and majors, there is no explicit preparation for interpreting *exogenous data and texts*, for making logical distinctions, and for evaluating evidence from *outside* those disciplines and majors, such as when confronted by commercial attention capture algorithms and political propaganda.

Establishing a Culture of Critique

To be sure, the content-specific critical methods and tools of data analysis learned *within* certain academic disciplines can be loosely extrapolated for cultural critique *beyond* campus, and this preparation serves college

Micronesian Educator #30

graduates in the voting booth. But think of all the citizens who do not attend college or finish college, and who drop out of high school. The educationally underprepared citizens, devoid of critical skills, amounted to a majority of the 74 million people who gullibly voted in 2020 for Trump and his 33,000 lies while in the Oval Office. From this appalling state of undereducation, one can surmise that critical thinking should be taught much earlier, starting in middle school. How else can a critically aware, critically informed, critically prepared population be grown such that the catastrophic years from 2016-2020 are not repeated? Unlike most college administrators and program chairs, I do not compartmentalize critical thinking as one academic subject among others that students take for three credits as a general education requirement. Rather, I believe that, with few exceptions, *all thinking performed by college students should be critical thinking*, and that, regardless of what courses they take, those courses should provide opportunities for the exercise and formal demonstration of critical thinking skills such as *interpreting exogenous data and texts, making logical and qualitative distinctions, and using objective criteria to assess evidence from outside one's disciplinary specialization*. Along with campus-wide writing-across-the-curriculum, there should always already be thinking-across-the-curriculum.

**

It is with these thoughts and problems in mind that I have envisioned an imaginary learning institution whose very mission is to rigorously avert the ecological imbalance and resulting catastrophes largely attributable to a critically underprepared population whose gullibility poses a dire threat to the future of the U.S. as a democratic nation. As A. A. Long reminds us, the ancient philosophers argued that when “the rule of reason” is inculcated and deployed in critically rigorous ways, not only does it expose malevolent and subversive forms of sophistry, but it also imbues citizens with an ethos of civility that forestalls the growth of cultural barbarism (154).

Mission Statement of Underhill Academy

“Code, Critique, Create, Collaborate!” [Motto of Underhill Academy]

Underhill Academy is a bridging institute between high school and college that prepares students for advanced learning opportunities by developing their powers of critical inquiry, research, and advanced literacy in the Liberal Arts and Natural and Applied Sciences, all within the interdisciplinary framework of general ecology. This framework presupposes a philosophical (hence ethical, logical, and aesthetic) concept of *world* as the “horizon of all horizons” which unites all students in the effort to distinguish the ecological grounds of their separate modes of scholarly endeavor (Kockelmans 57). A founding imperative of the academy is to develop and exercise within an *attentional ecosphere* the critical capacity of each student not in one token course (e.g., “Critical Thinking 101”) but in all our courses to immunize our students against the plague of gullibility that has afflicted millions of social media users seduced by attention capture algorithms whose logic is Hate for Profit. Inseparable from establishing a culture of critique is the theory and practice of hermeneutics, or textual exegesis—a.k.a. active reading and *explication de texte*. Our students, regardless of financial background, ethnicity, and gender, whether future librarians or network hackers or tree huggers, are all deep readers for whom reading is both an attentional practice of self-care and a disruptive technology to combat a nascent Dark Age. They are already existentially committed as individuals in their scholarly preparation and devotion to learning as a collaborative activity that empowers them to serve the global community in ways that respect local customs and cognitive styles. A founding policy of our institution mandates that once students are personally interviewed on campus and accepted, all those from financially disadvantaged backgrounds receive full tuition scholarships from a variety of funding sources adjudicated by our financial aid officers and advisors, some of whom are student trainees in that area. (All Underhill Academy operational sectors will employ student interns, including custodial and security services.) The academic courses at Underhill Academy, all of which bear college credit, interface with college and university courses in the area, including University of Vermont, Dartmouth College, and Rensselaer Polytechnic, to ensure that our learning environment is genuinely collegiate in theory and practice, i.e., in methodology, ecological awareness, and (inter)disciplinary content. We anticipate that as our students progress to the upper grades, we will coordinate so-called 2-2 and 3-2 programs, whereby after completing two or three years at Underhill, they will be able to transfer to more specialized

institutions to complete their studies and earn Bachelor or Masters' degrees, respectively. For example, for our Creative Expression students majoring in Liberal Arts, our neighbor downstate, Bennington College, will be a destination where they can earn an MFA degree, Likewise, RPI, in Troy, New York, has already indicated its willingness to consider transfer students in the applied sciences. All these curricular nuances and opportunities will be systematically integrated within academic programs as the initial cohort of students progresses from one year to the next and new students begin their studies. This integration will rely on close collaboration between administrators (all of whom teach), faculty members, staff, and students.

**

The above Mission Statement and the narrative essay which follows are imaginary, although the literary and philosophical allusions and citations are not. The interview with *Burlington Free Press* is also imaginary.

Fighting Two Contagions: COVID-19 and Social Media

By the time I threw in the towel, resigned from my professorship, and decided to start a philosophical academy here in Underhill Center, Vermont, the situation in the schools had eroded to the point that there were more teachers quitting than teaching. They were fighting two distinct contagions: the global pandemic which began as COVID-19, and the virulent algorithmic hegemony of social media, the latter involving teachers in a losing battle for their students' attention. As with frontline medical workers, teachers finally started cutting their losses and getting the hell out after months of unremitting *psychophysical threshold dissolution* on multiple fronts.

The past tense is somewhat inaccurate here, since all this madness is ongoing. As I am sure anyone reading this document knows, the pandemic never went away; no sooner was a vaccine developed than a new mutation of the virus, some resistant to all previous vaccines, went global. People call it the "Proteus Virus," or just "Proteus"; for once the overused adjective "protean" makes sense. The schools have suffered from a lack of consistent policy regarding the wearing of masks, openings and abrupt closings, and inconsistent enforcement of restrictions at home and other places where students spend time, such as malls, restaurants, movie theaters, sports events, gaming parlors, and so on. Even if a school rigorously follows strict policies, it cannot control the various ways students are exposed outside of school, and this problem increases the danger of older teachers being exposed when students enter their classrooms. Elderly vaccination has thus far only partly ameliorated this danger due to the unpredictable patterns of mutation in the virus. Likewise, the schools have suffered from inconsistent policies regarding digital gadgets and smartphones, a failure to curate or neutralize exogenous forces of distraction, resulting in untold losses of class time due to students fidgeting with their devices or watching films on Netflix, shopping, refreshing their Instagram page, playing video games, etc. Many schools, complaisant in their efforts to curtail the digital contagion, have refused to recognize the toxic threshold of the technical *pharmakon* beyond which users suffer cognitive stupefaction and mnemonic implantation. Confronted by complaints and protests from parents and students who refuse to part with their smartphones, administrators and teachers not only predictably acquiesce, but exhaust their paltry budgets and personal funds on so-called educational technologies whose efficacy at improving learning outcomes has not been convincingly proven. The epistemological and behavioral disruptions associated with the uncritical use of digital apps and networks are largely unknown by most teachers and administrators. They begin the school year assuming they are engaging the students' attention, and this assumption evinces appalling ignorance of attention capture algorithms and software which coordinates the psychosocial triggers activating addictive feedback "rewards" stimuli (Seymour 62). All teachers should be required to attend lectures and workshops on attentional ecology, with specific focus on attentional patterns in the classroom. If this sounds farfetched, administrators can at least provide a list of books on this topic to be read during the summer before classes begin. A good place to start is Bernard Stiegler's groundbreaking work, *Taking Care of Youth and the Generations*. Another insightful and informative work is Yves Citton's *The Ecology of Attention*. The bottom line is that traditional lectures and readings, group learning activities and private tutorials, cannot compete with the viral attentional ploys of entertainment media—so the latter must be carefully curated and curtailed across the curriculum.

Attentional Ecology and Underhill's Low Distraction Zone

This problem of how to neutralize or modulate viral threats is something on which Underhill Academy has gotten a handle because we are a boarding school, enabling us to set policies that minimize exposure to sources of Proteus infection beyond the school property; and, by enforcing an LDZ policy (Low Distraction Zone) on campus, we are able to safeguard attention as a finite resource and minimize the use of the internet and social media. These policies "ecologize" the concepts of immunology and attentional life in the sense of that term as it is used by *Erich Hörl*, himself indebted to Felix Guattari, in the stimulating anthology, *General Ecology: The New Ecological Paradigm* (27). It is not an afterthought to recall that the discipline of modulating or suspending the digital *pharmakon* is ultimately the self-responsibility of our students, not some spectral police presence on campus. Hence all students take an official vow to exercise their self-responsibility. Most importantly, self-responsibility will only prove to be an empty gesture if each student does not value learning and knowledge as noetically (spiritually) superior to entertainment and trivial modes of social interaction. Although our application process seeks to identify this ethos of noetic selectivity in prospective students, the same cannot be said for the general student population, which necessitates that public school teachers begin each semester by instilling this ethos of attentional discipline and intellectual self-esteem in their students. To repeat, teachers must not assume that students value learning, that they think it is "cool" to be smart. Such values must be modeled and inculcated. Otherwise, pedagogy will founder in a regressive cognitive milieu that subconsciously values entertainment and trivial sociality over learning and knowledge. R. G. Collingwood demonstrates the prestige of knowledge by citing a passage from Plato in which one character says to another who is famous for being knowledgeable, "I beg you, if you know the answer to this question, tell it to me; don't begrudge me your treasure." Collingwood then comments: "How civilized! How enlightened of these ancient Greeks to talk about mere knowledge as if it were gold or silver!" (303).

Mount Mansfield and the Ecology of Mind

When you are a small backwoods operation just starting up, everyone pitches in, tries one project or another, some carpentry or painting, groundskeeping or bookkeeping, until they find their zone of competence or the pleasure of novelty--or novelty of pleasure--draws them in. I have found both pleasure and novelty in conducting campus tours for prospective students. (As head of my own school, my job description is rewritten day by day.) Since we have only a few buildings, some under construction, I decided to take my initial tour group of six "young philosophers and scientists" on a hike up the backside of Mount Mansfield until we reached Butler Lodge, where we had a snack and rested for an hour before returning. Since then, I have twice repeated the tour, each with fresh faces and open minds. The clearly marked Butler Lodge trailhead starts in the forest on the edge of our campus, and it meanders across Stevensville Brook at several junctures, then passes through some magnificent lowland glades, strewn with mossy boulders keeping desolate company with spruce and maple trees, before gradually ascending Mount Mansfield. I have been unable to resist a bit of phenomenological rumination along the way. "You might wonder why this hike beyond campus is integral to our campus tour. I tend to conceive of it as the outer horizon of an ecology of mind. The school itself is the inner horizon, and Mount Mansfield the outer horizon. This explains why, even when I am sitting at my desk in Sanders Hall, these trees and boulders accompany my thoughts without distraction. They subtend each other in what Edmund Husserl would call an *intentional manifold*. Even when I enter a classroom, the spruce aroma, the cool shadows cast by boulders, are with me as I begin a lecture."

Institutional Origins

Now, as most informed citizens of Vermont are aware, Underhill Academy would not be possible if the beneficent (and blessedly idealistic) politicians and private donors had not decided to replace Maple Leaf Rehabilitation Center, which has been in Underhill for 64 years, by building a new, expanded, cutting-edge facility in South Burlington. This allowed us to take over the old facility in Underhill, at the base of Mount Mansfield, while incurring minimal expenses for furniture and renovation. None of this would be possible without the wisdom and generosity of Bernie Sanders, who endorsed our project from its inception and helped secure sustainable funding. We are also indebted to Orville

Micronesian Educator #30

Bateson, who bequeathed his 60-acre farm, located adjacent to Underhill Academy, for agricultural research and training, and for homesteading our own dairy products and organically grown produce. The old Maple Leaf Rehab Center is now our main classroom and administration building, renamed “Sanders Hall”; the hammers and saws I hear in the distance are our students and teachers completing tasks associated with the construction of a dormitory, the materials for which have been donated by local hardware stores, lumber yards, and construction companies from all over Vermont and New England. (Yes, the rumor is true, we politely declined a major contribution from Home Depot based on its previous support of the Trump administration, which itself evinced a devastating disregard of education in the United States, with the former President openly confessing his strong distaste for reading.)

The tent city I can see from my office window houses the students, who should be able to occupy the new dormitory *they built themselves* by early October, hopefully before the first snowfall. The inaugural cohort of 60 students comes from 14 different states and Micronesia. There are also tents for our teachers, most of whom have doctoral degrees. Do not feel sorry for students and faculty as they camp out under the stars during the frosty nights of September. Their tents and equipment are of the highest quality, being donated by camping supply stores from all over New England such as L.L. Bean, a private company whose owners, known for their support of education in the state of Maine, have been exceedingly generous to their Vermont neighbors. (One of them said to me: “Beware our ulterior motive; we can’t wait to hire some of your graduates!”)

Due to Trump’s immigration policies, our initial cohort of students holds American passports, but we hope this problem will be resolved soon. Although we are currently unable to accept international students, reversals in immigration policy already mandated by President Biden’s cabinet should enable us to accept foreign students by this time next year. Lots of xenophobic red tape—barbed wire and steel walls—to unknot and/or cut down. As you might have read in the *Burlington Free Press*, Bernie Sanders and Prime Minister Trudeau of Canada have informally discussed ways that Canadians can participate in Underhill Academy as students and faculty, perhaps on the funding level as well, with a scholarship established to support one or more Canadian students.

The Inestimably Exorbitant Value of Underhill’s Human Capital

As I mentioned, the construction is almost completed, at least enough for everyone to move indoors. Involving students in this way, that is, as integral to the construction effort, and for academic credit, is one of the innovative aspects of Underhill Academy, the idea for which can be retraced to utopian communities such as Brook Farm in 19th-century Massachusetts, which grew their own fruit and vegetables and baked their own bread, as we do here in Underhill—lots of apples and pumpkins, lots of apple and pumpkin pies, and do not overlook our pumpkin bread! Several students suggested we establish a storefront in the village, or on campus, to sell some of our organic products, and that idea is now a concrete plan whose logistics and finances are being developed by a student committee and faculty mentor. From the start, we have tried to encourage student participation in infrastructural development, and in this way avoid any misperception of our campus as some sort of resort where the students have a consumer-oriented, passive relation to school “assets,” “amenities,” and daily operations. The students are themselves our assets; the valuation of this school is based not on a luxury swimming pool or Olympic gymnasium, but on the knowledge, skills, and critical capacity of our students, that is, on their noble educated behaviors. They are our human capital, our gold standard, the bearers of treasure that they will give away across the earth all their lives.

Thoreau and Collingwood on Civility

The sobering irony of a school being housed in a former rehabilitation center is not lost on us but defines our purpose, which is to realign learning with the progress of the soul, and thus rehabilitate (or recuperate or reawaken) the overarching spiritual destiny of educational experience, which is lifelong teaching and learning. R. G. Collingwood called this process “civility”—being civil to one another, teaching each other things we know well that the other person knows vaguely or not at all. In other words, the sustainable structure of civil society is based on the sharing of practical knowledge like how to tie knots, how to swim, grow and harvest crops, etc., across generations.

Micronesian Educator #30

I have always found this to be a profoundly ordinary way of characterizing the role of education in our lives, since it finds it hiding in plain sight, outside, as a sort of grassroots continuum of teaching and learning. “We are the beneficiaries of an ancestral, prehistoric civility which we take too much for granted” (Collingwood 303). The dialectic of civility over the years situates common citizens sometimes as teachers who have something essential to share, sometimes as learners who have something essential to learn. This is a compelling theme in Thoreau’s *Journal*, where he marvels in granular detail at the soft-spoken, elemental civility of old farmers like Cyrus Hubbard, encountered during Thoreau’s sojourns. “The farmer spoke to me. I can swear, clean, cold, moderate as the snow. He does not melt the snow where he treads... Moderate, natural, true, as if he were made of earth, stone, wood, snow” (416).

However, the uneven distribution of access to technology, often a privilege of economic class, precipitates schisms in communication even at the intracultural level. Such a schism is depicted in Zadie Smith’s story, “Meet the President!” A young man of the privileged “global” (digitally enabled) class, preoccupied with a virtual reality game in which his mission is to save the U.S. President, feels uneasy when appealed to by a real child from the “local” (impoverished) population who has approached him on a beach in Ireland. His VR game meanwhile situates him in Washington, DC, and when he hears the child’s appeal as she tugs at his arm, it becomes evident that the young man is “unused to proximity” (158). By underscoring the digital divide between social classes, Zadie Smith is intimating that the intracultural grassroots civility as described by Collingwood is bordering on obsolescence. We can transpose the implications of Zadie Smith’s story to a more mundane milieu, such as a Thanksgiving visit by grandparents during which the grandchildren remain entirely absorbed in playing their new X-Box or PS5 in spite of repeated entreaties to chat with the grandparents. According to Collingwood’s concept of civility, this schism between generations represents a failure of educational opportunity. Bernard Stiegler would heartily concur; such is the abiding theme of his book, *Taking Care of Youth and the Generations*.

To uphold a sustainable continuum of civility that is the precondition for intergenerational knowledge transfer, the problem of attention must be addressed in a rigorous and consistent manner as a cultural necessity. In this regard, Petrarch imaginatively deploys the framing trope of “listening to a lecture” to epitomize the practice of paying attention as a mode of public comportment. “To sit upright without any lounging or sprawling, to look directly at the speaker, to maintain a pose of active attention, and a sedateness of countenance free from any expression, not merely of arrogance or displeasure, but even of other thoughts and preoccupations” (243). Hence, paying attention is not merely a disciplined behavior in the ecology of mind, but a focused phenomenological attunement, an optimum psychophysical integration of the body and its modes of expression within an intersubjective milieu.

Narratives and Archetypes of Intergenerational Rapport

One might pinpoint the crux of our rehabilitation efforts in the politics of attention and the attentional continuum linking generations. There is no point in grandfather passing on wisdom to a grandson who is not listening because they are playing a video game on their smartphone, or restlessly anxious to return to the game the old speaker has interrupted. This is one of the *ecological* problems studied by our students, the breakdown in intergenerational communication due to the captivation of youth by digital networks and the subsequent colonization of their tertiary retentional capacity described by Bernard Stiegler in *States of Shock*, whereby tribal memories are supplanted by the images and memes of popular culture (171). Here at Underhill Academy, we believe that literature is one of the modes by which the archetype of intergenerational sharing can be recuperated. For this reason among others, all students take literature courses regardless of their major. The folktales of Kenji Miyazawa come to mind as a rich resource for such recuperative efforts. In his story, “The Night of the Festival,” a compassionate youth named Ryoji comes to the aid of a reclusive mountain man who is ruthlessly beaten at a festival in a rural village for not being able to pay for some dumplings he ate at a food stall. Ryoji intervenes with some money to help the mountain man, then runs home, “in a hurry to tell his grandfather about the wild man of the hills” (205). When Ryoji arrives home, he finds his grandfather outdoors, “cooking some soybeans over a fire in the open hearth.” The passage continues as follows:

Micronesian Educator #30

Ryoji quickly sat down opposite him and told him everything that had happened. At first his grandfather listened quietly, watching the boy's face as he talked, but when he got to the end he burst out laughing. "Oh yes," he laughed, "that's a wild man of the hills, all right. The wild men are very honest. I've often met them up in the hills myself on misty days. But I'm not sure no one's ever heard of one coming to see a festival before..."

"Grandpa, what do they do up there?"

"Well, they say they make fox traps, for one thing, using the branches of trees..."

At this point in the narrative, Ryoji and his grandfather hear a loud noise nearby. When they investigate, they discover that the mountain man has left them a large supply of firewood and a load of chestnuts, which he originally promised to the dumpling vendor when he could not pay him:

"Grandpa!" Ryoji shouted, getting up again. The man brought chestnuts too!"

"Well! So he even remembered them," said his grandfather in astonishment. "We can't possibly accept all this. Next time I go into the hills, I'll take along something and leave it for him. I expect he's like something to wear best of all."

Suddenly Ryojo had a funny feeling, as though he wanted to cry.

"Grandpa, I feel sorry for him. He's too honest, isn't he? I'd like to give him something nice."

"Yes. Next time, perhaps, I'll take him a quilted coat. A wild man might prefer a thick, quilted coat to a thin, padded one for the winter. And I'll take him some dumplings" (205-6)

Our business with such an intergenerational exchange appreciates the *hearth symbol*, which centers the archetypal substance of the rustic event in which tolerance and generosity are communicated and affirmed. In 2021, it all sounds so quaint now that "about two-thirds of the children in America from two to thirteen are using digital devices, with many children online an average of seven hours a day, every day of the week, and an ever-increasing number of youth online as much as twelve or more hours a day" (Wolf 143-4). The grandfather is a noble exemplar of tolerance and hospitality, along with respect: he respects the mountain man, and teaches Ryoji as much by example. The contrast of this ethos, so tolerant and respectful of otherness, with the discriminatory behavior of the townspeople, offsets the entire concluding scene as archetypally suggestive of a mythically informed ecology. The Mountain God alluded to in the beginning of the story manifests itself in the fugitive appearance of the mountain man. Ryoji's kindness and respect, reaffirmed by his grandfather, signify a sustainable cycle of exchange (symbiosis) between farmers and nature's gifts. Without the grandfather's warm reaffirmation of respect, tolerance, and generosity, or hospitality, it remains questionable whether the next generation will have the knowledge and ethos to negotiate a sustainable cycle of exchange with the elemental world.

Attentional Best Practices: Spiritual Self-Care, Cognitive Patience, and Embodied Awareness

I raised the Platonic issue of educational achievement as spiritual progress. Anyone who reactively cringes at the word "spirit" and assumes formal religion is once again invading our classrooms, has already shown their ignorance of the happy coincidence of Mind and Spirit in the German word, *Geist*. Likewise, this duality goes for the French word, *Esprit*. For the optimum coordination of these historically redolent terms in the process of learning, we take up "spirit" as attention, and "mind" as consciousness. An attentive consciousness is a vector of spiritual concentration. The optimal learning experience requires desire for knowledge and a spirit-sustaining tension of consciousness, that is, attentional focus, or directed concentration, to retain and process the matter at stake in a lesson. Whether in prayer or deep reading, attentional rigor is spiritual intensity as an embodied practice. As Ivan Illich explains in his book, *In the Vineyard of the Text*, in monastic culture reading traditionally served as a practice through which focused attention engaged the entire body to undistractedly prepare the "inner ear" (55). Michel Foucault would concur, and further describes such practices, which include textual exegesis, as constituting what

the ancient Stoics called the “care of the self” (134). Such literacy exercises are necessary for the *patient* progress of consciousness, of classroom learning, for an informed and individuated intelligence. Let us recall Petrarch’s lecture on listening cited above: “To sit upright without any lounging or sprawling, to look directly at the speaker, to maintain a pose of active attention...” Likewise, to practice reading in the classroom is to exercise an entire *mode of comportment*, not just “keep your eyes on the page!” This mode of comportment includes what Maryanne Wolf calls “cognitive patience” (152), something indispensable but particularly challenging for those with “continuous partial attention” (146). All the above issues pertaining to attention converge in Bernard Stiegler’s *battle for intelligence*. Today, attention is capital, to be ceaselessly accumulated by digital algorithms. Corporate leviathans use attention capture technologies to monetize available brain time. Underhill Academy strenuously continues Bernard Stiegler’s crusade, now that he is deceased, of a battle for intelligence. For example, the entire campus has been designated an LDZ, or Low Distraction Zone. The details are in our promotional brochure.

Underhill “Secret Recipe”: Critical Thinking’s Best Practice is Critical Exegesis

Even today, after the catastrophe of the Trump years, there will be readers who think there is something quirky or unscholarly about a school where everyone ponders the structure and dynamics of attention. As with language itself and, say, grammatical nuances, few people care to reflect on the structure of attention. No one cares to hear that multitasking is not something to brag about, that Facebook is a predatory attention capture machine and data mining operation, that many people suffer from IFS or Information Fatigue Syndrome, and that millions if not billions of people have an attention span equivalent to that of a chipmunk. The fact that distraction has become normative does not justify or legitimate it. Smoking was normative for some decades. To recover the powers of attention requires extraordinary self-discipline, mobilized consistently, that most people lack the commitment and energy to undertake. But at Underhill Academy, the dynamics of attention do not float around as tenuous abstractions but are rendered concrete through the practice of critical thinking and exegesis. Phrased more concisely, critical thinking and critique are attentional forms that reach optimum salience and traction in the art of interpretation, which dialectically weaves explanation and understanding. This is the “secret recipe” of the Underhill curriculum. If you ask to see the “best practices” of critical thinking, look no further than in the accomplished writings by our students in the natural sciences and liberal arts.

Curricular Glimpses

I should provide a somewhat more detailed glimpse into our curriculum encompassing the Liberal Arts and Natural and Applied Sciences, the latter two offering courses in mathematics according to their respective orientations. These categories serve as thematic sectors for the more specialized courses within their province of inquiry. Once a student declares a major in one of these general sectors, they will design their individual program with an advisor. As I mentioned, a creative arts student will major in Liberal Arts, with a concentration in Creative Expression; and students who, say, desire a Pre-Engineering program, will major in the Practical Sciences. Electives can be selected by students across the three sectors, depending of course on their preparedness. A student who wishes to study philosophy, economics, and political science, can design an individual program in Political Economy. So, their BA degree will be granted in Liberal Arts, with a concentration in Political Economy.

All the courses taught here will have ethical, logical, aesthetic, and hermeneutic components appropriate to specific disciplinary content, theory, and practice. In addition, there will be foundational interdisciplinary courses required of all students along the axis of problems and themes pertaining to Critical Hermeneutics and General Ecology. These courses will constitute the philosophical orientation that more than anything else will distinguish our students and create an intellectual bond between them. The courses, which have been conceived by a committee of both faculty and students, thus far include the following:

Interdisciplinary Seminars in Hermeneutics and General Ecology

Micronesian Educator #30

- ◆ Critical Thinking and General Ecology: Problems and Prospects
- ◆ Civility, Civilization, and the New Barbarism
- ◆ Laws of Internet Governance and the Common Good
- ◆ Vectors of Sustainability: Invention, Development, and Conservation
- ◆ Critical Hermeneutics and Digital Studies I and II
- ◆ Decoding Algorithmic “Hate for Profit” Nihilism at Facebook
- ◆ The Attention Economy vs. Attention Ecology
- ◆ Truth and Method in the Liberal Arts and Natural Sciences
- ◆ Sustainability Problems in Utopian Novels: *Blythdale Romance*, *Herland*, and *Walden II*

All such courses, which will be “team taught” by our faculty members or visiting professors, will be unapologetically interdisciplinary and philosophical. These courses, characterized by freewheeling arguments and discussions, will comprise the Underhill “brand” that distinguishes our graduates. Not all course offerings come from a predetermined menu—from semester to semester we cherish what emerges from unbridled discussions and the spontaneity of both collective and personal consciousness. A few nights ago, I was reading Thoreau’s *Journal* where he confesses to falling in love with a shrub oak. “I love and could embrace the shrub oak with its scanty garment of leaves rising above the snow, lowly whispering to me, akin to winter thoughts, and sunsets, and to all virtue” (417). This gave me the idea of a course on “The Ecological Purport of Inter-Species Romance.”

Imaginary Interview with Burlington Free Press

BFP: One of the rumors circulating on social media is that Underhill Academy is primarily a training center for future teachers. Is this true?

CSS: While we will not be disappointed if a significant number of our future graduates become teachers or professors to keep the spirit of our project alive in a tradition with institutional continuity, our curriculum is not specifically designed to produce such a strictly defined vocational outcome. A career in politics would be just as welcome an outcome. In any case, we anticipate a diverse range of professional roles suitable for our graduates, who, nevertheless, according to Collingwood’s concept of grassroots civility, might at some point fulfil the role of educator regardless of the career they pursue. What is true is that Underhill Academy is a pilot project in communal pedagogy and learning framed by the problematics of ecology and the attention economy, a project that, if successful, can be replicated in other locations that provide public and private support in league with “creative” or innovative sources of funding. One is tempted to employ an oxymoron and call this place an *intimate institution* of higher learning. Anyone who looks closely at what we are doing here in Underhill will readily surmise our model is not infinitely scalable.

BFP: Another bit of hearsay floating around is that Underhill Academy is tacitly governed by radical “Green Ideology.”

CSS: Why, because our campus is an attentional ecosphere? I spoke earlier of the inner relation between critique and ecological thinking. These are both critical habits of mind. What they have in common is an alert, evidence-based situational awareness capable of making logical distinctions and meaningful inferences and conjectures from incoming data, whether from a difficult philosophical treatise or an alarming shift in climatological patterns. Although their alertness is existentially situated, it is never entangled or spellbound such that it loses sight of the big picture or system, the world as a semiotic totality. Inferences or deductions are made by interpretive Gestalt shifts between the micro and macro levels, the inner and outer horizons of the matter at stake. This process is guided by the principle of the hermeneutic circle, and hence qualifies both critique and ecological thinking as hermeneutical endeavors. Does that sound like “Green Ideology” to you?

BFP: Although you “prepare students to become global citizens even while critiquing globalism,” I noticed that your course offerings do not include foreign languages.

Micronesian Educator #30

CSS: That is observant of you; most people do not notice the absence of foreign language courses, which says something about the diminished importance of multilingualism in the U.S. Ivan Illich often decried the American *Homo monolinguis*—monolingual man (Cayley 91). The short answer is that we cannot afford full-time language teachers at this time. In any case, all our instructors and students are required to be at least bilingual their first day on campus. Adequate evidence of bilingual fluency must be provided, either in interviews, test scores or certification. We have already received ideas from enrolled students about this situation—for example, anyone is free to start language conversation clubs, or a Maison Française in a wing of the dormitory, the latter being established as I speak.

BFP: Although you do not have language teachers yet, can you say anything about your working roster of credentialed instructors?

CSS: Most of them are professors who thus far seem to be enjoying their experience at Underhill. I can think of one MFA—John Currie, a genuine poet who also happens to have a divinity degree and serves as our pastoral counselor. He has a steady hand with a reversible saw, which you might have heard when you passed the construction site. We successfully recruited Joff Bradley from Tokyo, a rising star who theorizes digital studies and the philosophy of education. He is our “go to” person for expertise on Bernard Stiegler. Visiting faculty are a sort of emergent novelty here, if I may phrase it like Bergson. For our first convocation ceremony we had Maryanne Wolf present her latest research on “The Reading Brain.” Dr. Wolf is a fellow New Englander at Tufts, in the suburbs of Boston. Another neighbor, Chanda Prescod-Weinstein, a theoretical physicist at the University of New Hampshire, has agreed to give a guest lecture on her new book, *The Disordered Cosmos*. And we hope to reroute the travel itinerary of Alphonso Lingis to Underhill long enough to teach a two-week intensive seminar on the “Phenomenology of Alterity Relations.” The students are excited by all such learning opportunities—hell’s bells, everyone here is excited.

BFP: Is Underhill Academy a newly born “Marxist” institution and utopian scheme taking advantage of the radical political climate instilled by the Biden administration?

CSS: The short answer is “no,” primarily because Marx himself spent most of his time critiquing institutions, and little time concretely envisioning institutional outcomes as feasible utopia. One can read Marx for years and remain clueless how to construct a utopia beyond the vague suggestions about collectivism. In any case, before using such overdetermined terms as “radical,” “Marxist,” or “socialist,” which have been opportunistically demonized by cable news channels and social media, I urge you to bracket your political allegiances and read up on the topic outside of your web-based sources of information and hearsay. I read Marx’s *Capital* in college and became ever more bewildered. Here was a rare case in which secondary sources saved the day. I first gained some traction reading Raymond Aron’s *Main Currents in Sociological Thought, Vol 1.*, published by Anchor books in 1968. I bought it for a few bucks in Middlebury. Then later, Lewis Coser’s *Masters of Sociological Theory* brought the clarity I desperately sought, taught by Professor Sampson in a course at UVM, “The Development of Sociological Theory.” If this response sounds overly personal, it is because reading is always something personal, integral to one’s biographical articulation. I still fondly possess Raymond Aron’s text, now a disheveled paperback held together with rubber bands.

BFP: Is it true your school will not field any competitive sports teams?

CSS: Did you bring your hiking boots? I am scheduled to conduct another school tour this afternoon if the weather cooperates. You can read about my tours in the text that accompanies this interview. When the weather grants us access, I take prospective students up the backside of Mt. Mansfield. Although it is not official property of Underhill Academy, the mountain is integral to the spirit of the place—and, with regard to the ecology of mind, its outer horizon. Last month we encountered some deer in the grove of spruces before the trail begins to ascend. Rather than ignore them or hike past them, we stopped at an unthreatening distance and observed them, their *alert serenity*. Later, during our break at the summit, I recounted for the hikers a Miyazawa folktale about a boy who drops his hand towel in the forest by accident, and who, upon seeking to recover it, discovers a small herd of deer carefully inspecting the towel. After each deer takes a turn scrutinizing it for any danger it might pose, they collectively dance around it. I described this event as a *trans-species lesson in taking care*—that is, in paying attention. Unlike humans,

Micronesian Educator #30

who have separated their rational cognition from both instinct and intuition, the deer seem to meld these into a formidable power of situational awareness—as I said, *alert serenity*.

What was your question? Oh yes, sports facilities. We have four tennis courts. A spring-fed swimming pond. We also have a “Cover-to-Cover” club in which students read novels and philosophical treatises in their entirety. Is that considered a competitive organization?

BFP: I have heard that you forbid the use of social media on campus.

CSS: We should establish some accuracy on that issue. Upon enrollment, all students must have terminated their Facebook membership. Of course, we secretly hope some of them never joined. Can you imagine the undissipated intensity of such individuals? More generally, we certainly do not encourage the use of social media—every new applicant is apprised of our status as a LDZ (Low Distraction Zone). And you will never see Underhill Academy promoting itself on Facebook! Look, we aspire to *generate our own learning milieu* and not inhabit one prepackaged that requires use of a certain branded technology like Google Classrooms. Now that we have set the LDZ precedent, other institutions of learning will surely follow. But we have hackers and students specializing in digital studies who find it necessary to use social media. They sign a permission form in the front office. As I mention above, all students take a vow of digital self-responsibility. They are aware that attention is a finite resource not to be squandered on chitchat and consumer entertainment. We want to avoid separating intellectual discipline and digital habits from the ecologization of existence, as the case may be—either general ecology or Felix Guattari’s “three ecologies” balancing personal, social, and enviroing worlds. Why should digital habits be treated any differently than nutrition or physical fitness, civic mindedness, or sustainable methods of trash recycling?

BFP: Can you point me to any other digital media policies?

CSS: Our governing policy, stated in the Underhill Academy brochure, is that “social media can be accessed with permission if it is integral to a student’s research.” The internet is not forbidden. Anyone with an historical perspective in education will find ample precedents for our careful approach to the social media. Ivan Illich and Foucault frequently allude to the integral importance of *ascesis* (intellectual austerity or self-limitation) in the ever-expanding marketplace of ideas and academic trends. To students today, it will seem strange that someone would find learning so pleasurable as to invoke the best practices of self-discipline from the ancient Stoics, Thomas Aquinas, and medieval scholars like Hugh of St. Victor. The latter conceived of reading books like a tasting tour through vineyards of the Napa Valley! Toward the end of his life, Foucault was preoccupied with scholarship on ancient “ways” of self-care, such as Japanese archery (*Kyudo*), and monastic practices. “Clear a space around the self,” Foucault says, “and do not let yourself be carried away and distracted by all the sounds, faces, and people around you” (222-3). He said that in a lecture he gave in 1982—more than twenty years before the inception of Facebook.

BFP: About your start-up funding. I happened to do a bit of digging behind the headlines and discovered that Bernie Sanders did not actually help you secure funding for the initial purchase of Maple Leaf Farms Rehabilitation Center.

CSS: Why say “actually”? It adds nothing to your statement. You are correct; after all, we are not a public institution. What he has done, bless his cranky soul, is connect our new institution with a “liberal” New England network of future sustainable streams of funding, some from private individuals, and some of which will require an application process and some passionate lobbying in Montpelier. Can one ask for more?

BFP: Then, where did the funds come from that initiated the purchase of Maple Leaf Farms for \$850,000?

CSS: One is held to the vow of candor expressed in the fine print of our founding documentation. I purchased a thousand shares of Amazon back in the days when it was valued at \$17 a share. It is now worth 3,200.00 per share. Do that math. Math is sobering. It will focus your attention and raise your soul to a new level of alertness. What remains incomprehensible to me is what are all the Amazon millionaires doing with their market gains? Watching

Micronesian Educator #30

Netflix in gated communities while complaining about the debased, illiterate, and uncouth state of American culture?

Works Cited

- Bump, Philip. "The demographic divergence that helps explain perceptions of the Capitol rioters." *Washington Post*, Jan. 14, 2021. <https://www.washingtonpost.com/politics/2021/01/14/demographic-divergence-that-helps-explain-perceptions-capitol-rioters>
- Cayley, David. *Ivan Illich in Conversation*. Anasi Press, 1992.
- Citton, Yves. *The Ecology of Attention*. Translated by Barnaby Norman. Polity Books, 2017.
- Collingwood, R. G. *The New Leviathan*. Oxford UP, 1992.
- Dewey, John. *How We Think*. Dover Books, 1997/1910.
- Epstein, Reid. "Ron Johnson Says He Still Has Many Unanswered Questions." *N. Y. Times* 1 March 2021, <https://www.nytimes.com/2021/03/01/us/politics/ron-johnson-capitol-riot.html>
- Finn, John. "Trump's Acquittal is a Sign of Constitutional Rot." *The Conversation*, 14 February 2021, <https://theconversation.com/trumps-acquittal-is-a-sign-of-constitutional-rot-partisanship-overriding-principles-153936>
- Hirsch, E. D. *Why Knowledge Matters*. Harvard Education Press, 2016.
- Erich Hörl and Burton, James, Editors. *General Ecology: The New Ecological Paradigm*. Bloomsbury, 2017.
- Isenstadt, Alex. "Trump pollster's campaign autopsy paints damning picture of defeat." *Politico* 1 February 2021, <https://www.politico.com/news/2021/02/01/trump-campaign-autopsy-paints-damning-picture-of-defeat-464636>
- Kornbluh, Anna. "Extinct Critique." *South Atlantic Quarterly* 119:4, October 2020.
- Foucault, Michel. *The Hermeneutics of the Subject*. Translated by Graham Burchell. Picador, 2005.
- Illich, Ivan. *In the Vineyard of the Text*. University of Chicago Press, 1993.
- Kockelmans, Joseph. *The World in Science and Philosophy*. The Bruce Publishing Co., 1969.
- Long, A. A. *Greek Models of Mind and Self*. Harvard UP, 2015.
- Miyazawa, Kenji. "Night of the Festival." *Once and Forever: The Tales of Kenji Miyazawa*. Translated by John Bester. NYRB, 1993.
- Plutarch, *Moralia*, Vol. 1. Translated by Frank Cole Babbitt. Loeb Classical Library, 1927.
- Riley, Dylan. "Faultlines: Political Logics of the U.S. Party System." *New Left Review* 126, Nov/Dec 2020.
- Sartre, Jean-Paul. *Existentialism and Human Emotions*. Translated by Hazel Barnes. Philosophical Library, 1985.
- Seymour, Richard. *The Twittering Machine*. Indigo Press, 2019.
- Smith, Zadie. "Meet the President!". *Grand Union*. Penguin Press, 2019.
- Stiegler, Bernard. *Taking Care of Youth and the Generations*. Translated by Daniel Ross. Stanford UP, 2010.
- ... *States of Shock: Stupidity and Knowledge in the 21st Century*. Translated by Daniel Ross. Polity Press, 2015.
- Thoreau, Henry David. *The Journal 1837-1861*. Edited by Damion Searls. NYRB Books, 2009.
- Wolf, Maryanne. *Tales of Literacy for the 21st Century*. Oxford UP, 2016.

Section Three



Book Reviews

Micronesian Educator #30

Johnson, Aaron. *Online Teaching with Zoom: A Guide for Teaching and Learning with Videoconference Platforms*. Excellent Online Teaching Book 2, 2020; paperback, \$11.99; ebook/Kindle \$6.99.

Lemov, Doug and the Teach Like a Champion Team. *Teaching in the Online Classroom: Surviving and Thriving in the New Normal*. Jossey-Bass, 2020; paperback, \$19.95; ePub/Kindle \$12.00.

Reviewed by PAULETTE M. COULTER

~~

The spring of 2020 jolted education in the United States when a nearly invisible virus closed many brick-and-mortar schools. Suddenly teachers had to face their students, if at all, on small screens; some of these teachers may have felt ill prepared for the abrupt transition, as did students and their parents. This review focuses more on teachers than students and families, though those issues are also major concerns in education.

Selection of these two books was neither arbitrary nor random. Google searches of the ten, twenty, or ALL most valuable sources on online education yielded a number of texts that were comprehensive, reasonably priced, easy to obtain, and readable by a wide audience (that is, readers do not have to be techies, but the books may help them control and master the technologies). Therefore, I selected books available as Kindle eBooks, which eliminated wait time and cost of mailing—though it increased screen time—of books of reasonable length.

Aaron Johnson concentrates on a particular but commonly used platform for online conferencing; his purpose is to assist teachers in the use of Zoom. Doug Lemov and the TLAC team focus on the classroom application of videoconferencing and its use in providing equity in education and in creating a “Culture of Attention and Engagement” (Chapter 3). The two books dovetail and reinforce each other in surprising ways, are readable, and offer advice that is easily followed or adapted in the classroom. Johnson speaks more to high school or college teaching, whereas Lemov et al. address issues in elementary and high school environments, the areas in which they do specialized teacher training.

Online Teaching with Zoom: A Guide for Teaching and Learning with Videoconference Platforms.

Aaron Johnson, according to the “About the Author” section of the book and his LinkedIn profile, is an Associate Dean of Educational Technology at the Denver Seminary in Littleton, Colorado. He has also written *Excellent Online Teaching*, an Amazon Bestseller. He completed his BA in Broadcasting: Video production at Cedarville University in 1999 and his MA in Christian formation and soul care at Denver Seminary in 2013; he worked there in the Educational Technology department from 2005 to 2013.

Online Teaching with Zoom is divided into four parts that comprise twenty short chapters as well as an introduction, an interlude between parts III and IV, an afterword, notes, acknowledgments, and information about the author and his works. Each chapter has several subheadings, oftentimes numbered; chapters usually contain a link to the *Online Teaching with Zoom* website, where the user may find additional information as well as downloadable materials. For some readers, Part 1 may be the most intimidating, as it deals with “The Technical Stuff” and contains eight chapters. While perhaps intimidating, these chapters were also helpful; they explain features of Zoom clearly.

The chapters of Part I deal first with “The Equipment” and second with preparing the classroom. Chapter 3 focuses on “Testing and Technical Difficulties.” Chapters 4 through 8 then narrow the focus on specific features of Zoom: “Sharing,” “Breakout Room Basics,” “Chat,” “Polls,” and “Security.” In terms of equipment, Johnson suggests that users get to know their computers if they have not done so, focusing first on audio (15–17), then on video. For online teaching, camera focus at eye level is most effective; looking up, down, or sideways at students is less effective than looking at them directly (17–18). While most of us use laptops for videoconferencing, Johnson suggests an external monitor as well, even to put “your presentation on one screen and your students on the second screen” (18). Johnson also suggests a range of helpful add-on equipment but indicates that “Good Enough is Good Enough” (19) and that expensive equipment is not necessary if instructor and student “webcam, microphone, and reliable internet

Micronesian Educator #30

connection” are present. He does recommend, however, that students wear headsets or earbuds and that they know how to access the Zoom classroom with their own devices—before class (19).

In Chapter 2, what Johnson means by preparing your classroom is to go into Zoom and check out everything: audio and video settings; all the settings that apply for participants; keyboard shortcuts from the Zoom website (Good idea to print this list!); sharing a file via Chat; start, stop, and restart recording; checking out Poll and Share and Breakout Rooms (21–22). The last may require some help from others to be in those virtual rooms. While this may seem overwhelming, Johnson states that “this will probably be the best 20-30 minutes you will invest” (ibid.) as it will mean not fumbling or losing time as you try to use any of these program features during a class. In this chapter, Johnson also deals with lighting, professional appearance, teaching from non-public spaces, having sufficient bandwidth and a good Internet connection, being on time or early, messaging students on how to find their online classroom, having a single-entry point to a classroom’s online space, and, as always, being ready for the worst possible cases and being able to mute unnecessary sound interruptions.

Chapter 3 re-emphasizes ways to be prepared for handling technical difficulties. First of all, Zoom has a Test Room Link that users may access and where they can practice using the program; the text has a hyperlink for this Test Room as well as to an editable template on the *Online Teaching with Zoom* website. In addition, teachers should have a pre-existing plan for what to do if and when their own equipment fails them.

Sharing is the topic of Chapter 4. Johnson provides a numbered set of paragraphs that outline a method for sharing files. As in other chapters, he provides a link to the chapter’s companion webpage. Most importantly, he notes that “when we share, we make a human connection with our students” (35). A warning on page 37 indicates that the information on file sharing that follows is technical and may require focus, time, and practice to master. The information is explicit and given step by step.

The “Breakout Room Basics” in Chapter 5 describe the online equivalent of breaking into small groups for discussion or problem solution in the face-to-face classroom. Johnson provides step-by-step directions, with links to a tutorial and a tutorial video (44). Practice with breakout rooms requires live participants. Best practices for creating and using breakout rooms include assigning students to a group, assigning specific work to be accomplished in group, and timing group activity (44–47). Part IV of the book focuses on details of “Working with Breakout Groups” in six chapters.

In Chapter 6 Johnson discusses “Chat,” one of the features of Zoom most users have adopted intuitively. He sees it as “the back-channel conversation that takes place among learners” (50) that can be used by the instructors who review it as “priceless insight into your students’ learning process” (ibid.). Teachers may record chat and review it after a meeting session is complete. While the material in this chapter seemed familiar to the reviewer, the information in Chapter 7, “Polls,” was new. Johnson describes this Zoom function as “both a useful educational tool and a great way to add variety to your class sessions and reengage the attention of your students” (55). He adds, “The most important technical thing to remember about polls is that they are attached to specific meetings” (ibid.). Care is necessary, then, in creating the questions for polls before class and in managing polls. A poll is a specific multiple-choice question associated with a specific meeting to elicit student response; more than one response is allowed (54). Polls are discussed further in Part III of the book as well as in supplementary downloadable chapters for which the author provides a hyperlink.

In Chapter 8 Johnson covers the basics of security for the Zoom classroom. He provides a hyperlink to the Zoom security pages and then works through a series of numbered steps. Each meeting host should know the account’s default security settings and in-meeting security controls, sign in with their institution’s account, remove troublemakers and prevent uninvited guests, create unique meeting IDs, integrate access to Zoom with Moodle or other Learning Management Systems, prevent users from joining the meeting before the host, choose to record at the beginning of each meeting rather than using it as a default, and keep the Zoom client up to date (55–61).

Micronesian Educator #30

Part II contains two chapters. Chapter 9 addresses “The Student Perspective” while Chapter 10 focuses on “Classroom Protocols,” or the instructor’s perspective. The student perspective includes two recipes: one for a bad session and one for a good session. To create a bad session one can do what makes for boring classes: too much information with no conversation, long and unnecessary pauses, slides that cover conversation and chat, lack of direction, the constant talker, and unprepared classmates (65–68). Johnson lists ten items; some overlap. For both students and teacher, this reviewer considers the tenth item (unprepared classmates) the most important in managing the technology, the material, and the classroom itself, which leads directly to the recipe for a successful Zoom meeting: an environment that encourages participation through forming stable groups and providing clear direction, being curious about new knowledge, and providing meaningful prompts, learning tasks, and accessible materials (69-71). Chapter 17 provides “Zoom Preps” to help motivate students.

Clear and meaningful protocols for the online classroom (Chapter 10) do the same thing as protocols for face-to-face learning: they establish ground rules. Johnson provides a downloadable document for teachers to adapt as a model in the companion website (73); this should probably be a stand-alone document (79) distributed to students. Some of the requirements are obvious: necessary equipment and a stable Internet connection that have been tested before the first class and allow for collaborative work, a quiet well-lighted place to “attend” class, and being seen (camera on!) as an attendee (73–76). Students of driving age should not try to attend an online class while driving (75). The decision to mute or unmute should be up to the instructor, and students should be aware that they are expected to be participants (77–78). Actually, Johnson states that self-awareness is necessary for all participants in the online classroom (78). He suggests, finally, that one silly rule should be included in the protocols (79).

In Part III, Johnson presents three chapters on “Active Learning with Zoom.” Chapters 11 through 13 address “Key Instructional Practices,” “30 Active Learning Methods,” and ten practices for “Facilitating Active Learning.” In Chapter 11, Johnson discusses nine practices for active learning in the online classroom. The first deals with the classroom agenda, the structuring of the class (direct instruction, practice, consolidation, assessment) and the rhythm of instruction in predictable ways. One of the most enlightening practices for this reviewer is “#3 Side-by-Side View,” which Johnson insists “students absolutely must learn to use” and which “places your presentation (or other screen share) on the left side of the screen and you and their fellow students on the right” (86; emphasis in original). A thin line separates the halves of the screen and can be used to resize either half as needed (ibid.). Johnson suggests introducing this practice in the first class and using the chapter’s webpage to try the demo (ibid). While many of the other practices are carryovers from face-to-face classrooms, item #3 and item #5 are new in the classroom. Many people have already learned item #5: “*Higher Level of Energy (and Breaks) are Required*” for both teachers and students (ibid.; emphasis in original). The other items are also worthy of consideration, especially editing instruction, making clear that learning requires effort, and making materials accessible (88-89).

In Chapter 12, Johnson presents *thirty* methods for active learning in the online classroom. Each teacher should review them and select the ones that best fit their discipline, classroom practices, and age of students. In Chapter 13, Johnson again provides a list of ten numbered items that can be used to select classroom practices relevant to a teacher’s style and student needs. Some of these items relate to items in other chapters, such as “#6 Be Assertive,” which relates to discussions in chapters 2 and 9 of teachers giving clear and specific directions (112, emphasis in original; 23, 66, 70, et al.). Other items refer to general practices, such as using student names (112), or to things teachers have experienced or need but have not necessarily articulated, such as succinct explanation, some time for reflection, modeling (111), and practices for taking turns in group discussion (113). Still others refer to the use of breakout rooms for small-group activity (109-110).

An interlude on “Adapting” follows Part III. Here Johnson states his belief that “*videoconferenced learning is impacting many educators in similar ways, stretching our usual practices and prodding us to consider different approaches*” (117; emphasis in original). In Part IV, Johnson works to develop greater understanding of breakout groups, which he considers “*the most important and powerful educational tool*” of Zoom (ibid.; emphasis in original) and does so with six chapters.

Micronesian Educator #30

Because Part IV is primarily for instructors who use small-group activities and discussions, its chapters provide nearly step-by-step instructions for designing successful use of groups. Therefore, it is better for those who will use breakout groups to access the chapters and their accompanying website pages rather than summaries of them. Johnson recommends that teachers assign and maintain stable groupings and establish expectations for behavior in groups (chapters 14 and 15). Work group sizing should vary by task (Chapter 16, 133). Chapters 17 and 18 emphasize group guidance, with Chapter 17 presenting two examples and three tips on how to make Zoom Preps meaningful (139–41), the last of which is an attention grabber: “Set them up for failure” (140), an odd concept for a book on promoting student success! He means that Zoom Prep should be so essential that “to come unprepared makes the conversation or task so challenging that students quickly learn the importance of these activities” (140–41). Therefore, these activities should also be important to their success in learning and be clearly expressed, and Chapter 18 provides specific examples of discussion guides for these activities. In Chapter 19, Johnson identifies and explains “three core skills [instructors need] to facilitate learning in breakout groups: 1) assertive leadership [a topic he repeats in several chapters], 2) asking questions, and 3) attending to the subtext of conversations and group dynamics” (146). As mentioned above, paying attention to the subtext is easier in face-to-face interactions, as is keeping a finger on the pulse of interactions in brick-and-mortar classrooms.

Part V, “Wrapping Up,” contains only one chapter: “Improving Our Game.” In it, Johnson emphasizes *deliberate practice* and **feedback** (177, italics and emphasis in original). This chapter addresses five numbered points that suggest teachers record and watch themselves, use polls to keep a finger on the class pulse, use chat for immediate feedback, and make feedback a simple process (a single question) and an important and as nearly automatic an element of the classroom experience as possible (172–175). In the face-to-face classroom, feedback has often been simple and automatic, for teachers have been able to read facial expressions of their students and have been able to feel the atmosphere of the classroom, two things that are not always easy to accomplish when students are simply staring at a screen.

In his Afterword, Johnson explains that the book was incomplete when the pandemic of 2020 began, but that others convinced him to complete it anyway “to help educators teach thoughtfully and effectively in this video-mediated learning space” (177). The Notes at the end of the book provide references for each chapter, either as URLs or bibliographic references, as needed. While the URLs in the chapters are hyperlinks, in the Notes they are not, which may be because the website for the book was being developed simultaneously with, or slightly lagging, the writing of the book.

Teaching in the Online Classroom: Surviving and Thriving in the New Normal

Doug Lemov, according to the website of Uncommon Schools, a charter-school management organization, is Co-Managing Director of Teach Like a Champion (TLAC), a professional teacher-training group. His booking agent, All American Entertainment, and his LinkedIn profile, state that he has a BA from Hamilton College (1989), an MA from Indiana University Bloomington (1997), and an MBA from Harvard Business School (2004). He is the author of a number of books on education that are available at Amazon.com.

Teaching in the Online Classroom was published in September 2020 by Jossey-Bass, a brand of Wiley. The book has an introduction, seven chapters, a coda, a glossary of Teach Like a Champion (TLAC) terms and techniques, an appendix on semisynchronous tasks, and an end user license agreement. Different members of the TLAC team have written each chapter, and each chapter contains links to videos at <https://www.wiley.com/go/newnormal> that demonstrate techniques and procedures that the chapter describes.

In their Introduction, Lemov and Erica Woolway refer to a chart developed by John Friedman and presented in a blog post by Emily Oster. The chart shows the rapid decline in learning in an online math program, correlated with socioeconomic class, with the greatest losses in the lowest bracket. Like many educators, these authors “have been asked to do what they know is difficult: to shift without warning, to an unfamiliar universe—one where we interact with our students remotely, as if through a tiny keyhole” (2). This is a universe in which students become tiny icons

Micronesian Educator #30

on a computer screen instead of living people in a classroom. They state, “[T]his book is for those teachers who, like us, would not have chosen this course but who, faced with it, are determined to find simple, replicable ways to do it well and serve our students best” (6).

Chapter 1, “Synchronous and Asynchronous Learning,” written by Hannah Solomon and Beth Verilli, defines these two terms that have Greek roots. In synchronous learning, instructor and students in different places are present online at the same time (23–26); in asynchronous learning, the lesson is previously recorded, and the instructor is not present online, except in the recording, while students use the lesson at different times and places (16–23). The authors discuss the benefits and limitations of each method to build a model of greatest synergy; for example, in synchronous lessons, students may ask the teacher to slow down or explain something again while in an asynchronous lesson, the student may stop the lesson, rewind, and replay it as necessary as well as email the teacher with questions. No matter which method is used, planning is now greater than critical; it is crucial, and planning and preparation are necessary for success (31–33). Hyperlinks to video clips allow the reader to view examples of possible techniques; these may be easier to use with ePubs than hardcopy, though hardcopy allows for simultaneous use of an open book and an open computer file. This and following chapters conclude with a bullet-point summary for review.

In Chapter 2, Jen Rugani and Kevin Grijalva recommend that no matter whether synchronous or asynchronous lessons are produced, an objective of the instructor should be to “Dissolve the Screen.” What they mean by that is to make the online experience as much like the classroom experience as possible, which varies, of course, by age and grade of students, but which carries over the protocols and practices of the classroom, such as calling students by name or starting with a “Do Now” activity for example. For synchronous learning, Rugani and Grijalva recommend cameras are on and faces are visible, using both private and public chat, taking polls in response to simple questions that can take a visible answer such as thumbs up or number of fingers for multiple choice, or doing individual work and holding up a sheet of paper or a small whiteboard for all to see (43–44). For asynchronous learning, they recommend varying the mode of submitting work (picture, email, audio or video memo), asking self-reflective as well as content-related questions that can be answered by text or email, and challenging students to share their work (44–47). All these means of submitting work, of course, require teacher feedback. Another thing the authors recommend is cultivating a culture of error (similar to Johnson’s idea of setting them up for “failure,” and maybe a better term); that is, making it acceptable to make mistakes and learn from them (51–52). Contact with families is also important, especially for younger students (52–53).

The major emphasis of the book is captured in the title of Chapter 3, the creation of a “Culture of Attention and Engagement.” A good place to start this chapter is the “In Review” section at the end, with pencil and paper at hand to outline and take notes, to see at a glance what Colleen Driggs and Jaime Brillante do. One peculiarity of online education is that we use a major form of distractibility to focus attention: any distraction is just a click away. For someone like this reviewer, an online class often means that in addition to a physical text and written notes, the computer is open to the meeting application, the iPad is open to a supporting website or typed notes, and the phone is open to a search engine or a dictionary to look up additional details. Driggs and Brillante suggest access to as few distractions as possible and an organized workspace; starting a lesson quickly (within three minutes); doing one thing at a time; providing clear, simple, explicit directions; varying activities and pacing to best fit the needs and attention span of students; focusing on attention and engagement during a lesson through student activity; and preventing overload for both students and instructor (57–79) The chapter is divided into five sections and would be an easy chapter to provide the review reader with a series of quotes. That “learning relies on working memory to process ideas and encode concepts in long-term memory” (59) and that “if we show text and images together, working memory is better able to connect them, contributing to better understanding” (62) are among the more memorable. Similarly, the authors stress the benefits of taking notes by hand and reading aloud in the synchronous classroom, including the use of audiobooks (71–72).

Micronesian Educator #30

Hilary Lewis and Brittany Hargrove discuss “Pause Points” in Chapter 4. Noting that “[l]eft to their own devices, people will drown in their own devices” (85), they re-emphasize the need to begin participatory activity within the first three minutes of class and call this the “Iron Law of Online Learning” (83). Pause points are times for the teacher to pause and let the students act, participate, respond; they are “short, interactive moments embedded in a lesson” (81) that should be used as frequently as every five minutes to maintain and enhance attention, engagement, and accountability. These interactions also allow for formative thinking, give an instructor an opportunity to check for understanding, and give students a chance to “consolidate learning into memory via retrieval practice” (86). Pause points also clearly help vary classroom activity, or as the authors say, “[B]reak up the monotony of the day” (97) or at least constant staring at the screen!

Chapter 5, “Accountability Loops and Checking for Understanding,” deals with assessment. Accountability and checks for understanding are usually classroom practices that teachers monitor by watching classroom behavior and students’ facial expressions, things they do not necessarily see online. Emily Radillo, Jen Rugani, and Hannah Solomon discuss implicit, lagging, and real-time assessment and the implications each poses for both planning and classroom practice. Implicit assessment is student self-assessment against a model and is not necessarily dependable while lagging assessment occurs when students turn in work and wait for evaluation (100, 108). Real-time assessment is exactly that, immediate feedback on a piece of work (111). This can be accomplished through checking work together and then turning it in, which is often easier in the classroom than via technology.

In Chapter 6, Darryl Williams and Dan Cotton emphasize the need for maintaining “Procedures and Routines” in the virtual classroom because they “ensur[e] student focus and attention” (123). They also provide stable and predictable routines for students, especially needed in times such as the present. Routines such as “‘backstopping’ independent work [. . .] with Cold Calls” (125), that is, calling on a student who has not raised a hand to start checking a completed task are one form of real-time assessment. Another TLAC term used in this chapter is “Means of Participation,” which refers simply to the ways students can participate in a class (125–33). Some means are the same as the face-to-face classroom, such as volunteering, cold calling, and “Everybody Writes” (127–28), though the latter may be typing as well as handwriting. Chat and breakout rooms are specific functions of online learning; both can be used to ensure student ideas are incorporated into a class. Williams and Cotton also discuss how student workspaces can be organized for class, class-opening routines, giving directions, and teacher-facing procedures (132–139). By the last they suggest teachers make a cheat sheet for when they want to use specific Means of Participation during a lesson (139). Such a list should alleviate some of the stress on the teacher’s own short-term memory and could easily be included in a template for a given class.

Rob Richard and John Costello discuss “Classroom Tech” in Chapter 7; this chapter is primarily for the teacher and includes figuring out how and where to record classes, which involves setting up one’s own workspace for most effective teaching (143–145; 157–158). They also discuss the use of Chat for student participation and to check for group or individual understanding, and Breakout Rooms, which can be used for Turn and Talk—or pairing—as well as group work (148–155). For these discussions, clear rules of entry, exit, and timing are needed. Interestingly, Richard and Costello recommend randomizing breakout groups (153) rather than setting up stable groups as Johnson (46) does. Teachers should plan how documents—written, audio, and video—will be distributed to students and submitted to the instructor (Richard & Costello in Lemov et al. 155–157) and practice screen sharing, noting that Zoom has a basic whiteboard (161). Tool tips are provided for each tool. The material in this chapter both complements and supplements Johnson’s first chapter.

The Glossary provides definitions of TLAC buzz words, such as “Pause Point” and “Means of Participation,” and in the “Coda” Erica Woolway, Emily Radillo, and Doug Lemov discuss “Planning for the Future,” a task that includes planning for uncertainty. Nevertheless, they offer a number of suggestions: make the virtual classroom as similar to the physical classroom by using the same language and translating classroom routines (163–164). This includes planning the use of materials and the schedule for online learning rather than in person as well as what to do if not all students attend the physical space (164–65). Social class may affect learning (166–167), and staffing patterns may

be adapted through partnerships and assistantships (168). The spring (and now the fall?) semester has called upon teachers to adjust and has reinforced the idea that brief and clear instructions and use of multiple means of participation is essential online (170). The authors believe the challenges have had silver linings, especially in “breaking barriers of time and place” (172). What remains essential in teaching, however, is the relationship between teacher and student(s) (173).

The Appendix provides “A Lesson Template and the Concept of the Semisynchronous Task.” Semisynchronous (sometimes hyphenated in the text) refers to a mixture of synchronous and asynchronous tasks, and the template outlines potential activities and shifts from one to the next for a sixty-minute class period (180); a possible template is offered that could be adapted across an entire school and includes a description of the essential elements of each segment and ideas for accompanying visuals. The four activities included in the template are lesson opening, independent work, lesson closing, and flex time, which could mean time to tackle homework or other independent work. The Lemov et al. text has no Notes section because each chapter has endnotes.

Discussion

Although not designed and developed by the same authors, the information in each book dovetails with and reinforces the other. Some differences do occur. Johnson provides numbered lists in nearly every chapter; the formatting of these list headings is inconsistent, sometimes bold and/or italic, sometimes plain text. Lemov et al. provide In Review lists at the ends of chapters. Each author has a set of specialized terms for common classroom experiences. Lemov et al. provide a glossary; Johnson explains as he goes. Neither book has an index. For Johnson, therefore, the table of contents provides the guide for finding desired information; for Lemov et al. the review points at the end of each chapter, in conjunction with the table of contents, may work best. For the digital version of either book, the search or find function may be the quickest way to access information.

Johnson teaches college and works in educational technology; he addresses technology in his first eight chapters. Nevertheless, this information blends with and reinforces similar information in Richard and Costello’s discussion in Chapter 7 of Lemov et al. Both works provide links to accompanying websites, though not all are hyperlinks. In one case in Lemov et al. I was unable to find a video that is cited in text at least twice. At first, I attributed the failure to screen fatigue, but a fresh start produced no results either. As noted above, links in Johnson’s notes at the end of the book are not hyperlinks. Some readers may find these links less easy to use, and for them, perhaps reading the text first and later checking the links that appeal to them is a good option. A potential annoyance may also result from the digitizing of the text. In Lemov et al. most chapters have multiple authors, and the surname of the author preceding the *and* may be joined to the conjunction; for example, “Rob Richardand” (142).

Both books are readable and interesting, offering insights into aspects of online teaching that some may not have considered. Figuring out how to split a screen and show slides and students at the same time seems like a good idea. Suggestions on how to use chat, polls, and breakout rooms are especially valuable. Both books recommend practicing with these tools before using them in the classroom.

Whether online teaching will become the status quo of the future remains to be seen. Even if it is no longer needed fulltime, mastering the skills Johnson and Lemov and TLAC present in their books means having another adaptable tool in the classroom. Both books show that mastery of these skills is adaptation of best teaching practices to a new medium of transmission. These books are valuable resources whether one is currently teaching online or not. For teachers they may help refine some best teaching practices. At a minimum, they might help any user be more comfortable in a Zoom call or meeting.

Works Cited

- Aaron Johnson. LinkedIn Profile. 2021. [linkedin.com/in/aaronrobertjohnson](https://www.linkedin.com/in/aaronrobertjohnson). Accessed 5 Jan. 2021.
- Doug Lemov. LinkedIn Profile. 2021. [linkedin.com/in/douglemov](https://www.linkedin.com/in/douglemov). Accessed 5 Jan. 2021.
- Oster, Emily. “COVID-19, Learning Loss and Inequality,” *Parent Data*. 15 June 2020.
<https://emilyoster.substack.co/p/covid-19-learning-loss-and-inequality>.

Micronesian Educator #30

**The Malaise of Modernity, by Charles Taylor.
Toronto: House of Anansi Press, 1998; 135 pages; \$22.95, softcover.**

Reviewed by DAVID R. HARRINGTON

1. A Focused Look Back

If crises have identifiable antecedents, should we not identify them in order to prevent or ameliorate such disasters? After the financial crisis of 2008, the question of why it happened was asked repeatedly in the media, accompanied by the query of whether anyone had predicted it. Indeed, some had. (See Michael Lewis, *The Big Short: Inside the Doomsday Machine*, 2010.) Back in 1969, as a sophomore in university, I learned about the predicted consequences of burning the carbon stockpiled by nature for millions of years. Half a century later, in the midst of rising seas, increasing storms, and melting glaciers, the accuracy of those environmental scientist prophets has been confirmed. It is foolhardy to ignore accurate predictors of crises if we are to prevent the eternal return of the same old wretched business as usual.

My preoccupation for the last few years has been understanding how another crisis came about and what to do about the situation that threatens democracy. The recent American dalliance with authoritarianism - the election of President Donald Trump – was not anomalous. Currently, autocrats in numerous countries are using Hitlerian tactics to resist and overturn democratic rule. Francis Fukuyama's optimism is false prophesy (*The End of History and the Last Man*, 1992), since history does not seem to be defaulting to liberal democracies.

This review should be seen in the context of a search for *practical* ways to understand and counter a threat that in many ways connects with other grave threats. The use of the word "practical" reflects a personal bias, a belief that complex speculations may consume voluminous parchment and years of reading and digesting but are akin to playing violin while civilization burns. Unless translated into praxis, philosophical speculation remains at most a way to pass time, though perhaps with some confirmatory consolation.

It is not a mystery why the power-hungry attempt to seize control. No matter when or where people live, the avaricious will always be present. But why do citizens not only allow them to ascend to power, but continue to support them when their power-greed becomes obvious? Are there factors in modern (or postmodern) culture that encourage the rise of and continued support for such anti-democratic and autocratic rule? What has happened to bring about the increase in authoritarian followers? When I am not listening to novels while driving or performing chores, a blessed benefit of this age and a major solace in this time of Covid-19, my reading nearly completely revolves around these questions. I have looked to science fiction, classic fiction, sociology, history, political science, and psychology. Bountiful hypotheses exist, many supporting each other, from the family dynamics of citizens to the concerted efforts of glitzy news media. In my own field, psychology, the works of Bob Altemeyer, a Canadian psychologist, clearly document the rise of right-wing authoritarianism and social dominance over a number of decades. Most noteworthy in this context are his *Right-Wing Authoritarianism*, (1981); *Enemies of Freedom: Understanding Right-Wing Authoritarianism* (1988); and *The Authoritarians* (2006). John Dean, of Watergate fame, has frequently cited Altemeyer's work and recently co-wrote a volume with him well worth reading: *Authoritarian Nightmare: Trump and His Followers* (2020).

When I found that Charles Taylor had produced a book, *Reconstructing Democracy*, with two collaborators (Patricia Nanz and Madeleine B. Taylor, 2020), I pulled down from my shelf a copy of *The Malaise of Modernity*, a treatise I had skimmed many years ago. I was drawn back to the volume by its title, likely because of the unease, discomfort, and depression I have felt since 2016, my own malaise. Additionally, due to my commitment to modernity, I wanted to see if these Massey Lectures – three decades old – would expand my understanding of this alarming anti-democratic trend – or maybe (unlikely) even provide a curative. If, I reasoned, I get insight into the current situation from his earlier discussion, then I will move into his more recent thoughts.

2. Lost Horizons

Writing about American democracy nearly two centuries ago, Alexis de Tocqueville warned of the possibility of citizens becoming “enclosed in their own hearts,” resulting in abrogation of social responsibilities and diminishing involvement in politics. With Tocqueville as foundational, Charles Taylor presents three similar malaises of modernity.

The first that Taylor identifies has to do with our contemporary individualism, “a loss of meaning, the fading of moral horizons,” and is the subject of most of the book. The second affliction involves the ubiquity of instrumental reason, resulting in economics and efficiency controlling our lives, the over-elevation of technology in society, and the creation of a sense of fatalism. The third trouble derives from the other two: powerlessness and loss of political liberty.

Taylor acknowledges prominent critics of modernity (e.g., Daniel Bell, Christopher Lasch, and Allen Bloom) and gives them credit for their critique of modern individualism that shuts out other significant issues and people. But he strongly disagrees with their contempt for contemporary culture. Taylor’s goal is not to condemn modernity but to attempt to retrieve the ideals upon which maladaptations arise and suggest how we can move to practices that better align with them. A “powerful moral ideal” undergirds even “self-stultifying” relativism and “trivial and self-indulgent” forms of self-fulfillment, according to Taylor. Citing Lionel Trilling, he argues that being true to oneself, *authenticity*, is a foundational moral ideal, a calling toward “what we ought to desire.” The ethic of authenticity, articulated to some degree by Augustine, was reinforced by the thought of Descartes, Locke, and Rousseau. Rousseau referred to it as an inner call aligned with nature, supported by self-determining freedom. Actualizing individual and individualized potentials, enshrined in the social contract, is a substantive part of political foundations created during the Enlightenment.

One problem that stems from a society that accepts this ideal of authenticity involves a common “liberalism of neutrality,” where the conceptualization of the “good life” is left to each individual without significant discussion about what those choices mean. This dearth of discourse is amplified by the widespread opinion that morals are ungrounded, that they are merely subjective. Taylor summarizes one of the problems of persuasion in a neutral culture: “If the youth don’t care for causes that transcend the self, then what can you say to them?” This question is one akin to a more recent dilemma; what can you say to persuade neighbors to wear masks in a pandemic, to vaccinating their kids, or to perform meaningful research before voting? Argument in this time rarely involves attempting to uncover truths or to explore the meaning of any foundational ideal.

Since the text is a bit disjointed, it was helpful to find - mid-book - a concise summary of his major theme regarding authenticity. Authenticity involves creation, construction, discovery, originality, and frequent resistance to societal rules and morality. It requires receptivity to *horizons of significance* and a dialogal approach to self-definition. If parts of this process are suppressed or ignored, or if some parts are privileged over others, the process leads to the debased forms we see in contemporary culture. Resisting societal mores and rules, for example, while suppressing openness and dialogue, primes a process that results in solipsistic ratification of an ethic of non-reflective rebellion.

Horizons of significance surround us as we create manifestations of an ideal; they are the conditions of the possibility of their emergence. In life, as in art, our actions are surrounded by a context given by tradition, history, culture, nature, mythology, and religion. Meaning arises out of our interaction with these horizons. For example, along with this drive to separateness is a cultural affirmation of “the life of production and the family, of work, and love.” From this affirmation, Taylor derives the idea that identity requires *recognition* by others. And this recognition, combined with the emphasis on each person’s right to self-actualize, promotes the collapse of social hierarchies, the diminishing of the hierarchical notion of “honor,” and the rise of the notion of “dignity.” Recognition by significant others is accepted as essential in child-rearing, the discourse of democratic citizenry emphasizes equality, and love

Micronesian Educator #30

relationships have become understood as “the crucibles of inwardly generated identity.” Recognition, and the realization of its historical lack, founds feminism, multiculturalism, and race relations. The horizon of significance that surrounds authenticity does not support withdrawal into a separate ego, but leads into dialogue, dialogue with other people and with history and culture. Self-choice does not stand alone.

The ideal of authenticity became represented by debased forms such as narcissistic hedonism because of the diminution of horizons of significance, horizons that would resist the production of trivial practices. Any drive to individuation is accompanied by a temptation of selfishness, of solipsism, but the shrinking of the horizon of significance magnifies this temptation. The shrinking, in turn, was due to the mobility and urbanization that accompanied modernity, the breaking of traditional social ties, and the increasing depersonalization that attended living in very populated cities. Technology and bureaucracy that relate to people in instrumental ways also had its part in its reduction.

Taylor’s project, therefore, is to not only talk about what is avoided, but to also point to ways that this dialogical process can widen: “What we need is a work of retrieval, through which this ideal [authenticity] can help restore our practice.” Taylor points out three ideas that must be accepted in order for this to happen. *We must accept that authenticity is a worthwhile and sound ideal, we must be able to argue about ideals and practices that best align with those ideals, and we must accept that these arguments can make a difference.*

Returning briefly to his second malaise, instrumental reason, whose supreme manifestation would be a “pure, self-verifying rationality,” Taylor offers an example of the kinds of extremes that we saw in the debate about individualism. On the one hand, we have critics who see technological society - grounded in instrumental reason and the view of the earth as a source of material resources - as “an unmitigated decline” due to our loss of connection to the planet, the heritage of indigenous peoples, and “our own natural being.” On the other hand, we have technological advocates who see those who hold such views as irrational zealots; these proponents of technology and its accompanying reason tend to be allied with the right wing and hold *laissez faire* economic positions.

intervening and providing for victims of famine and natural disaster. (Of course, Taylor did not know that a future president would castigate the residents of Puerto Rico, American citizens, after a devastating Taylor disagrees with both and wishes to retrieve the ideal that gives rise to means-end thinking. He acknowledges that doing so in such a way that matters is a difficult task; this form of reasoning is ubiquitous and dominates both our economy and governmental affairs (we are in Max Weber’s “iron cage”). But instrumentalism arises, according to Taylor, in the moral ideal of “self-responsible, self-controlling” reason. Additionally, he looks to the empiricist Francis Bacon, whose methods strongly influenced the development of the scientific method. Bacon criticized earlier approaches to science as not contributing to humanity’s issues and conditions. We are “heirs of Bacon” due to the instrumental ways that we approach hurricane, and label them poor and dirty, using means-end reasoning in a quite different – anti-Kantian way.)

Taylor argues that it may be possible to make a difference in the ways we are confined to this approach, despite overwhelming forces. “[O]nce a climate of common understanding comes to be created around the threat to the environment, the situation changes.” Presumably the threat becomes the enemy that unites both sides of the technology issue. One would then infer that the reason that global warming/climate change remains contentious is due to lack of common understanding. Of course, this lack of understanding has quite likely been encouraged by a concerted corporate campaign to promote doubt about scientific consensus.

3. Harbingers

Towards the end of the work, Taylor returns to the political situation, the third of his malaises and the primary reason I picked up the book, a situation where modernity weakens the desire and ability to remain in democratic control and where people accept despotism. It is in this discussion that correlations arise between Taylor’s ideas and that of the time I write this review. Taylor reinterprets Tocqueville’s fear of “soft despotism” as the danger of

fragmentation. There are numerous single-issue groups in society, and the forces of atomism foster an inability for people to join in communal undertakings and loyalties:

A sense grows that the electorate as a whole is defenseless against the leviathan state; a well-organized and integrated partial grouping may, indeed, be able to make a dent, but the idea that the majority of the people might frame and carry through a common project comes to seem utopian and naive. So people give up. Already failing sympathy with others is further weakened by the lack of a common experience of action, and a sense of hopelessness makes it seem a waste of time to try. But that, of course, *makes* it hopeless, and a vicious circle is joined.

What Taylor does not address is the consolidation of many of the fragmented arts of society, something that typifies the recent populist approach in the U.S. Out of the discussion of myriad ideas, fantasies, mergings of truth and falsehoods, and pure fictions that are presented on right wing television and posted on social media and the internet, groups of people have conglomerated in politically significant ways. The most recent congressional election has resulted in the seating of representatives and senators who claim widespread voter fraud – contradicting even election officials of their own party and state and federal courts, *including the conservatively-biased Supreme Court*. A believer in QAnon (a bizarre fabrication involving widespread governmental pedophilia and the harvesting of brain hormones from captive youths) has been elected to Congress. The notion of people as atomistic fragments indeed characterizes the current era, but the non-rational, non-dialogical, and nonintellectual forces that glue these fragments together need to be explored. It is not just Taylor who understands that horizons of significance matter; well-funded media attempt to *create* horizons, complete with worldviews, crafted mythologies, and injected disinformation.

Another thing that deters citizens from becoming involved in the formation of “democratic majorities around meaningful programs” is the increasing role of judicial review. Where other nations decide such issues in their representative bodies, the Supreme Court can do so without legislation. Taylor believes that the movement of substantial political power into the judiciary removes the motivation of citizens to collaborate in meaningful, holistic, action. The ruling in *Roe v. Wade* legalizing elective abortion in 1973 resulted in substantial efforts to reverse the judgment through the assessment of prospective judges on their personal beliefs about abortion and other specific issues, with conservatives attempting to “stack” the court. The result has been an astonishing intellectual effort, channeled into politics-as-judicial-review, that has made law schools the dynamic centers of social and political thought on American campuses; and also a series of titanic battles over what used to be the relatively routine – or a least non-partisan – matter of senatorial confirmation of presidential appointments to the Supreme Court.

Since the writing of the book, these efforts have resulted in a conservative majority on the Court who have deemed as unconstitutional legislation reining in campaign funding, reinterpreted the meaning of the second amendment, and invalidated specific portions of the Voting Rights Act of 1965. The conservative majority in the Senate refused to debate the confirmation of a presidential nominee for court justice until a new president was inaugurated, waived rules requiring substantial debate in the confirmation of another nominee, and appointed justices deemed unqualified by the American Bar Association. Regarding this issue, Taylor was spot on.

Taylor also noted (in 1991!) that candidate debates have become “ever more disjointed,” “ever more blatantly self-serving,” composed of “soundbites,” promises that will be broken, and “attacks on ... opponents” that “sink to ever more dishonorable levels, seemingly with impunity.” We have certainly witnessed the expansion of these rhetorical inanities, for instance – both before and after the presidential election of 2016 - at Trump rallies where the chant “Lock her up!” was used against his opponent.

4. Present Context

In a somewhat optimistic reference, Taylor states his belief that a couple of American shared values remain strong: “The rule of law and the upholding of rights.” He uses the example of Watergate and the resultant resignation of Richard Nixon to support this optimism. Of course, this book was written before the PATRIOT Act, presidentially-directed extrajudicial killings, extraordinary rendition, the revelations of governmental intrusion into electronic

Micronesian Educator #30

privacy, and the relentless attempts to hold onto power by Donald Trump and his loyal followers inside and outside of Congress and the millions of citizens who support him still.

A consensus seems to be growing regarding the reasons for this coup attempt, and although a number of right-wing entities have falsely blamed left-wingers and the “deep state,” there is a concerted effort by many previous Trump supporters to distance themselves from him and his authoritarianism. The number of senators expected to challenge voting results shrunk to two, although scores of members of the House of Representatives persisted in their challenge, even after the invasion.

Taylor states near the end of his lectures that the “politics of resistance is the politics of democratic will-formation.” His musings of thirty years ago hit close to the mark, although some significant areas remained unexplored. I look forward to his latest work on reconstructing democracy. I do have hope, faltering as it is, that maybe we can approach a remedy for our malaises.

Micronesian Educator #30

**Unsustainable Empire: Alternative Histories of Hawai'i, by Dean Itsuji Saranillio.
Durham, NC and London, UK: Duke University Press, 2018; 312 pp.; \$27.95, paperback.**

Reviewed by HEIDI SAN NICOLAS, University of Hawaii

~~

The succinct yet sharp title of the foreword gives readers of *Unsustainable Empire: Alternative Histories of Hawai'i* the immediate tone by which Dean Itsuji Saranillio approaches his narration of the American occupation of Kānaka 'Ōiwi homelands— "Statehood Sucks". If that did not register, then the author's detailing of the Hawaiian Independence Act Alliance's demonstration at the Fiftieth Anniversary of Statehood complimented by photos of shirts spelling out "FAKE STATE" and banners that exclaim "HAWAIIAN INDEPENDENCE", which is also depicted on the cover, would have you leaning into the introduction with an idea of the political discourse that is to come.

This text offers a counter hegemonic history to the establishment of the Hawaiian state by articulating that the United States empire was not an almighty and all powerful entity at the inception of overseas expansion but was "rather a result of a weakening U.S. Nation whose mode of production— capitalism — was increasingly unsustainable without enacting a more aggressive policy of imperialism" (p. 9). In this regard, Saranillio claims that the project of American territorialization "failed forward" and sought to incorporate Hawai'i in direct response to economic and political crises.

The first two chapters present the challenges of achieving statehood, particularly addressing how white supremacist racialization of Kānaka 'Ōiwi as primitive and Asian settlers as "ever looming threats to the safety of the United States" (p. 91) made Hawaiian annexation an unappealing endeavor in the eyes of American leaders overseas. Saranillio displays the theatrics of white settlers invested in propelling the idea of a Hawaiian state forward through the lens of journalistic outlets, namely the *Honolulu Advertiser*. Additionally, the author conveys the extensive lengths by which corporate actors like "the Big Five elite" and the "imperial university" of the University of Hawai'i, along with figures such as eugenicist Stanley Porteus and sociologist Romanzo Adams, looked to race as a way to legitimize Native Hawaiian dispossession and Asian settler exclusion.

Racial ideologies kept statehood off the table for a brief time, but the third and fourth chapter show how these same disqualifications were now being utilized as a means to justify Hawai'i's incorporation. Through largely white corporate propaganda, statehood was presented as an opportunity for the United States to display its benevolence and inclusivity as a racial melting pot. Employing Edward Said's theorization of a "future wish", Saranillio states that the American imperial gaze "required a notion of history where one progressed by looking forward to the future and turning one's back to the past" (p. 44). American imperialism, under the guise of liberal multiculturalism, propelled the "alleged annexation of Hawai'i in 1898" (p. 201). The most profound parts of these sections are the moments when Saranillio argues against the misconception that statehood was largely uncontested by detailing the rich and often untold stories of Indigenous activists such as Kamokila and Samuel Amalu as well as haole, non-Native Hawaiian allies like Kathleen Dickinson Mellon.

The elaborate way in which Saranillio is able to weave together an abundance of stories of various actors, both for and in opposition to statehood, in relation to major events such as the Colombian Exposition, the 1937 Congressional Hearings, and the Cold War as particular sites of analyses shows the reader just how evasive, haunting, and intimate settler colonialism is. Further, this intricate web of connections is a testament to the author's knowledge and ability to present the complexities of these histories while also keeping the subject matter thoroughly engaging as one moves onto the final and concluding chapter.

The fifth and most significant chapter looks at the Kepaniwai Heritage Gardens in Mau'i as a testament to multiculturalism and exploitation of the settler state, but more importantly it lends tales of Kānaka 'Ōiwi grounded normativity and resurgence that offer new Hawaiian futures beyond imperialism. The author produces an engagement of Kepaniwai beyond a mosaic of multiculturalism by illustrating both traditional and contemporary

Micronesian Educator #30

Kānaka ʻŌiwi practices of engaging with the land and water of ʻĪao Valley, an ancestral and sacred place where the heritage park unnaturally sits. Within the valley is Wailuku River, one of four waterways that comprise Nā Wai ʻEhā, or “the four great waters”. In courtrooms and daily life, sugar companies dared to privatize and obstruct Indigenous access to Nā Wai ʻEhā, seen as “the original sin of water expropriation and competing claims for water tied to opposing modes of life continue to haunt” (p. 191). Saranillio ends by discussing how the Native Hawaiian return to ancestral epistemologies, like Hōkūao Pellegrino and his family’s loʻi kalo (taro farm), not only opens new possibilities for Hawaiʻi beyond settler colonialism but also creates pathways for a more sustainable and healthy world.

Though foregrounded within Hawaiʻi, Saranillio writes that statehood discourse fails to recognize American overseas territories to include Guåhan, the Northern Mariåna Islands, American Samoa, Puerto Rico, and the U.S. Virgin Islands. This text would be an invaluable resource in establishing a framework that, in keeping with its name, provides alternative histories to United States imperialism as well as inspires new and creative Indigenous futures. As a final call to action for marginalized and Indigenous communities, especially those within Oceania, who have been historically written (and rewritten) as savage, uncivilized, and unintelligible within colonial hegemony, I refer the author’s aim of this book, which hopes to “expand our political imagination of this moment by proliferating divergent stories and unexpected individuals who were largely dismissed as deviant: historical revisionists, unruly women, subversives, communists, con men, gays, and criminals” (p. 8).

Micronesian Educator #30

**Crouch, Stanley. *Don't the Moon Look Lonesome: A Novel in Blues and Swing*.
New York: Vintage Books, 2000; 546 pp; \$26.95.**

Reviewed by JAMES SEYMOUR, University of Maine-Augusta

~~

The death this past September (2020) of culture critic, biographer, and literary iconoclast Stanley Crouch occurred without much notice, yet I could not help feeling a terrible loss. Familiar to most were his contributions to jazz commentary and participation with best friend Wynton Marsalis in founding the Jazz at Lincoln Center program. As a *New Yorker* I was familiar with his frequent articles in *The Daily News* and *Village Voice*, in addition to his appearance in several Ken Burns' documentaries. I even had the occasion to meet him once at a writers' event; his terse dismissal of my comment about his appearance on CBS Sunday Morning seemed to confirm what others found to be a somewhat overbearing persona with, according to *The New Yorker's* Robert Boynton "a virtually insatiable appetite for controversy." I did not care. His unwavering defense of the finer values of traditional jazz, his praise of Ralph Ellison, and his carefully delineated dissection of democracy's impenetrable link to jazz history, especially the Blues, always struck me as remarkably illuminating.

A vintage publication date does not always bestow distinction; nor, need it be said, does death. After Crouch's passing, however, I seized an opportunity to read his only novel, *Don't the Moon Look Lonesome*, and concluded that the world has lost not simply a valuable social critic, but a world-class novelist of the first order. How could the output of this brilliant intellectual – winner of the 1991 MacArthur "genius" grant – have been limited to one work of fiction? Under no illusion that any contribution here can answer such a question, I believe an investigation of his abilities as a storyteller and surveyor of America's racial paradoxes certainly deserve attention.

The novel chronicles the lives of two jazz musicians – different as day and night, man and woman, black and white – who find themselves entangled in the relationship of their lives, a romantic attachment that both understand reflects their best chances at "true love." Carla came via Chicago Blues clubs from the plains of South Dakota to test her vocal talents in New York, while Maxwell has already established his national reputation as a Houston-born tenor sax player in mid-career. Neither has reached their now comfortable positions as working artists in the toughest town in the world without suffering significant loss and disappointment. Maxwell's sister has sunken into a state of physical and financial deprivation. Carla lost her kid brother at an early age and her sister, confounding familial expectations, now raves about her newfound marriage to a white supremacist behind impenetrable gates in suburban Buffalo. These are only some of the circumstances that have convinced them both, especially Carla, that any differences in the racial assumptions of those responsible for their different upbringings can be tempered by the artistic bond engendered by their mutual understanding of certain musical truths. Tempo, harmony, compositional verity, and improvisation are all as fundamental to them as language or touch.

Are these burning artistic urges enough to transcend the dangers of interracial comingling, especially when our two protagonists remain so steadfastly headstrong, if not downright egotistical? No spoiler here; it is enough to say that the reader will embrace their individual journeys, as well as the outcome of what promises to be such a genuine union of man and woman. It also seems inevitable that many will find it fascinating that the author, a *black man* who has devoted his life to exploring the Black Experience in America, so completely embodies the character of a *white woman*. Though he often diverges into extended details of his secondary characters, including Maxwell, Crouch makes it explicitly clear that Carla remains his primary subject. Note the colorful ways in which he captures her onstage life, his language so precisely – yet freely – denoting the magical qualities of live musical performance.

When it worked, the emotion, combined with musical logic, pulled the audience members into the hotter and more reflective aspects of their own lives. The responses of those listeners – verbally, visually, and through the mood they created when sufficiently moved – liberated Carla to look inside herself for more life to which she could give order and narrative on the jet wing of the

Micronesian Educator #30

moment. (p. 18, Kindle file)

Crouch's ability to transcend the obvious dissimilarities of author and character illuminates a more metaphoric thesis he explores, especially during the novel's second half: to what degree are each of us – regardless of heritage, political leaning, or skin color – nothing more or less than a mask? To what degree do we feel we need to present ourselves as something other than what we think we are? Especially if one is Negro American (a term the author prefers over African American), how can such a conclusion deepen that person's sense of alienation and discontent? This reader found his world of disenchanting Village bohemia, its darkened jazz clubs and, especially, its richly decorated living rooms of successful Black artists, the perfect backdrop for these and other philosophical inquiries.

Just as Crouch defined in his essays the virtues of pure jazz (as opposed to the growing hunger for Jazz Fusion in the 80s), he also celebrated his own "radical" ideas, his "reasoning across the categories of false division and beyond the decoy of race." While these intellectual musings in *The All-American Skin Game; or, The Decoy of Race* contributed to the greater part of his reputation as a writer, much to the consternation of other Black social critics like Spike Lee, Amira Baraka, and Henry Louis Gates, Jr., perhaps his most perceptive illustration of these ideas can be found in his one work of fiction. Consider how much more we could have benefited from his acutely sharp imagination – so expertly manifested in writing that likens itself to the improvisational qualities of the music he loved – had he been encouraged to explore his love of fiction so apparent in this novel.

Scottish writer James Campbell in his review for *The New York Times Review of Books* found Crouch suffering "an overall insensitivity to language," going so far as to suggest that "the use of taboo words – nigger crops up frequently, usually in conversation between blacks, but often as a provocation – becomes tiresome." Such tone deafness reflects a foreigner's understanding of the use of this expletive and its embrace by the Negro American community. And when this same expatriate critic complains that Carla's friend Leeann "speaks in a continuous scatological flow, and mistakes exhibitionism for candor," he betrays a certain European traditionalism, thereby missing the entire point of the character's impetus. Perhaps, Mr. Campbell should be forgiven, since the very core of this novel – and the music celebrated between its covers – is indelibly American, representing a treatise on the unshakable ties between democracy and the Blues. And any attempt – such as the one from Campbell – to discredit the novel's lack of perpetual dramatic action demonstrates a clear inability to appreciate extraordinary philosophical fiction writing.

This novel, so unlike many other attempts to capture the world of jazz, aims for something grander than the usual tragedies of drug abuse and racial marginalization. In an interview with *Jerry Jazz Magazine*, Crouch observed of his characters: "I wanted them to have big minds and imaginations and broad sensibilities, just like many of the people you meet in the New York jazz world." In the same interview, Crouch says he is attempting to capture the "epic quality of American life, understanding the arrival of intelligence in almost everyone is something you have to shoot for." While the *Austin Chronicle's* Tim Walker found "Crouch's verbal riffs sometimes get ahead of his ideas," he admits "the prose is often spot-on," especially "his characters' dialogue, which can flow out so truly that disbelief may be suspended." Such minor reservations should not eclipse the clarity Crouch brings to such a misunderstood milieu. America needs to embrace his kind of writing and the bravery he displayed in contradicting our understanding of certain racial norms.

Given the landscape of pain and discouragement one encounters in this stunning and bold addition to truly authentic American fiction, its impact – especially considering the litany of racial scars the country has endured since its writing – remains refreshingly hopeful and can best be appreciated in the words of the author:

The fact that we live and we *want* to live gives life all the meaning it will ever need, even if God, in all His so inarguably tender and torrential mercy, didn't exist. That, from [Carla's] perspective, put a gag on all the whining about meaningless-ness. (p. 541 Kindle file)

Micronesian Educator #30

Works Cited

Boynton, Robert S. "The Professor of Connection: A Profile of Stanley Crouch." *The New Yorker*, 6 November 6, 1995, pp. 97–116.

Campbell, James. "All That Jive." Review of *Don't the Moon Look Lonesome: A Novel in Blues and Swing*, by Stanley Crouch. *The New York Times Book Review*, 30 April 2000, p. 14.

Crouch, Stanley. *The All-American Skin Game; or, The Decoy of Race*. Pantheon Books, 1995.

Crouch, Stanley. "Interview with Stanley Crouch." *Jerry Jazz Musician*, 22 January 2014.

<https://jerryjazzmusician.com/2014/01/interview-stanley-crouch-author-kansas-city-lightning-life-times-charlie-parker>

Walker, Tim. Review of *Don't the Moon Look Lonesome*, by Stanley Crouch. *The Austin Chronicle*, 9 June 2000, <https://www.austinchronicle.com/books/2000-06-09/77506>

Micronesian Educator #30

Gardner, Howard. *A Synthesizing Mind*. MIT Press, 2020. \$29.95, hardbound.

Reviewed by C. S. SCHREINER, University of Guam

One of the rhetorical conventions of book reviewing is to succinctly introduce some authorial facts and achievements before turning to the book in hand. But *this* book in hand, *A Synthesizing Mind*, is nothing less and little more than a self-congratulatory compilation of Howard Gardner's (auto)biographical facts and professional achievements, with Gardner himself serving as the exemplar of a synthesizing mind. In other words, the title of this new book refers primarily to Howard Gardner's own mind, which he categorizes as "*synthesizing*" within his framework of "five minds for the future," as follows: the *disciplined* mind, the *synthesizing* mind, the *creating* mind, the *respectful* mind, and the *ethical* mind. These cognitive styles are not identical to his famous multiple intelligences, but supplement and update them in terms of vocational manifolds. Gardner has persuasively argued that his five minds for the future can most effectively meet challenges in the 21st-century and beyond, hence are provocative for future teachers and leaders to ponder and integrate within their respective educational milieus and career ambitions.

Has self-flattery become the new normal in academic discourse under Trumpism? If you highlight in fluorescent yellow the number of times that Gardner pats himself on the back and strolls down the red carpets of academia, you will have to don sunglasses or risk going blind. "In this particular major, I was a star..." (46); "I have published well over one hundred peer-reviewed articles..." (102); "My competitive advantage...I was curious; I could read rapidly and widely; I enjoyed synthesizing and resynthesizing. I could also write quickly and clearly; and I could address various audiences, including the intelligent general reader" (103); "I became a columnist for *Psychology Today*--which was, if I may be permitted a self-serving phrase, a far more serious publication in those days" (104); "I might have had a successful, even lucrative, life as a textbook writer" (104); "I was becoming a skilled summarizer and synthesizer of the works of other scholars" (105); and so on and so forth. These proud utterances only take us up to the mid-point of Gardner's new book. One transcribes them with mixed emotions knowing that Gardner merited every one of his distinctions yet enjoys fiddling while Rome burns.

Due to my interest in utopian curricular design, I was intrigued enough to teach Gardner's book, *Five Minds for the Future* (2005), in a graduate seminar in critical theory, also because most of my students either already are or intend to become teachers, the latter comprising the primary audience of Gardner's research. While Gardner's theory of five minds was found more accessible than other critical theories studied in my seminar and aroused lively discussion, current teachers said they were too stifled by curricular mandates and testing priorities to integrate Gardner's futural modes of thinking with student learning objectives in a coherent and sustainable format. They suggested it would be more practical to start from scratch and design a new curriculum aligned with Gardner's five minds than retrofit the extant curriculum, which sadly allows no time for innovation. I urged the students to initiate an experimental curricular revolution (*Gedankenexperiment*) in the form of provisional research projects and prototypes that would envision a school based on the theory of five minds for the future...but no one did so. One student said that the "action research" model she was encouraged to adopt by her education professors did not seem compatible with *Gedankenexperiment*. If graduate students are not envisioning curricular invention, or innovation, or at least reform, then who is?

In *Micronesian Educator*, an academic journal sponsored by a school of education, one would think it superfluous to introduce a renowned scholar like Howard Gardner, who is the John H. and Elisabeth A. Hobbs Research Professor of Cognition and Education at the Harvard Graduate School of Education. He has been associated with Harvard in various capacities since his student days. However, I have not heard Gardner mentioned by any of the education majors in my literature classes, nor seen citations of his scholarship in their essays where it might be pertinent. The diligent education majors who take my courses comprise a small sample, so I will refrain from jumping to conclusions. Nevertheless, it is difficult not to infer that, since students these days generally confine their reading to what their teachers assign in class, Gardner is not being taught by the faculty in the School of Education, at least not recently. This leads me to conjecture why Gardner is not currently popular among educators at UOG and perhaps elsewhere. While it is true that his landmark study of multiple intelligence(s) is old news, Gardner's research has remained

timely, as evidenced in his book *The App Generation*, which is a study of identity problems and psychosocial developments in the generation of app users known as digital natives. My review of that book in this journal found few noteworthy discoveries except that of *role diffusion* among frequent users of digital platforms and social media apps. According to Gardner's research, the collective pressures of social media disindividuate users in ways that instill a herd mentality, making it more difficult for app users to distinguish their own desires and priorities at an age when decision making is crucial for identity formation.

Gardner's discovery was compelling but hardly unique; other scholars, of an unapologetically philosophical bent, describe a similar problem of role diffusion, although some of them do so by harnessing theoretical perspectives that *critique* a more encompassing epistemological milieu that implicates media conglomerates seeking to monetize available brain time in the youth of tomorrow. Theorists like Bernard Stiegler not only conduct holistic or ecological analyses of digital penetration of the lifeworld, where disinformation incites mobs to swarm in violent paroxysms of rage, and where attentional formats such as Google Classrooms ensure that learning itself becomes a *branded desire*, but also peer into the mnemonic depths of tertiary retention and protention, where multimedia imagery and sound supplant distinctly individual memories and expectations with collective memories and expectations funneled by algorithms into mass purchasing patterns, such as those which incited global sales of the *Harry Potter* book series and *Fortnite* video game.

There, in that word "critique," lies the crux of the difference between Gardner's research findings and those of the philosophical theorists. The theorists, uninhibited by an explicit data set and research design, conduct a sustained and sweeping critique of the attentional ecosphere under the domination of digitized industrial forces that invade homes, schools, and workplaces. Gardner, who is one of the most prestigious spokespersons for education, avoids sustained critique, ever so urgent today, as he reports his research findings at Harvard. Although one hesitates to characterize attenuated critique as *complicity* with the status quo, it does merit a guarded use of the less political word, *complacency*. In any case, neither the widespread macro nor micro consequences of digital app usage seem to compel or engage Gardner's critical faculties. The self-definition of a research scientist, the methodological rigor and scope of project design, serve as protective armor against any such characterizations.

It was my impression that in his *App Generation* Gardner's interpretation of the impact of digital technologies on today's youth was almost congenial, sort of avuncular, with no trace of the disquieting alarm, the catastrophism already evident in an earlier study of the digital revolution, Bernard Stiegler's *Taking Care of Youth and the Generations*, which is not cited in Gardner's index. Perhaps it is misguided to expect Gardner's report of research findings to be a nuanced interpretation, much less a critique; but even diehard empiricists understand that raw data does not speak for itself and must be explicated in a horizon of pertinent intelligibility. Stiegler signals the urgency of the matter at stake by repeatedly insisting in his *Taking Care of Youth and the Generations* that teachers are fighting a *battle for intelligence* against forces of algorithmic captivation in the digital era (35). Citing numerous examples, Stiegler and others argue that the attention capture technologies of web-based platforms and streaming media colonize memory and cognition, which are vulnerable to implantation by and synchronization with commercial algorithms. Further alteration of consciousness is caused by the universal habit of scanning and browsing, or "continuous partial attention" which lowers the threshold of patience needed for deep reading and sustained attention (Wolf 146). Many young people become compulsively absorbed in contemporary modes of popular culture, such as video games and social media, whose mnemonic deposits gradually obviate historical awareness and situate digital consumers at an incommunicable disjunction with former generations that causes a loss of tribal knowledge, respect, and wisdom integral to the sustainability of spiritual community. At this point, following the insurrection of January 6, 2021, it seems unconscionable for educational researchers to "look the other way."

As I just suggested, a simple explanation for the disparity between Gardner's and Stiegler's responses to commercialized digital hegemony is that the former, an educational psychologist, sticks close to his research study, based on surveys and interviews, of the attitudes and practices associated with the App Generation; whereas

Micronesian Educator #30

Stiegler, a philosopher, gives himself license to conduct a broad speculatively *critical* inquiry which draws on scholars and writers from myriad disciplinary backgrounds. The difference comes down to *tone* and *scope*. Gardner's tone is calm and urbane, while the scope of his research on apps is concretely defined by his research design and level of funding. Stiegler's tone is at once somber and precarious; the scope of Stiegler's inquiry, which in theory seems metaphysically uninhibited, is in practice rigorously limited to the "objects" being critiqued, such as memory, with its tertiary retentional and protentional structures, and widespread demonstrations of cognitive and emotional immaturity associated with digital proletarianization. Perhaps the most salient contrast between Gardner and Stiegler is that the former assumes intelligence and knowledge to be culturally esteemed objects of desire, cherished by young and old alike, while the latter claims he is fighting for their survival, with the desire of youth either dissipated into *anomie* and nihilism, or rerouted by commercial algorithms to fixate on video games and social media. Listen to what Gardner says about intelligence in the following passage from *A Synthesizing Mind*:

Ever since Alfred Binet (1857-1911), a great French psychologist, the use of the word "intelligence" and the instrument called "intelligence quotient test" or the "IQ test" has taken on a special, even sacred meaning in much of the Western world. *We want to be intelligent ourselves: we want to know and befriend people who are intelligent; and above all, we want our children to be intelligent.* (123) [emphasis added]

To most readers this probably sounds like a perfectly copacetic observation about the universal desirability and allure of intelligence. Gardner's statement testifies to the high value placed on intelligence by the people in his lifeworld. The deceptive inclusiveness of that collective pronoun, "we," should not escape questioning, for it becomes inaccurate if universalized. Even if "we" is meant to signify his readers, it remains arguable that all of them value intelligence over, say, playing video games or bingeing films on Netflix. "We" surely pertains to Gardner's family members, colleagues, friends, and students in Cambridge. It pertains to his socioeconomic class and cultural milieu at Harvard, in Cambridge, Mass. But it needs to be underscored that not everyone *desires* to be intelligent or *values* intelligence. Such desire and valuation are culturally inculcated. This is an understandable but conspicuous oversight by a distinguished professor cozily insulated from students with different desires and values than the ones who takes his courses at Harvard.

If we undercut the universality of Gardner's claim about the desirability of intelligence, a vista opens in which teachers in the public schools beyond Cambridge find themselves burdened with a formidable task on the first day of classes-- how to convince students that it is "cool" to be smart, that intelligence brings success, social prestige, and spiritual fulfilment. Never mind the personal challenge to be an *exemplar of wisdom and knowledge*; are new teachers objectively prepared by their schooling to instill the *value of knowledge*, to teach the *value of literacy* as *attentional discipline* and a *mode of empowerment*; or has their training in formal pedagogical methods presupposed what Gardner presupposes, that students already desire to be intelligent and knowledgeable? Any such presupposition emits fantasies which obfuscate the reality of conditions in the classroom today--at least beyond Cambridge—and represent a fatuous denial of the widespread devaluation of knowledge and expertise.

Why do I hear no mention of Howard Gardner's research among education majors and faculty? After all, Gardner has been an academic celebrity since his pathbreaking publication of *Frames of Mind* in 1983. This was the book in which he introduced the theory of multiple intelligences, commonly referred to as MI theory. It could be that, now that "diversity" has justifiably become a catchword and mandate in most academic settings, the idea that intelligence manifests itself in a capacious spectrum of modes outside the verbal and mathematical aptitudes assessed by standardized testing (psychometrics) is no longer as earthshaking as it was when Gardner's *Frames of Mind* was published. Diversity—whether demographic, racial, or cognitive—is now an academic norm, or mandate, *at least in policy if not in practice*, and no longer an innovation. Another reason Gardner is arguably irrelevant to today's education students is that his sparkling career successes and acclaim, and the coziness of his permanent affiliation with Harvard as a student, researcher associate, tenured professor, and distinguished research professor, mark him as *out of touch* with the habits and attitudes of lower and middle-class students beyond the Ivy League. How else to interpret his assumption that intelligence is universally desired?

Micronesian Educator #30

The John H. and Elisabeth A. Hobbs Research Professor of Cognition and Education at the Harvard Graduate School of Education. Generally, positions with long titles have historical precursors, a noble legacy of luminous names associated with the position. In this case, however, given Gardner's research achievements, it sounds like the distinguished position was created specifically with Gardner in mind. A quick scan of the web site for Harvard's Graduate School of Education (HGSE) shows that Gardner is indeed the first professor to hold that position, which was named after a beneficent married couple that over the years contributed "cumulative gifts in excess of \$5 million" to the School of Education.

As was said earlier, *Frames of Mind* was the book that introduced "MI theory" and made Gardner famous. Even before *Frames of Mind* was published, he won the Genius Award by the MacArthur Foundation, then valued at \$196,000 dispensed over five years. (Today the award is \$625,000.) When he received this prestigious windfall in 1981, Gardner was not yet a full-time faculty member at Harvard; he did not have any professorial rank. For ten years he had previously administered Project Zero at Harvard, which kept him busy obtaining funding for himself and other researchers. Project Zero was the brainchild of Nelson Goodman, who became one of Gardner's illustrious mentors when he moved from Brandeis to Harvard in 1967. As transcribed in *A Synthesizing Mind*, Gardner's anecdote regarding their first encounter, on the Brandeis campus, is curiously revelatory of his uncritical, conciliatory disposition seeking institutional approval:

I got off on the wrong foot. In response to a question about my familiarity with philosophy, I mentioned that I had been reading the work of Maurice Merleau-Ponty, a French phenomenologist. Goodman frowned noticeably. But then, when I added that I had also been reading the work of Susanne Langer, a philosopher of the arts (who had been the college teacher of my wife, Judy), Professor Goodman visibly relaxed and said, "Well, that's another story." That brief conversation changed my life—one of those positive transformational experiences. (71)

Gardner's life was transformed because Goodman hired him to join Project Zero, after which his career took off like greased lightning. But for a budding scholar who eventually champions multiple cognitive styles over a reductive conception of intelligence, Gardner's demonstration of tacit compliance with Goodman's aversion to continental philosophy, represented by Merleau-Ponty, in favor of analytic thought, represented by Langer, suggests a young mind anxious to fit the ideologically reified Ivy League mindset. By "compliance" I mean that Gardner makes no effort to disagree with Goodman by defending his reading in phenomenology. He stays "positive." To be sure, philosophers disagree; antithesis, since Socrates, has been the engine of the dialectic. So maybe all that I am saying here is that researchers like Gardner are fundamentally unphilosophical, i.e., uncritical. Their positivity—"Give us a smile and say *cheese!*"—manifests the blindfolded confidence of scientism and its perception of reality as Big Data. In his last book, *The Creative Mind*, Henri Bergson laments the minority status accorded intuition in the model of scientific knowledge inherited from Kant, when Kant's own phenomenological description showed the syntheses of creative intuition and sensory input to be co-constitutive of intellectual understanding. Hence Gardner's synthesizing mind selectively delimits its own reach. "The human mind," Bergson writes, "is thus relegated to a corner, like a schoolboy in disgrace: it cannot turn its head around to see reality as it is (65). I wonder if this scientific way of conceiving reality accounts for Gardner's uncritical positivity in *The App Generation*, compared to the irreducibly heartbreaking and apocalyptic observations of digitally spellbound youth culture by a phenomenologist like Stiegler. This positivity cannot be solely attributed to Gardner's subconscious identification with the privileged backgrounds of some of the digital natives he surveys. By turning his back on Merleau-Ponty's phenomenology, did Gardner diminish the observational possibilities and intuitive depths of his own synthesizing intelligence, which subsequently became comfortably reified within the cocoon of research methodology?

As it turned out, Merleau-Ponty became a world-renowned thinker whose writings continue to inspire hundreds of conferences, books, and scholarly societies. Langer scholarship languishes in oblivion, a diminished thing. It is well known among philosophers that for decades after the demise of Bradley (the neo-Hegelian) and Whitehead (the metaphysician), the Harvard philosophy department was conspicuously underrepresented by professors of

Micronesian Educator #30

continental philosophy. (Stanley Cavell's fame at Harvard was to so small extent attributable to his unorthodox dialogue with Heidegger's work to make sense of Thoreau's *Walden*.) Would Gardner have been hired for Project Zero if, in his Brandeis interview, he contested Goodman's distaste for Merleau-Ponty? Gardner's entire career at Harvard—spanning almost five decades—ensued from his uncritical response to Goodman's dismissive frown.

Some readers of this review might scoff at my angle of scrutiny. But my reading of the Nelson Goodman anecdote told by Gardner is continuous with and supports my earlier claim that Gardner's writings lack the sobering sting of critique that distinguishes the work of Bernard Stiegler, whose own background, which included five years in prison for felonious bank robbery, was decidedly lacking in Ivy Tower amenities while he pursued doctoral studies and practiced phenomenological intuition from within his prison cell. There is also the matter of what I called Gardner's positivity, which I earlier attributed to empirical scientism. The philosopher Byung-Chul Han criticizes digital natives for habitually uncritical positivity resulting from the "like" culture of Facebook (22). But this digital habitus of youthful positivity has arguably had only a minor influence on Gardner. I would wager that Bernard Stiegler's analysis of widespread if not viral "denial" in the face of global ecocide in the Anthropocene is more pertinent to fathoming Gardner's uncritical or gregarious (avuncular) diagnosis of the App Generation, which includes his grandchildren on Facebook. Stiegler argues that such denial is symptomatic of worldwide madness under digital hegemony and computational capitalism. For example, many users of Facebook simply ignore the fact that Mark Zuckerberg and his programmers foment bloody revolutions in foreign countries, insurrections in the U.S. and elsewhere, and make billions of dollars through stirring up violent emotions in its users.

When Gardner initially conceived his MI theory, he used the phrase "multiple competences," and sometimes "multiple capacities" to describe his beautiful idea. He conceptualized the seven modes of intelligence as follows: Linguistic; Logical-mathematical; Musical; Spatial; Bodily kinesthetic; Interpersonal; Intrapersonal. It is arguable that if Howard Gardner's recent publications are in denial about anything, it is the collapse of such nuanced distinctions into the collective *abaïssment* of the masses on social media. The walls of his comfort zone, his good conscience, built of his meritorious achievements, hide the tumult that swarms outside. The uncritical masses subsume distinctions into memes and twitter storms within the hivemind of social media. Jeff Bezos often describes social media as a *nuance-destruction machine*. For once I agree with him. The polythetic threads of multiple intelligence, of consciousness and desire, have been algorithmically homogenized to "swarm" in monothetic attentional surges to view or play *Game of Thrones*, *Bridgerton*, *Schitt's Creek*, *Call of Duty*, *Fortnite*, *Minecraft*, *Grand Theft Auto V*, *Valheim*, *God of War*, *Super Mario Odyssey*, etc. As for the January 6th insurrection against the U.S. Capital Building, the attentional surge was regressively sublated into a drive-based rage for chaos. Even so, everyone had the wherewithal to take selfies. All the hardcore gamers and Q-Anon devotees converged in a fusion reaction of destructive affects—recorded on their smartphones. One wonders: is the U.S. Capital all that far from Cambridge, Mass.? Did anyone in the Harvard Graduate School of Education take notice of the mayhem and feel at least vaguely responsible for long-term student learning outcomes gone awry? Or are they collectively at ease, blessed with the sunny days that come to a good conscience?

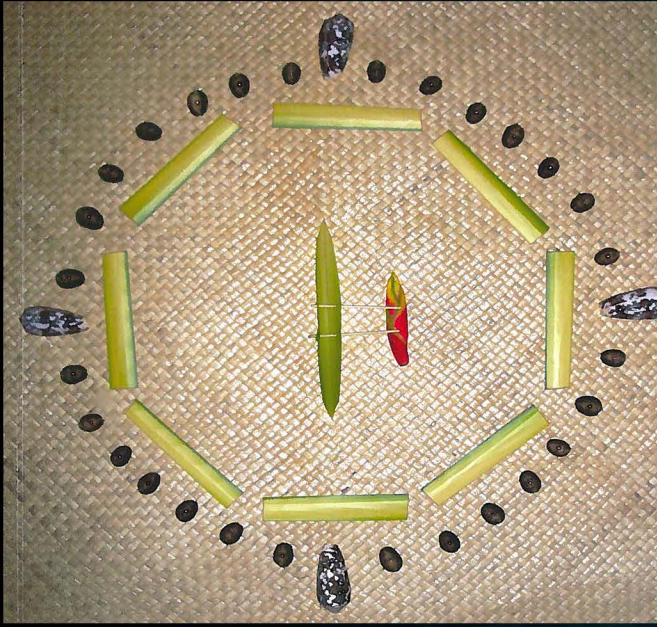
Vladimir Jankélévitch describes the complacency of the good conscience: "No one admits of wrongs...nor counts himself guilty in the least; each is convinced of being in the right and of the injustice of others toward him. Wicked or not, egoists are in general quite content, very satisfied with what they do, and they most often enjoy excellent sleep..." (1). Bernard Stiegler, however, did not seem self-satisfied in the years before his death in August, 2021. His numerous publications and distinguished appointments did not placate his anguish. He wrote in his *Uncontrollable Societies of Disaffected Individuals* that he was steeped in disquiet, "shocked by the apathy of my contemporaries as much as by their fury." He continued: "I find myself melancholic, angry, yet also ashamed of this melancholy, which has itself become so fashionable, as if it had become our very mode of existence, or inexistence, sometimes bland, yet always so profound and philosophical, and that fascinates us—and kills us" (11).

Works Cited

Bergson, Henri. *The Creative Mind*. Translated by Mabelle L. Andison. Philosophical Library, 1946.

Micronesian Educator #30

- Han, Byung-Chul. *The Swarm*. Translated by Erik Butler. MIT Press, 2017.
- Gardner, Howard, and Davis, Katie. *The App Generation*. Harvard UP, 2013.
- . *Five Minds for the Future*. HGSE Press, 2005.
- Jankélévitch, Vladimir. *The Bad Conscience*. Translated by Andrew Kelley. University of Chicago Press, 2015.
- Stiegler, Bernard. *The Age of Disruption: Technology and Madness in Computational Capitalism*. Translated by Daniel Ross. Polity Press, 2019.
- . *Taking Care of Youth and the Generations*. Translated by Daniel Ross. Stanford UP, 2010.
- . *Uncontrollable Societies of Disaffected Individuals*. Translated by Daniel Ross. Polity Press, 2013.
- Wolf, Maryanne. *Tales of Literacy for the 21st Century*. Oxford UP, 2016.



Heiwa: Heiwa is the pushing of the canoe on the unfolded mat to demonstrate how a canoe will actually sail in the ocean from the departure island to the destination island. The navigator uses one or more stars or constellations and uses the fauan etak (primary reference island) and possibly a fauan yatil (secondary reference island) in tracking the course. Heiwa is also used to explain the feeling of the canoe's movement caused by the waves and swells hitting the canoe.

Image Design:
Lawrence J. Cunningham and Manny Sikau