Micronesian Educator

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

Volume 32, 2022

A Publication of the School of Education, University of Guam

Micronesian Educator #32

FAÑOMNÅKAN 2022

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

Published by:
School of Education, University of Guam

Editors' Introduction

Welcome to the 32nd 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 writings. This volume consists of three sections: (I) articles and critical essays; (II) book reviews; and (III) Poetry.

Mary Jane Miller, PhD, Professor of Education
Christopher Schreiner, PhD, Professor of English

TABLE OF CONTENTS

PART ONE: ESSAYS and ARTICLES

PART TWO: BOOK REVIEWS

PART THREE: POETRY

Section I

Articles and Essays

Critical Pedagogy and Mediated Place: Communication Education in Oceania During Social Distancing

HUNTER H. FINE, University of Guam

Critical pedagogy should include aspects of place and in many instances, indigeneity. This perspective is not extracurricular to course curriculum, but part of its learning content. By advocating for the rights of marginalized populations this process can move toward more inclusive sites of learning. Critical pedagogy is a problem-solving approach to education based on the transformation. When these sites become mediated due to public safety measures critical pedagogy functions within the electronic apparatus but remains dialectical. Furthermore, when combined with Indigenous studies paradigms critical pedagogy can decolonize curriculum (Thaman, 2003, p.3). In this article, I discuss these concerns within the context of teaching in mediated platforms. Indigenous Studies is a field of study that centers around the cultural, social, and theoretical traditions that arise from Indigenous peoples, communities, and histories. The field provides a respectful and rigorous space to learn from Indigenous knowledge sets that have often been marred by the effects of colonialism and its legacies within Western education. This field is an aspect of decolonization, which is a process by which colonies become independent of the colonizing nation. When combined with educational practices the notion of decolonization confronts the intellectual paradigms and discourse that also entail structures of oppression.

Placed-based pedagogy situates learning in the real-world negotiations of these paradigmatic intersections. The influence of Indigenous knowledge structures on course curriculum, cultural identity, and modes of social advocacy and communication, provide the space for a sustained critique of intellectual colonization. This can open practical pathways that link differing and at times contradictory forms of learning. As students are asked to engage in course content, they enter global conversations concerning the ways such content influences perspectives. While the historical contexts of intellectual imperialism, colonial domination, and settler displacement also continue to manifest themselves in realities that uphold these legacies, so will the development of the tools to resist these structures. Paulo Freire in *Pedagogy of the Oppressed* (1993) notes that *unity*, is a central element of what he refers to as *dialogic* action. Unity, along with *cooperation*, *organization*, and *cultural synthesis*, Freire writes “occurs in a reality which is only authentically comprehended in the dialectic between the sub- and superstructure” (p.175). In other words, all education occurs in context. This process of fostering a lifelong commitment to learning and leadership based on the negotiations of context, for Freire, partially materializes through a more dialectic approach to curriculum content and education. Critical pedagogy, in this regard, starts with a consciousness of the geographical, social, and cultural situation or place in which education occurs (Freire, 1993, p.109). Critical Pedagogy is a manner of teaching that invites everyone involved to become active members of the learning process. In doing so, they mutually examine structures of power and come to understand how education is implicated in social issues rather than separated from them. Freire notes that this way of teaching and learning is intended to foster the development of a critical consciousness or *conscientização*.

Scholars such as W.E.B. Dubois have examined space from a sociological perspective, noting the ways in which marginalized communities suffer from the spatial manifestations of racial inequality. Other authors have looked at more contemporary conditions that note the on-going ways in which power inequality function spatially. In a similar vein, Indigenous scholars such as Elizabeth Lynn-Cook (2001; 2012), Epeli Hauʻofa (2008), Marissa Muñoz (2019), and Vincent Diaz (2016), among others, have noted the ways Indigenous paradigms are releveled by paying attention to place. Many other scholars have noted the social productions of space, such as Henri Lefebvre (2007) and Marc Augé (1995), the interplay between physical *places* and more ideological *spaces* such as Yi-Fu Tuan (2007) and Tim Cresswell (2004), the ways individuals and groups embody, reify, and resist such spatial productions through everyday *practices* such as Michel de Certeau (1984) and Pierre Bourdieu (1990), as well as the intersections that are created between geographical borders and boundaries of identities in Gloria Anzaldua’s (2007) work on *borderlands*. These scholars reflect a distinct spatial turn that expose conditions of power and reflect the spatial influences on human subjectivity. This attention to space also plays out in material and electronic educational spaces.

Critical pedagogy is a transformation-based way of teaching grounded in the works of John Dewey (2007) and discussed by Paulo Freire (1993), Augusto Boal (1985), bell hooks (1994), and Henry Giroux (2011) among others. They each examine what it looks like when we teach in ways that actively attend to contexts of power and influence. The learning discussed in this article takes place in Oceania at the University of Guam in Micronesia. Oceania is a continental grouping that emphasizes the Ocean as the link between its differing regions, cultures, and nations. Oceania encompasses the Pacific Ocean and its islands as well as Australasia, Melanesia, Micronesia, and Polynesia.

For Freire (2003) *problem-posing* education attends to the ways in which participants in the educational process are encouraged to engage critically with course content. This involves recognizing elements of power that are present with course curriculum and discussion (p.84). Participants are asked to actively bring their own experiences, histories, and perspectives into classroom discussions rather than leaving them behind. In doing so, the class attends to issues and *problems* that might arise in relation to context. I argue that this emphasis on the place in which education occurs lends itself to Indigenous epistemologies and pedagogies, which are often noted as arising from a way of learning associated with geographical settings and history. In distinction to dialogic action indicative of critical pedagogical practices Freire (2003) identifies the *antidialogic* actions of *conquest*, *divide and rule*, *manipulation*, and *cultural invasion*, which hinders the goals of critical pedagogy (pp.138-147). Academic discourse is often capable of providing political and cultural weight to certain knowledge structures. Freire refers to the *banking model of education* as the major way these structures of information get transferred. This approach treats participants as passive receptors of information, which tends to empower the dominant interests of the political context. Critical pedagogy is learning involved in the awareness of the "situation" through collective critical thinking. This process promotes the co-construction of knowledge (Freire, p.109). These pedagogical leanings mirror recent moves in communication studies toward models of communication that place the meaning of messages as a social product as well as critical and cultural turns witnessed across academe. Communication Studies is an academic field that centers around the processes of human communication to examine cultural, social, and political life. It uses various methods of empirical, interpretive, philosophical, and critical methods to better understand the ways in which much of life depends on structures of communication.

Judith Hamara (2005) notes that when concepts from performance studies are added to critical pedagogy, we can better interpret the context through an embodied perspective. She states that the "conditions, strategies, and protocols" through which we come to know the pedagogical situation enable us to know "the pedagogical body" or bodies involved (p.76). The durability of symbolic systems adds political and cultural weight as concepts can overshadow both place and body. For John T. Warren (2005) critical performance pedagogy disrupts the classic Cartesian split between mind and body. Such a longstanding tradition within Western education intends to "free the mind from the potential misrepresentation of bodily sensation" (pp.89-90). Performance studies uses the broadly defined notion of performance as a central element of social, political, and cultural life, which is then used to attend to the political contexts in which education occurs. When practiced in forms of learning, the body becomes a skeptical site for the place of knowledge and so does its spatial surrounding. Warren adds that schooling practices throughout history have "consistently worked to erase the presence of bodies in educational activity" (pp.89-90). Critical performance pedagogy is a practice-based approach to education that draws from the field of performance studies as well as the tenets of critical pedagogy.

The critical pedagogical actions previously mentioned by Freire (2003) are considered dialectical or *dialogic* goals of the educational process. These resist the tendencies within educational contexts to oppress through the *antidialogic* elements previously mentioned (pp.138-183). Aspects of critical pedagogy in communication studies classrooms at the University of Guam allow further reflection on its combination with place and indigeneity. With an emphasis on *dialogics,* educators can bring about a consideration or *conscientização* of the educational "situation" (Freire, p.67). Questions concerning the situation of any given educational setting for Freire are dialectical concerns that arise through an interrogation of content in relation to context.

Rose Carnes (2015) notes that Indigenous pedagogies align with transformative education "as a process of growing and learning" that also entails a commitment to reconciliation (p.4). To strengthen the connection, she draws from Judy Atkinson's five core elements of Indigenous critical pedagogy: *respect*, *rights*, *responsibility*, *reciprocity*, and *relatedness*. Each tenant is intertwined with the goals of the others (p.4). The ways in which traditional educational practices and the dissemination of information function, from this perspective, asks that practitioners become aware of the co-constructed nature of learning. Place and social context are almost always real physical aspects of Indigenous optics that ground disciplinary content and trends in the histories of place. These often involve elements of colonial, imperial, settler, militarized, and Indigenous interaction. Such perspectives of information transference indicative of these structural forces are often described by Freire (1993) as *antidialogic* elements central to the *banking model of education.* This mode sidelines local history and knowledge in favor for a process of passive acceptance of information rather than an active participation in the creation of knowledge (p.96). In the *banking model*, content often possesses the ability to transcend context. A critical perspective to such intactness of curriculum content engages in how place and space play a role in altering such discourse within the classroom.

Freire's critical pedagogy intends to transform situations through education thus attending to placed-based problems. It is a way of learning that functions as a praxis or plan to achieve transformation. He states that *cultural synthesis*, for example, is "a mode of action for confronting culture itself," in many cases the dominant culture by which the educational situation "was formed" (p.180). The connections between performance, place, and indigeneity become lived moments of a critical pedagogical praxis. Ultimately, critical pedagogy is a transformative approach to teaching and when this approach is combined with performance and indigeneity it finds context and corporeality.

For me these methods of critical pedagogy and instances of place-based learning become salient in a class on intercultural communication at the University of Guam. In this educational situation the class conducted an artifact analysis of a popular film that represent various cultural identities, notably CHamoru and Micronesian culture, the island of Guåhan, its residents, militarization, and traditional Austronesian and Oceanic seafaring. Pedagogy grows out of a series of placed-based performances and the ways in which social spaces are formed and function are a product of such practices. Indigenous and institutional practices and perspectives remain connected to the places and environments in which they arise. N. Martin Nakata et. al. (2012) notes "a range of tensions presents and complicates educational discussions" concerning teaching indigeneity specifically (p.123). When critical paradigms such as postcolonialism and critical pedagogy are engrained in place-based cultural settings, such paradigms become necessary across disciplines. Postcolonialism, for example, rather than a period after colonization, is a way of thinking that untangles and confronts the many ways in which colonial legacies are reified. A critical academic field, postcolonial studies, draws from critical theory to interrogate and question the worldviews embodied and engrained in society through colonialization.

The co-production of knowledge within the communities in which we are situated is a vital aspect of critical pedagogy and placed-based learning. In *Teaching to Transgress: Education as the Practice of Freedom* (1994), hooks notes that the self-actualized teacher is aware and reflexive of the ways in which they learn along with and from students (hooks, p.22). It is here in these moments of self-actualization that we are learning as a community and disrupting the *banking model of education*. Muñoz (2019) states it is important to "trouble some of the irreconcilable discrepancies around identity, collective memory, and public pedagogies" of our *borderland* communities (p.62). As teachers we should see ourselves as part of the communities we educate and strive for the bridging of the gaps created by the *antidialogic* communication practices of division.

Research Direction: Representations

During a course on intercultural communication a *Netflix* film titled *Operation Christmas Drop* (2020) directed by Martin Wood and starring Kat Graham debuted. The film largely took place on Guåhan and featured the island, region, Indigenous culture, and the U.S. Most students were familiar with the portrayal of daily life depicted in the narrative and some residents took part in the film, while many, including those in the class, had some opinion of its representations. To respond to one-sided mass mediated artifacts, the class conducted an artifact analysis of the film regarding cultural communication and representation. Giroux notes in *On Critical Pedagogy* that what critical pedagogy insists "upon is that education cannot be neutral" (183). It should be utilized in service for the understanding of larger political, social, and cultural contexts. The class examined and coded the film for moments of cultural representation according to a series of emerging themes. Looking at scenes and dialog in the film as units of measurement within the artifact students identified thematic moments of *intensity* and *frequency*. All the students watched and analyzed the film and produced papers of artifact analysis. The collective work was then further organized and a select group of students presented our work according to class conversations at the UOG College of Liberal Arts and Social Sciences *Academic Research Conference* in 2021 (2021). Giroux notes that critical pedagogues should "be willing to share their ideas with other educators and the wider public by making use of new media technologies" and communicating to a wider public audience (226). This becomes salient during times of social distancing when emergency situations place education in mediated contexts. The artifact was available through streaming platforms and the conference and class conducted were conducted entirely online. This assignment centered around the place-based situation of the educational context while occurring entirely in electronic platforms, adhering to necessary protocols of social distancing.

The goals of the assignment were to investigate and respond to the ways in which shared life worlds are depicted, presented, and created through symbolic narratives. Giroux states that critical pedagogy is "directive in its attempt to teach students to inhabit a particular mode of agency" while encouraging them to understand the world and "one's role in it" (181). In this way we can better understand our own cultural identities in relationship with others and develop the tools to reflect and respond in meaningful ways. To this end, we drew from the theorists and perspectives of those referenced in class including Erving Goffman (everyday performance) (1959), de Certeau (everyday practices) (1984), Judith Butler (gender performativity) (1990), Hauʻofa (indigeneity) (2008), hooks (critical theory) (1994) and Edward Said (postcolonialism) among others. The theory and ideas that the class used stretched across curriculum interests while the artifact situated the cultural analysis within a particular placed-based context. This allowed students to decipher and follow their own interests while using generally recognized theory as a guiding lens and the popular artifact as a shared set of data.

After each student conducted their individual assignment we further categorized and presented the collective class work to a larger audience during the conference presentation. Ultimately, we emphasized the major conclusions and findings based on the shared themes recognized by the class. Along with an overview of the film, we coded and organized student work according to the themes of *gender*, *militarization*, and *economy*. The film follows an assistant to a U.S. congresswoman working toward a promotion in Washington D.C. She is assigned to create a report on a military base on Guåhan during the U.S. Christmas holiday. The film portrays this fictional narrative alongside an actual military operation that has gone on since 1952. The main character in the film exhibits personal and emotional growth as a person while developing a newfound sense of honesty in relation to work and romance. After this initial reading of the fictional personal story in the film the artifact was then coded according to the ways in which societal values such as gender and success were depicted in the film, which have real world implications. All texts are sites of tension in that our readings of them and our determinations involving meaning is open for dialog. Nevertheless, narratives and symbolic structures also impact our material worlds.

In the first theme *gender,* the student's work fell into the subcategories of *femininity, patriarchy,* and *identity*. The most career-minded characters in the film were played by women and much of the work produced by students in this theme marked and celebrated the empowered female roles depicted in the film. They each had the most access to power and status in terms of economic and political influence in the narrative. This portrayal recognized and resisted actual contexts of sex-based inequality. Drawing on the ideas of Butler and Goffman, the findings by the students in this theme, noted that the female characters also relied on traditional constructions of gender and sexuality to achieve success and establish identity. They both portrayed characters whose identity closely resembled mainstream notions of femininity and family. They also performed roles of heterosexuality pursuing relationships that resembled those most found in traditional power structures. Within fictional narratives we can observe the ways in which certain characterizations are celebrated, which results in the success of these characters in the plot. Which character rides off into the sunset and which one meets their demise at the end of fictional film plots informs audiences of larger societal values. In the real world we tend to see those same values celebrated, which further enables us to draw parallels between symbolic structures and material conditions.

In the theme of *militarization,* students identified and examined the portrayal and roles of the U.S. military in the film. Their work fell into the subcategories of *assistance* and *power.* They recognized and critiqued a persistent romanticism of the U.S. military in the film narrative. The film in many ways was used as an advertisement or promotional campaign for the U.S. military. Based on data, they determined that it was largely portrayed as a caring force of positivity and support. The military operation, as the name of the film implies, centered around the ritual of gift giving or humanitarian aid. We noted how elements of Indigenous and local culture that are similar such as reciprocity or *chen chelu* were left out as well as, other, more dominating violent aspects of military operations. During critical artifact analysis, we are encouraged to look at what is present as well as what is not present and examine why it is left unmentioned. By expressing these sentiments that are systematically ignored, we can practice oppositional readings and speak upon what is important to us an audience. In this manner, we can actively recognize and examine the unrepresented and systematically obscured. Mobility became interesting in the film as traditional Oceanic canoes and surfing, both forms of Indigenous knowledge, were represented in the film but pushed to the background in favor for more militaristic forms of mobility such as all-terrain vehicles and jet airplanes. In this regard, we can expand on these elements in artifacts that are visible but only serve passive or secondary roles, thus attending to the discursive margins. In these spaces we can discuss how our actual life worlds are being represented and presented in particular ways.

Militarization is inseparable from the political and social life of the island and Oceania playing a large role in the history and contemporary composition of the region. Students were given the opportunity to discuss the ways in which these pervasive elements function in their own lives and are portrayed in a widely disseminated artifacts. Having already been symbolized as small, the film reinforces hegemonic discourses that belittle ideas stemming from Indigenous frameworks and island sites such as those in Micronesia. This allows notions of control by larger military powers and social forces to continue. The rationales and justifications behind societal values and policies are expressed in popular artifacts such as this film. The student's arrived at the conclusions that much of this obfuscation, belittlement, and perceived dependency is furthered through the film's narrative. Such conceptualizations are something that those on island experience daily as are the rewards of military presence and service. This semi-fantastical space of the film allows this material space to be examined. Goodyear-Kaʻōpua (2019) notes that Pacific Islanders are overrepresented in the U.S. military by 249% while "Guahan's rate of troop deaths in Iraq and Afghanistan" was five times the U.S. national average (p.91). Within various Pacific Island communities there are also critics of militarization. During operations of military buildup on the island there is a sustained mobilization of critique and protest. Amidst a precarious territorial U.S. designation there is also a centuries long struggle for reconciliation, which calls for either independence, statehood, or free association. The fight for independence is notably visible in Independence Guåhan. There are also various celebrations of Indigenous structures such as traditional Austronesian and Oceanic seafaring, which presents counterarguments to military control through its sustained practices of mobility and organization. The continuous celebration of Austronesian and Oceanic seafaring along with other Indigenous practices is visible in *the Festival of the Pacific Arts*, which Guåhan hosted in 2016 and postponed in 2020.

Military references are *frequently* observed in the film that allude to its significance in the narrative as well as *intense* moments and lines from the film that indicates its importance to the storyline. For example, when the love interest and main military personnel character states that he would love to go home for Christmas but "kiddo, they need me here" the role of dependency is displayed (Wood, 2020, 1:32:43). The line is contradictory to most student experiences, which is reified later in the film when a military personnel states that Guam is vital to U.S. military interests referring to the island as "the most strategically important in the South Pacific" (Wood, 2020, 1:26:22). Aside from missing its geographic location, Guåhan is in the North Pacific, the sentiment is contradictory to the narrative. An analysis of the cultural communication contained in the artifact provided students the epistemological foundation to question who needs who? The film narrative, for students, reasserted the colonizing themes and rationales of the past in contemporary portrayals and plot structures or mediated artifacts.

This assignment invited students to search for their own current Indigenous epistemologies and methodologies, critiquing how they learn through popular artifacts in contemporary contexts. As Smith et. al. (2019) notes this often "emphasizes land, water, and the more-than-human world, emphasizing relations as accountability, emphasizing a past-present-future that exceeds" national identities and modern imperial formations (p.22). The students discussed the sacred aspects of many of the land sites portrayed in the film, noting that most people on the island had never visited some of the places featured in the film due to their current occupation by the military. The film crew and actors had access to spaces that were otherwise off limits to people on island. Furthermore, the symbolic space of the film allowed audiences far and wide to relish in the island's geography and beauty in ways that those that lived there could not. The film brings these tensions to our attention and reminds us of the link between symbolic portrayals and material conditions. At one point in the film, the main military personnel character states that his real mission is to "bring Christmas here" reflecting colonial attitudes that reify processes of cultural domination as cultural rituals are displaced and replaced (Wood, 2020, 1:30:40). By marking these conditions and responding to the ways in which they are revealed through film discourse students gain agency in the learning process.

In the theme *economy,* the class coded the collective work into the subcategories of *class, employment,* and *identity* while observing the distinctions between culture, identity, and wealth. The colonial history of the island and region were on display for many students throughout the narrative. Modernity is the overarching concept that encapsulates the linear progression of human achievement largely from a Eurocentric perspective. The concept and rationale are used throughout history to rationalize untold oppression and cultural destruction, which relates to the violent processes of modernization. The students noted many instances in the film where Indigenous and local culture is depicted in a way that reifies notions of inferiority and dependence. Contemporary Indigenous representations in discourse are directly connected to these historical forces of oppression. In class, the collective conversation, based on artifact analysis and regional context exposed the rationalizations behind these depictions. Such readings and conversations are elements of discursive reconciliation and in line with the goals of critical pedagogy. As these conversations unfolded within mediated classroom and academic spaces, it became even more important to reconnect these mass mediated worlds back to our shared physical spaces. In the film, the U.S. military is only depicted engaging in acts and gestures that improve the lives of those encountered, mirroring the modernist and colonialist concepts of technological progression, individualization, bureaucratization, and secularization.

Ultimately, the rationale that justifies territorial expansion is exhibited in the subcategory of *assistance* recognized by the students. This functions merely to highlight the benevolence of U.S. territorial policy, which some note as unconstitutional (Statham, 2002, p.81). The regional culture is sidelined in service for a role of dependency. Nevertheless, the undeniable influence of the military and thus the island and culture are represented, which allowed the space for these class discussions. Representation and discursive space in popular artifacts such as films is significant particularly when there is often a lack of such depictions. Yet, in this portrayal the student's found problematic obfuscations that reinforce such legacies of colonial and military domination. The island of Guåhan is featured heavily, yet in the film, the location is referred to more often as "that island," which fills in for "Guam," which is only used once in the script (Wood, 2020 1:28:23). The context in which this analysis took place became a salient point in discussions of this obfuscation. This assignment of artifact analysis called for the critical attention to the ways in which the global contexts of Guåhan, the Marianas, and Micronesia are represented. The film provided the space to consider the ways in which dominant yet socially constructed stances of wellbeing, identity, and success are depicted through symbols and reflected in material forms. Narratives become implicated in the social, political, and cultural materiality of society and disseminated via popular artifacts. Separated physically in conditions of social distancing, we continued to learn about our shared physical spaces while having discussions through mediated platforms. Artifact analysis and the reflections of the way in which narratives within these artifacts functions will continue to be important pedagogical sites. Resistance to some of these norms is reflected in the film as a female is featured in the major role of power and a female Person of Color in the secondary role of power. In *Indigenous and*

Decolonizing Studies in Education: Mapping the Long View the authors note that along with critical pedagogy we should strive to become "decolonizing educators" (Smith, L.T., E. Tuck, & W. Yang, 2019, p.23). This involves presenting course curriculum within placed-based contexts that gives students the opportunity to contend with the ways in which they are informed and educated.

Conclusion

Rooted in its Indigenous CHamoru culture and connected to the regions of the Marianas, Micronesia, maritime Southeast Asia, and Oceania, the University of Guam is a U.S. public academic institution at the global and Western intersections of intellectual, national, and political contexts. It exists in its geographical setting in Oceania and serves the broader educational and professional needs of local and global communities. It also represents the cultural lineage that is present within the region as well as national and international disciplinary trends. I have intended to discuss some of my experiences in the classroom and construct an example of what critical Indigenous performance pedagogy might look like when paying attention to place-based education during times of emergency education and social distancing.

Works Cited

Anzaldua, G. (2007). *Borderlands, La Frontera: The New Mestiza*. San Francisco: Aunt Lute Books.

Augé, M. (1995). *Non-Places: Introduction to an Anthropology of Supermodernity.* Trans. John Howe. London: Verso.

Boal, A. (1985). Theatre of the Oppressed. New York: Theatre Communications Group.

Bourdieu, P. (1990). *The Logic of Practice*. Trans. Richard Nice. Stanford: Stanford UP.

Butler, J. (1990) *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

Carnes, R. (2015). "Critical Indigenous Pedagogy meets transformative education in a third space learning experience." Teaching and Learning Forum.

Cresswell, Tim. (2004). *Place: A Short Introduction*. Malden: Blackwell.

Dewey, J. (2007). *Democracy and Education*. Teddington: Echo Library.

De Certeau, M. (1984). *The Practice of Everyday Life.* Trans. Steven Rendall. London: U of California P.

Freire, P. (1993). *Pedagogy of the Oppressed*. Trans. Myra Bergman Ramos. New York: Continuum.

Giroux, H. (2020). *On Critical Pedagogy*. London: Bloomsbury.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Garden City: Doubleday.

Goodyear-Kaʻōpua, N. (2019). "Indigenous Oceanic Futures: Challenging Settler Colonialisms and Militarization." *Indigenous and Decolonizing Studies in Education: Mapping the Long View*. Eds. Smith, Linda Tuhiwai, Eve Tuck, and Wayne Yang. Routledge: 82-102.

Hanlon, D. (2017) "Losing Oceania to the Pacific and the World" *The Contemporary Pacific* 29.2 286-318.

Hau'ofa, E. (2008). *We are the Ocean: Selected Works*. Honolulu: U of Hawaiʻi P.

Hooks, B. (1994). *Teaching to Transgress*: *Education as the Practice of Freedom*. New York: Routledge.

Ingersoll, K.A. (2016). *Waves of Knowing: A Seascape Epistemology*. Durham: Duke UP.

Mamdani, M. (2020). *Neither Settler Nor Native: The Making and Unmaking of Permanent Minorities*. Cambridge: Harvard UP.

McCoy, M. (1979): "A Renaissance in Carolinian-Marianas Voyaging" *The Journal of the Polynesian Society* 82.4: 355-65.

Metzger, E. (2006). "Carolinian Voyaging in the New Millennium" *Micronesian Journal of the Humanities and Social Sciences* 5.1/2: 293-305.

Lefebvre, H. (2007). *The Production of Space*. Trans. Donald Nicholson-Smith. Oxford: Blackwell.

Lewis, D. (1972). *We, the Navigators: The Ancient Art of Landfinding in the Pacific.* Honolulu: UP Hawaiʻi.

Low, S. (2103). *Hawaiki Rising: Hōkūle'a, Nainoa Thompson, and the Hawaiian Renaissance.* Hawai'i: Island Heritage.

McCoy, M. (1979). "A Renaissance in Carolinian-Marianas Voyaging" *The Journal of the Polynesian Society* 82.4: 355-65.

McLaughlin, J. (2013). "'Crack in the pavement': Pedagogy as political and moral practice for educating culturally competent professionals" *The International Education Journal: Comparative Perspectives* 12.1: 249-265.

Muñoz, M. (2019). “River as Lifeblood, River as Border: The Irreconcilable Discrepancies of Colonial Occupation From/With/On/Of the Frontera.” 62-81.

Na’puti, T.R. (2019). “Archipelagic Rhetoric: Remapping the Marianas and Challenging Militarization From “A Stirring Place” *Communication and Critical/Cultural Studies* 16.1: 4-25.

Nakata, M.N., V. Nakata, S. Keech, and R. Bolt. (2012). “Decolonial Goals and Pedagogies for Indigenous Studies” *Decolonization: Indigeneity, Education & Society* 1.1: 120-140.

Pigafetta, A. (1969). *Magellan’s Voyage: A Narrative of the First Circumnavigation*. New York Dover Publications.

Poulakos, J. and T. Poulakos. (1999). “Rhetoric and Display.” *Classical Rhetorical Theory.* Boston: Houghton Mifflin, 61-87.

Rogers, R.F. *Destiny’s Landfall: A History of Guam*. Honolulu: U of Hawai‘i P, 2011.

Said, E.W. (1979). *Orientalism.* New York: Vintage Books.

Smith, L.T., Eve T., and Wayne Y. (2019). “Introduction.” *Indigenous and Decolonizing Studies in Education: Mapping the Long View*. Eds. Smith, Linda Tuhiwai, Eve Tuck, and Wayne Yang. Routledge: 1-24.

Statham Jr., E.R. (2002). *Colonial Constitutionalism: The Tyranny of United States’ Offshore Territorial Policy and Relations.* Lanham: Lexington.

Thaman, K.H. (2003). “Decolonizing Pacific Studies: Indigenous Perspectives, Knowledge, and Wisdom in Higher Education” *The Contemporary Pacific* 15.1: 1-17.

Tuan, Yi-Fu. (2007). *Space and Place: The Perspective of Experience.* Minneapolis: U of Minnesota P.

Underwood. R. (2018, Feb. 26). UOG Welcomes Students to the First Official Fanuchånan Semester! https://www.uog.edu/news-announcements/2017-2018/2017-UOG-Welcomes-Students-to-the-First-Official-Fanuchanan-Semester.php

Walker, I.H. *Waves of Resistance: Surfing and History in Twentieth-Century Hawai‘i.* Honolulu: U of Hawai‘i P, 2011.

Wood, M. (Director). (2020). *Operation Christmas Drop* (Film). Netflix.

Contributions of Literature to a Thematic Exhibition of Cultural Education: An Asian Experience of Jin Yong's Gallery

WENHUI DENG, GINY YUNG-LING CHIN, DICKSON K.W. CHIU,
Faculty of Education, The University of Hong Kong, Pokfulam, Hong Kong

KEVIN K.W. HO, School of Business and Public Administration, University of Guam

Abstract

As the museum industry is booming, most museums are currently hosting different types of permanent or short-term special exhibitions to attract visitors. This study aims to find out the influence of Jin Yong's Gallery from visitors' viewpoints, focusing on cultural education and providing some suggestions for its further development. We employ a qualitative method to obtain in-depth perceptions of visitors' semi-structured interviews. Most participants believed that the Gallery influenced their perceptions, including a deeper understanding of Jin Yong, his novels, creative process, and impacts on Hong Kong's popular culture. The Gallery was also well received as a representative and pleasure attraction for Hongkongers and foreign tourists. For these reasons, the Gallery would be useful in engaging the cultural education of the public, especially contributing to the inquiry-based and theme-based learning of Hong Kong's students.

Keywords: Museum education; martial-art novelist; Hong Kong; qualitative research; visitor impact; cultural education

Introduction

The relationship between society and the museum is interaction. Society has led to the emergence of museums, while museums also have a role in society's development. Nowadays, the Chinese museum industry is booming, and most museums are hosting different types of permanent or short-term exhibitions to attract tourists. Museum visits are often short and infrequent events that require less time and effort than most other educational activities (Hein, 2002). As they have multifaceted impacts on people and society, more and more people like to visit the museum when they have leisure time. As museums' primary functions include collection, research, education, and recreation, museums should raise tourists' awareness of the exhibits and inspire travelers by providing knowledge and culture for visitors in a comfortable and casual environment (Weil, 2012).

The information conveyed by different museums is different, and the museum exhibition is a major factor in the realization of the value of museums (Lord & Piacente, 2014). Although many scholars have studied the influence of museums (information about Jin Yong can be found in https://en.wikipedia.org/wiki/Jin_Yong) scant research has explored the content of specific museum exhibitions from educational perspectives. Besides, scant studies focus on public visitors' learning viewpoints, which should be considered (Holden, 2004).

There is an old saying among the ethnic Chinese community that "if there are Chinese people, there will be Jin Yong's books." Jin Yong's Gallery is the first permanent Character-class museum exhibition with the theme of the famous writer, Dr. Louis Cha (under the pen name Jin Yong) in Hong Kong. Since March 1, 2017, Jin Yong's Gallery, a new permanent exhibition in the Hong Kong Heritage Museum, has been open. It highlights the early career of Dr. Cha, the creative process behind his martial arts novels, his work, his spirit, and the impact of his novels on Hong Kong's popular culture (Jin Yong Gallery, 2017) by displaying 300 exhibits. The Gallery is divided into four main themes, involving "Footprints of the Master of Martial Arts Novels," "Jin Yong's World of Martial Arts," "The Jin Yong Phenomenon within Film, Television and other Entertainment Circles," and "A Literary Giant of the Century." Also, the Gallery schedules theater screenings and guided tours. It provides an excellent chance to understand the influence of a featured museum exhibition on cultural education perspectives. So we choose Jin Yong's Gallery as our case study.

The central questions explored in this study are focused on the common themes emerging from opinions among the visitors of Jin Yong's Gallery to find out the contribution of Jin Yong's Gallery to people and society from a learning perspective. According to the museum's role, and the original meaning of the Jin Yong's Gallery, the overall research questions (RQs) are as follows:

RQ1. What are the purposes of the visitors visiting Jin Yong's Gallery?
RQ2. What are the perceptions and cultural impressions made to visitors after visiting Jin Yong's Gallery?
RQ3. What is the relationship between Jin Yong's Gallery and cultural education?

The findings of this research are therefore expected to be valuable to managers or professionals of museums in Hong Kong to know more about the contribution of Jin Yong's Gallery and other similar museum exhibitions from the visitor's viewpoint and possibly for better improvement on this museum exhibition and other future museum exhibition designing in Hong Kong.

Literature Review

Evolving social roles of museums

According to the International Council of Museums (n.d.), the definition of a museum is as follows: "A non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates, and exhibits the tangible and intangible heritage of humanity and its environment for education, study, and enjoyment."

The above definition hints that museums are shifting from collecting, preserving, displaying, and research to education and leisure/recreation/entertainment for the public. (Arinze, 1999; Lundeen, 2010; Weil, 2012). Since the early nineteenth century, the new role regarding education has played a significant role in motivating the public to study the collections and knowledge behind collections. Later, it has become the museum's terminal function, which significantly impacts people's lives, personal development, and social capital construction. (Bennett, 2013). Another new role regarding leisure/recreation/entertainment has appeared since the 1990s. Due to the advancement of knowledge and living standards, museums are no longer merely for the experts to conduct research, but also deliver generic education to the public to learn more about the designated discipline in an interesting and easy-to-understand manner the theme and missions of the museums. Such a change drives the public to visit museums with families and friends, gradually becoming a leisure and recreation place (Stephen, 2001). Weil (2012) claims that most museums' unique advantage is the museum objects leading visitors to have extensive, diverse, and profound experiences. However, Frey and Meier (2006) point out that people can visit a museum by themselves or with their families, or by education events for schools and NGOs, for education, leisure, recreation, or entertainment purposes, which are not merely driven by museum objects.

Museums' Role of Leisure, Recreation or Entertainment

With the improvement of people's living standards, people frequently seek leisure, recreation, and entertainment. As museums welcome any demographic background (any ages, genders, education backgrounds, nationality, etc.) of visitors, they have attracted increasingly more visitors to engage in recreational activities (e.g., through cultural tourism for foreigners and local visitors) or seek entertainment (Scott, 2003).

In contrast to *leisure* aiming just to kill time, *recreation* is regarded as a voluntary activity/involvement driven by intrinsic motivations to achieve self-satisfaction and pleasure, which rely on a state of mind (Stephen, 2001). The current trend of recreational activities in museums is integrating museums with cultural tourism. Museums have become favorite tourist spots because they can also provide entertainment to their visitors, and people feel pleasure and surprise during their visit (Frey & Meier, 2006; Scott, 2006). These museum functions attract people to go there, thereby giving them opportunities to access more cultural knowledge.

Entertainment is defined as "entailing communication via external stimuli (not necessarily in the form of activities), which reaches a generally passive audience and gives some portion of that audience pleasure" (Bates & Ferri, 2010). Some popular ways to entertain visitors during museum education include gamification, virtual reality, and augmented reality (Lo et al., 2019), keeping visitors longer in the museum to receive more cultural knowledge.

Museums' Role in Education

Museums are now widely regarded as one of the institutions that provide education for the masses (Hein, 2002; Xidis, 2010), which has played a significant role as repositories of culture or artifacts of knowledge, and they have become an increasingly active disseminator of knowledge since the 20th century (Donald, 1991). Besides learning new facts or information, visitors can also reinforce what they have already known because they can learn deeper from the exhibits in museums (Griffin, 2004).

The youth public is part of a continuing trend to expand museum visitors (Szekely, 2012). As museums offer generic education on a designated theme or discipline to the public, visitors can be from individuals, organizations, or families. Although different types of visitors have different educational needs, Hein (2006) highlights that motivation, no matter intrinsic or extrinsic factors, is important for attracting visitors to visit/revisit to allow museums to deliver updated knowledge to the visitors. If museums can satisfy visitors' leisure, entertainment, or recreation needs, the motivation of visiting the museums would be improved and thus offer opportunities to educate the diverse public.

Unlike formal education in schools providing content-driven and rigorous education, museums offer inspiring examples of others' lives and success to help visitors examine phenomena from diversified viewpoints (Scott, 2003; 2006). Such a free environment to enlighten, seek, and verify personal interest and discovery learning attracts some schools looking for different ways for students to strengthen, support, and expand formal education in schools to enrich students' learning (Bobick & Hornby, 2013; Johnson & Rassweiler, 2010; Scott, 2006). Further, students can learn extra-curricular knowledge autonomously and experimentally (Hein, 2002; Mallos, 2012; Weil, 2012), especially in the current trend of moving to inquiry-based learning (Lo et al., 2017). Such knowledge gained from museums often arouses the visitors' interest in the designated topics (e.g., from negative or neutral to positive). Moreover, these visits may even change their behaviors (e.g., improve their motivations to learn more about related topics in the future) (Kufilk et al., 2012). Such impacts are also regarded as the main missions of museum education (Eger, 2014).

Research Methods

This study adopted a deductive approach to finding out the contribution of Jin Yong's Gallery to visitors' feelings and attitudes, as qualitative research usually emphasizes the words in data collection and analysis, which is more suitable for studies of an exploratory nature (Connaway & Powell, 2010). The interview strategy is the most useful data collection technique in qualitative research (Marshall & Rossman, 2014). At the same time, semi-structured interviews can facilitate detection and ensure that critical information is not ignored and allow participants to fully express their attitudes and opinions in their own words, and allow conflicting views. As the purpose of this article is to explore and reveal different, richer data types that the questionnaire cannot provide, semi-structured interviews would be deployed to collect data in this study.

The data collection technique used in this study was face-to-face interviews, each approximately 15 minutes. Participation in the study was entirely voluntary. Besides demographics, interview questions are divided into three parts based on research issues. The interviews were conducted in a semi-structured format and were fluid by asking the same set of questions to maintain consistency between the data. It helped determine the similarities and differences of visitors' feelings after they visited Jin Yong's Gallery. After the interview, a coding strategy was applied to capture interviewees' main ideas to segment the data into categories and themes regarding the research topic (Creswell, 2013).

Throughout the process, visitors came with certain randomness, and this study conducted a simple random sampling method to select participants for the interview. Given the fact that adults are more experienced, this study only interviewed adults. This study carefully recorded each interviewee’s opinions, and finally, no new information about the research questions was found after interviewing the fourteenth visitor. So the final interviewee number of this study was 14.

Participants’ profiles

Data on visitors of different ages, cultures, and occupations help improve the study’s effectiveness. Table 1 summarizes the background of the visitors. The background data show that fourteen participants came of different ages, from young people to middle-aged people to the elderly; some were locals in Hong Kong, while others were visitors. At the same time, their career and education levels were diverse, including even a few were retirees.

Table 1
Coding for Participants’ Profiles

Themes	Coding
Age	22；23；26；30；35；38；40；45；55；60；65
Ancestral home (Place of residence)	Hong Kong (Hong Kong); Mainland China (Hong Kong); Mainland China (Mainland China); Germany (Mainland China)
Occupation (education level)	Finance(Undergraduate); Retirement(Secondary); Teacher(Bachelor); Clerk (Secondary); Administration(Bachelor); Master student; Museum work(Bachelor); Museum work(master); Housewife (College)

Research Results and Analysis

This section presents the analysis of data collected from semi-structured face-to-face interviews according to the themes derived from the data, including the purpose of visit, leisure travel, the cultural impression of Jin Yong, cultural education for Hong Kong schools, and the shortcomings of Jin Yong’s Gallery.

Purpose of visit

After knowing the participants’ background, participants were asked their mode of visiting the Gallery. As shown in Table 2, most participants came to visit with their family, children, or friends, while a few visited on their own. The majority were family visits.

Table 2
Coding for Visit Mode

Themes	Coding	Visitor quantity
With family	•I took my son and dad to have a look.	1
	•I come with my family.	6
	•I took my child to visit.	1
With friends	I visit with my friends.	3
Alone	I go by myself.	3

Table A1 summarizes the three main reasons for visiting Jin Yong’s Gallery, including “visit Jin Yong’s Gallery specifically,” “visit by chance after visited other exhibitions,” and “come to Hong Kong Heritage Museum and visit all the exhibitions.” Among the 14 participants, two-thirds of the visitors were fans of Jin Yong. However, it is surprising that only two visitors came to visit Jin Yong’s Gallery on purpose. The others were not aware of Jin Yong’s Gallery before they visited the Hong Kong Heritage Museum. These responses showed the publicity at the Jin Yong's Gallery was insufficient.

Leisure Visits

As most participants mentioned leisure was a key purpose of their visit, we further analyzed it in a separate subsection. Their opinions could also improve the attractiveness and promotion of the exhibition, which would also be essential to engage the visitors for education purposes. Table A2 shows the impact of Jin Yong's exhibition on leisure travel. When discussing the relationship between Jin Yong's Gallery and the tourism industry, all the participants agreed that it was suitable for people to relax at leisure. Some of them mentioned that it would be ideal for families to visit together, such as bringing their parents and children to have fun while learning cultural knowledge. Some of them thought that it is also good to go with friends.

Further, nearly half of the participants believed that Jin Yong's Gallery would help Hong Kong's tourism industry develop by being a major tourist attraction for foreigners. However, some participants thought it would become a tourist site but not a major one because of its small size and far distance from the city center. However, some participants opined that foreigners might not be interested in it.

> "I don't think the foreigner is interested in it. Because most people didn't know him or what the children have read, they know their children didn't read such kinds of novels, so they will not be interested in it. Jin Yong in my country isn't popular; I didn't know him before."

> "For foreigners, it may not be attractive, because Jin Yong wrote Chinese novels, even although there are translations, it is best to see them in the original."

Cultural Impressions of Jin Yong

When discussing the cultural influence of Jin Yong's Gallery, participants were asked the question, "What changes of your impression on Jin Yong and Jin Yong's work after visiting this Jin Yong's Gallery?" Table A3 shows the impact on personal impressions into six parts, but not all participants agreed to these effects.

Firstly, most visitors thought Jin Yong's Gallery helped them enhance the impression of Jin Yong's novels with the introduction and background of the stories, as well as the documents, like the manuscripts. Also, they had a better understanding of how Jin Yong's novels were being diffused into different forms of popular culture. However, four participants thought nothing changed because they were already familiar with Jin Yong's works.

Some visitors rethought the influence of Jin Yong's novels on literature, both to Hong Kong and other places like Mainland China and Singapore. Most participants got a deeper understanding of Jin Yong and his creative process. Some of them just read novels but ignored the author. After they visited this Gallery, they had known more. All participants agreed that Jin Yong had a high impact on Hong Kong's popular culture. Not only were his novels famous among people, but many theme songs, drama series, video games, and other popular culture derived from his novel have also won wide support in many countries.

However, there were different opinions on the theme "encourage visitors to read books." Some participants believed this Gallery could encourage people to read Jin Yong's novel, but might not motivate visitors to take the initiative to read other books because they thought reading might relate more to personal habits. Yet, some participants said they still gained no interest in reading Jin Yong's books. Notably, many Hong Kong residents thought Jin Yong's Gallery had provided an opportunity for memory, as Jin Yong had become a part of their life.

Cultural Education for Hong Kong Schools

For the impact on cultural education, most participants agreed that teachers in Hong Kon should incorporate and use Jin Yong's Gallery for teaching Liberal Studies. It provided facts and history, and Jin Yong has been widely considered part of Hong Kong's popular culture. Table A4 shows the advantages for students perceived by the participants. However, a few participants were neutral on these views. Notably, some participants pointed out that educators should consider the fit of educational purpose in using the Gallery.

> "The key is to see what study. In middle school, we compared Jin Yong's novels with film and television works to see the difference. If so, maybe watching a TV play is more practical than visiting Jin Yong's Gallery."

> "The school usually visits the Science Museum, the content here is too specific, why the school needs to organize to visit is the school needs to consider."

Shortcomings of Jin Yong's Gallery

Lastly, some participants also put forward some shortcomings, as summarized in the four areas in Table A5. "The scale is too small" and "the content is not rich enough" were already mentioned by many participants. Some visitors said they just spent a little time visiting around.

> "The content is not rich enough. For example, I did not see the printed version or pocket version of Jin Yong's books; the comic I see has only limited coverage, which is too little and too superficial. Also, I did not see anything about Jin Yong's world status and how other countries' readers appraise, but I want to learn from here. Besides, there are not many references to the translation of Jin Yong's novels and how the books' ranking in the sales charts. Although it mentioned French and Japanese, Jin Yong's works were translated into English and Vietnamese. I think the translation of more different languages should be displayed."

Apart from this, a few participants believed that the interaction of Jin Yong's Gallery was not attractive enough to children, even with a "Throes of Masters" photography area. Another drawback is that the publicity is not active, and not many people know Jin Yong's Gallery has been opened to the public, even the fans. This finding is consistent with the previous analysis in Table A1.

Discussion

Positive Cultural Impressions and Contribution

There are many kinds of learning and learning experiences in various types of museums, which may lead to diverse results. As Jin Yong's Gallery is a Character-Class museum exhibition, it is used to remember Jin Yong and his achievements. As the result shows, the influence of Jin Yong's Gallery is mainly in the impression of Jin Yong and his works. This includes a deeper understanding of Jin Yong and his creative process, enhancing the impression of his novels, and rethinking his influence on literature and Hong Kong's popular culture. Visitors can reinforce what they already know because they can know deeper about the exhibits on display in museums (Griffin, 2004). Most participants had some change in the impression of Jin Yong and his works because this gallery provided the introduction and background of Jin Yong's novels and abundant documents like manuscripts, publications, and newspapers. Further, the exhibition shows the diffusion of his novels to popular Hong Kong culture, like TV series, radio dramas, stage dramas, video games, and various cultural and creative products. However, for several participants not so impressed due to inadequate content, the exhibition still served more like a cultural memory because they could recall the story they read or the scene they saw on-screen during our visit.

Although museums and schools are suggested to combine their resources to enhance student learning (Bobick & Hornby, 2013; Johnson & Rassweiler, 2010), the influence on Hong Kong schools' cultural education is in line with the cultural impressions of Jin Yong and his works. School visits to Jin Yong's Gallery help students better understand Jin Yong and his novels, which are phenomenal successes and icons of Hong Kong's popular culture. It can also help students learn history or culture through Jin Yong's novels. Nowadays, extra-curricular education should be engaging and fun for youngsters. The participants generally opined that Jin Yong's Gallery was a pleasant attraction for both

Hongkongers and visitors to Hong Kong. Further, many visitors brought their family or came with friends. This result hinted that the exhibition should be engaging and fun for most visitors. Local tourists are a group that cannot be ignored because they can become repeat customers and can bring new visitors to the museum (Scott, 2003).

Although there were few Western visitors under our observation during the research and very few read Jin Yong's novels, they still showed impressed and interested even though there are translations. This finding showed that the exhibition contributed to the introduction of Jin Yong to them as an influential popular culture of Hong Kong. Further, we expect visitors from Asia, especially those from Taiwan, Mainland China, and Singapore, to appreciate the exhibition because they have the same cultural root and similar cultural tastes as Hongkongers.

As Scott (2003) believes that the museum is a dynamic learning place for all ages, most visitors like to visit with somebody, and they also suggested visiting with family or friends. This is because they can communicate with one another during the visit, learning more than visit there alone.

Although the museum can generally satisfy interviewees' leisure and recreation needs, to further improve the entertainment as a motivational factor for visitors to visit the gallery to learn and the effectiveness in the museum's role of education, we discuss some of our suggestions in the following subsections.

Marketing as a Motivator of Learning in the Gallery

Visitors are the object of the museum's services (Waltl, 2006). As most of our participants did not even know the existence of Jin Yong's gallery before their visit, it is essential to improve marketing for potential visitors. We suggest various marketing strategies, including push marketing, pull-marketing, personalized, non-personalized marketing strategy, and location-based marketing strategies. At the same time, Jin Yong's Gallery should cooperate with the government to provide subsidies to encourage school visits.

The museum can use a pull marketing strategy for potential new visitors from the general public, allowing audiences to check marketing information in various media, such as newspapers, television, websites, and social media, without proactively pushing marketing information to the target audiences proactively (Lieb, 2012). However, for the museum's registered members, it is more appropriate for the museum to use a personalized push marketing strategy providing customized marketing information to the potential audience according to their profiles (Buhalis & Foerste, 2015). This finding is also useful for existing visitors to attract them to revisit the Gallery, as a proactive advertisement of services can lead the target audience to remember the services (Challagalla et al., 2009). Besides, in the current era of mobile computing, it is helpful to use location-based marketing by pushing marketing information for various locations in the museums or near the museum via apps (Hong et al., 2007; Nilsson et al., 2016).

Enrich the Content of the Exhibition

Most participants felt the need to enrich the content of the exhibition. First, we suggest collecting and displaying more physical objects related to Jin Yong, such as different print editions, to allow visitors to understand the different types of Jin Yong's novels in the past. Different language translations like French, Japanese, English, and Vietnamese can increase foreign visitors' interest in reading Jin Yong's novels. Second, we suggest adding an area to show Jin Yong's world status, such as the reviews in other parts. This suggestion enables visitors to understand Jin Yong's achievements better. More details of Jin Yong's key novel can be displayed, highlighting a few famous roles (e.g., Ashes of Time), attracting students' attention and reading these novels. Besides high-quality content and items, the gallery should include educational booklets and exhibition boards for education (Weil, 2012).

Expand the Venue and Supporting Services

Currently, the exhibition space is not large enough, limiting the content displayed and the number of visitors. Further, as this topic is well received according to participants, an appropriate suggestion is to expand the space. Also, as Jin Yong is famous for his martial arts novels, it is logical to set up a small library or a mini-bookstore to enable interested visitors to enjoy browsing or reading his novels.

On the other hand, it is desirable to create an atmosphere of experience to attract the masses to engage in learning at the gallery. Even now, there is a place to take pictures in Jin Yong's Gallery, but just one is not enough. The interaction with the collection is the main factor for potential visitors to visit a museum and retain/engage the museum's current visitors to stay at this gallery for a longer time (Waltl, 2006). The Gallery can carry out more interactive activities through various contemporary technologies (Lo et al., 2019). These new technologies include providing learning more about each collection item by Augmented Reality (AR), learning more about the martial arts written by Jin Yong using Virtual Reality (VR), and learning more about the characters in Jin Yong's novels using gamification (Hew et al., 2016). Such an interesting interactive approach can attract visitors of all ages, especially the younger generation, and improve learning engagement and, hence, museum education effectiveness.

Due to space limitations, the information offered by the gallery is insufficient. Thus, it is essential to organize more guided tours by staff and volunteers to let visitors learn more deeply about various themes of the Gallery. Alternatively, the gallery can offer a virtual guided tour to improve engagement and museum education effectiveness. This approach can help visitors explore and enquire about what they are interested in (Harron et al., 2019). Further integrated with gamified learning, VR, and AR, virtual tours can offer more experiential learning opportunities without using up much extra space (Pallud, 2017).

Conclusion

The paper is based on a qualitative analysis of the interviews with visitors to examine their perceptions of Jin Yong's Gallery's contribution, which is overall positive. Given the research objectives and data collected, the following conclusions are drawn. Most participants believed that Jin Yong's Gallery influenced their perception of Jin Yong and his novels. Its functions include a deeper understanding of Jin Yong and his creative process, enhancing the impression of Jin Yong's novels and his impact on literature and Hong Kong's popular culture. Besides contributing to leisure, recreation, entertainment, and tourism, Jin Yong's Gallery was also well received as a representative and pleasure attraction for Hongkongers and foreign tourists. For these reasons, the Gallery would be useful in engaging the cultural education of the public, significantly contributing to the inquiry-based and theme-based learning of Hong Kong's students. On the other hand, the perceived shortcomings of Jin Yong's Gallery were mainly in four main aspects: small scale, limited contents, low interactivity, and weak publicity. To better develop the Gallery, we have made some suggestions in its promotion, enriching the exhibition's content, and expanding the supporting services.

Every research has its limitations. Firstly, the number of interviewees is limited. We plan to do a questionnaire survey with more visitors, especially the users' experiences and perceived effectiveness in their learning. We would also like to interview other professional stakeholders, such as museum curators, researchers, and schoolteachers. Besides, we plan to expand our study to other museums and special exhibition themes (Lo et al., 2017; Chen et al., 2018).

References

Arinze, E. N. (17.05.1999). The role of the museum in society. *Lecture delivered at Guyana Workshop, the National Museum, Georgetown, Guyana*

Bates, S., & Ferri, A. J. (2010). What's entertainment? Notes toward a definition. *Studies in Popular Culture*, *33*(1), 1-20.

Bennett, T. (2013). *The Birth of the Museum: History, Theory, Politics*. New York, NY: Routledge.

Bobick, B., & Hornby, J. (2013). Practical partnerships: Strengthening the museum-school relationship. *Journal of Museum Education, 38*(1), 81-89.

Buhalis, D., & Foerste, M. (2015). SoCoMo marketing for travel and tourism: Empowering co-creation of value. *Journal of Destination Marketing & Management*, *4*(3), 151-161.

Challagalla, G., Venkatesh, R., & Kohli, A. K. (2009). Proactive postsales service: When and why does it pay off?. *Journal of Marketing*, *73*(2), 70-87.

Chen, Y., Chiu, D. K. W., & Ho, K. K. W. (2018). Facilitating the learning of the art of Chinese painting and calligraphy at Chao Shao-an Gallery. *Micronesian Educators, 26*, 45-58.

Connaway, L. S., & Powell, R. R. (2010). *Basic Research Methods for Librarians*, 5th Edition. Santa Barbara, CA: ABC-CLIO.

Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage publications.

Donald, J. G. (1991). The measurement of learning in the museum. *Canadian Journal of Education/Revue canadienne de l'éducation*, 16(3), 371-382.

Eger, J. M. (20.04.2014). *Applause for the Education Mission of Museums*. Retrieved February 6, 2020, from https://www.huffpost.com/entry/applause-for-the-educatio_b_4808926

Frey, B. S., & Meier, S. (2006). The economics of museums. *Handbook of the Economics of Art and Culture, 1*, 1017-1047.

Griffin, J. (2004). Research on students and museums: Looking more closely at the students in school groups. *Science Education, 88*(1), S59.

Harron, J. R., Petrosino, A. J., & Jenevein, S. (2019). Using virtual reality to augment museum-based field trips in a preservice elementary science methods course *Contemporary Issues in Technology and Teacher Education*, *19*(4), 687-707.

Hein, G. E. (2002). *Learning in the Museum*. New York, NY: Routledge.

Hein, G. E. (2006). Museum education. In: S. Macdonald (Ed.), *A companion to Museum Studies* (pp. 340-352), Hoboken, NJ, Wiley.

Hew, K. F., Huang, B., Chu, K. W. S., & Chiu, D. K. W. (2016). Engaging Asian students through game mechanics: Findings from two experiment studies. *Computers & Education*, *92*, 221-236.

Holden, J. (2004). *Capturing Cultural Value*. pp. 31-36, London, UK: Demos*.*

Hong, D., Chiu, D. K. W., Shen, V. Y., Cheung, S. C., & Kafeza, E. (2007) Ubiquitous enterprise service adaptations based on contextual user behavior. *Information Systems Frontier*, 9(4), 343-358.

International Council of Museums (n.d.). *ICOM Definition of a Museum*. Retrieved from http://archives.icom.museum/definition.html

Johnson, J. I., & Rassweiler, J. L. (2010). Connecting museum, school and community: Collaborations for learning. In: K. Fortney & B. Sheppard (Eds.), *An Alliance of Spirit: Museum and School Partnerships* (pp. 65-72), Washington D.C., American Association of Museums.

Jin Yong Gallery. (2017). Heritage museum. Retrieved from http://www.heritagemuseum.gov.hk/en_US/web/hm/exhibitions/permanent_exhibitions/permanent_jin-yong-gallery.html

Krendl, K. A., & Warren, R. (2004). Communication effects of non-interactive media: Learning in out-of-school contexts. In: D. H. Jonassen (Ed.), *Handbook of Research on Educational Communications and Technology* (pp. 59-74), Mahwah, NJ: Lawrence Erbaum.

Kuflik, T., Boger, Z., & Zancanaro, M. (2012). Analysis and prediction of museum visitors' behavioral pattern types. In: A. Krüger & T. Kuflik (Eds.), *Ubiquitous Display Environments* (pp. 161-176). Berlin, Germany: Springer.

Lieb, R. (2012). *Content Marketing: Think Like a Publisher -- How to Use Content to Market Online and in Socia* Indianapolis, IN: Que Publishing.

Lo P., Chan, H. H. Y., Tang, A. W. M., Chiu, D. K. W., Cho A., Ho, K. K. W., See-To, E. W. K. , He, J., Kenderdine, S., Shaw, J. (2019). Visualising and revitalising traditional Chinese martial arts – Visitors' engagement and learning experience at the 300 Years of Hakka KungFu. *Library Hi-Tech*, 37(2), 273-292.

Cho, A., Lo, P., & Chiu, D. K. W. (2017). *Inside the World's Major East Asian Collections: One Belt, One Road, and Beyond*. Cambridge, MA: Chandos Publishing.

Lord, B., & Piacente, M. (2014). *Manual of Museum Exhibitions*, 2nd Edition, Lanham, MD: Rowman & Littlefield.

Lundeen, M. (2010). *Museum Education: Creation, Implementation, and Evaluation of a Web-based Elm Fork Natural Heritage Museum.* Dissertation, The University of North Texas.

Mallos, M. (2012). Collaboration is the key: Artists, museums, and children. *Journal of Museum Education, 37*(1), 69-80.

Marshall, C., & Rossman, G. B. (2014). *Designing Qualitative Research*. Thousand Oaks, CA: Sage Publications.

Nilsson, T., Hogsden, C., Perera, C., Aghaee, S., Scruton, D. J., Lund, A., & Blackwell, A. F. (2016). Applying seamful design in location-based mobile museum applications. *ACM Transactions on Multimedia Computing, Communications, and Applications*, *12*(4), 1-23.

Pallud, J. (2017). Impact of interactive technologies on stimulating learning experiences in a museum. *Information & Management*, *54*(4), 465-478.

Scott, C. (2003). Museums and impact. *Curator: The Museum Journal, 46*(3), 293-310.

Scott, C. (2006). Museums: Impact and value. *Cultural Trends, 15*(1), 45-75.

Stephen, A. (2001). The contemporary museum and leisure: Recreation as a museum function. *Museum Management and Curatorship*, *19*(3), 297-308.

Szekely, I. (2012). Multiple perspectives on teen-centric art museum programs: A recent emergence. *International Journal of the Inclusive Museum, 5*(4), 25-36.

Waltl, C. (2006). Museums for visitors: Audience development - A crucial role for successful museum management strategies. *Proceedings of Intercom Conference: New Roles and Missions for Museums. Society for Technical Communication*, Taipei, Taiwan.

Weil, S. (2012). *Making Museums Matter*. Washington, DC: Smithsonian Institution.

Xidis, R. I. (2010). *Telling Stories, Making Connections, and Striving for Balance in Designing Museum Exhibition Experiences: A Case Study at the Chicago History Museum.* Northern Illinois University.

Ho, et.al., Appendix – Coding Tables

Table A1
Coding for Why Participants Come to Visit

Themes	Coding	Fans or not	
Visit specially	•I like his work and know it, so come to visit. •I searched for a place to play near Sha Tin, and I saw it.	Fans	2
Come over	•I came to visit the "Imperial Residence of Eight Emperors." •I came to see "Inventing le Louvre" and visit it when I have time. •I took my child to visit the "Children's Discovery Gallery."	Fans	4
	•I go to see other exhibitions and visit by chance.	Not fans	2
Visit the Hong Kong Heritage Museum	•Come out for a weekend tour. •I hear the Heritage Museum is very famous. •I have not been to the Heritage Museum for a long time.	Fans	3
	•My friend likes him. I accompany my friend. •For leisure, not been to Heritage Museum for a long time. •I just want to visit the Heritage Museum and experience the atmosphere of culture.	Not fans	3

Table A2
Coding for Influence on Leisure Travel

Themes	Coding ("-" means neutral or negative)	
A good place to relax for Hong Kong people	Suitable for family outings	•Suitable for taking parents to visit and relax. •Suitable for taking older children to visit. •If I have more time, I may enjoy talking with my dad about Jin Yong. •The act projecting is attractive to kids. •Knowledge here is presented in a leisure way, not a boring or strict one.
	Suitable for coming with friends	•It would be better to go with friends. •It can be one of the spots that locals bring their non-local friends there. •It is better to come with friends rather than the family because children may not know Jin Yong.
It can become a major tourist attraction in HK	•If my friends come to play in HK, I will suggest them to visit here. Coming to HK is not only shopping or eating; culture is also important. •It may be good for Hong Kong to develop new unique tourist attractions. •Jin Yong is more popular in Taiwan, Mainland China, and Singapore than HK. •People from Taiwan, Mainland China, and Singapore come to visit because they have the same cultural root and similar cultural tastes. •Maybe not so many people are fans of Martial arts novels, but Asian people will like it. •As long as the publicity is enough, tourists will come to visit.	
	-Foreigners may not be interested in it. -Not a major tourist site, but an important site, especially for his fans. However, it is in Shatin, far from the city center, so so convenient. -It cannot be a major one because its scale is too small. -It has little impact on the tourism industry in HK because publicity is not enough; not many people know.	

Table A3
Coding for Influence on Personal Development

Themes	Coding ("-" means neutral or negative)
Enhance the impression of Jin Yong's Novels	•Learn more with some background of stories. •Know more with lots of documents, including manuscripts, publications, newspapers, TV/movie reviews, and so on. •Previously believed Jin Yong's novels were first published as books, but actually, they appeared first as serialized stories in newspapers. Besides, the vivid images also changed my impression. Before, I thought the pictures are of low quality. •Better understand how his novels are diffused into different forms of popular culture, like TV series, radio dramas, stage dramas, and video games. •For non-locals, that may enhance their understanding and appreciation. For the younger generations, they may have a better understanding of these, and parents may talk about those products which they have seen when they are growing up.
	- Nothing changed for that our generation was quite familiar with it.
Rethink the influence of Jin Yong's novels on literature	•With the media information developed, there are temptations from South Korea, Japan, and other anime TV. Young people rarely read these books, which needs to pay attention to. •Jin Yong's works are the key elements of HK literature. •He has a great influence on the culture of HK. Most of the honors were given to HK. •It also has impacts on mainland China and Taiwan.
	- No rethink, know it before. - The exhibition is not related to this, but some from the different sets of publications and TV/movies in different regions.
Deeper understand Jin Yong and his creative process	• Know a little bit about him after the visit, but not much. •Before just read novels and didn't pay attention to the author, but now have a deep understanding of the author and understand that Jin Yong wrote his life experiences into novels. •It is interesting to look through the manuscripts and find out the creating of the famous literature, which helps understand his creative process. •Know Jin Yong's process of creating novels like how he comes up with all kinds of ideas and put them into practice.
	- Not much change, I had already understood Jin Yong's life before.
Rethink Jin Yong's influence on Hong Kong popular culture	•He is a well-known writer, now has a gallery to let people come to pilgrimage; he is mighty. •He and his works have a great impact on HK's popular culture. This exhibition urges me to rethink his importance. •Re-read his novels will not feel old but still very attractive, and it can continue for hundreds of years. My son also likes to read them; his audience is very wide. •He has won lots of awards and a worldwide reputation. •His novels were adapted into movies, TV shows, games ... almost all adults have read. •Every year, some works, like theme songs and drama series got popular again.
Encourage visitors to read books	•His novels have a deep cultural heritage and history, which are worth reading. So I took my son to see and try to let him be interested. •It can encourage people to see his novel, but may not affect to take the initiative to see other books. •Jin Yong made me fall in love with the book. •My wife is very impulsive in finding those books to read again. •I am particularly concerned about this area for that I like reading. •If I can find the English version, I shall try.
	- Whether to read has a relationship with personal character. - At least I don't have any interest in reading.

	- It is just for a brief promotion of Jin Yong's works. It is only general education. - Time is different, and there are too many temptations.
Provide an opportunity for memory	•For locals, it serves more like a memory. •The display stimulated people to retrieve the theme song to listen, to recall. •The characters, stills, and stories of some TV dramas [based on his novels] can be put into memory.

Table A4
Coding for Influence on Extracurricular Education of Hong Kong

Themes	Coding ("-" means neutral or negative)
Should incorporate and use it for teaching Liberal Studies	•Most of the novels written by Jin Yong have factual and historical basis. •For those who study Jin Yong literature, it is worthwhile to come for a visit. •Teachers should feel the environment, not just recite some questions to teach students.
	- Yes, but not necessarily.
Should organize students to visit and study	•It's good to organize tours which help know about Jin Yong and enlarge students' eyesight. •Visiting museums are suitable for children, and they can find surprises unknowingly. •It is a good place for the students to find new information by themselves and teach modern Chinese literature. •It can raise students' interest in learning knowledge about the culture. •It's interesting to learn more about history by visiting than to study history books alone. •At least Jin Yong's passion for books can infect visitors.
	- It depends on what is the educational purpose. There is a possibility that this visit will not achieve the purposes.

Table A5
Coding for the Shortcomings of Jin Yong's Gallery

Themes	Coding
Scale is small	•This gallery is too small. •It is not a big exhibition which will just take 20 minutes at most.
Content is not rich enough	•There is not enough content; for example, Jin Yong's books showed little, Jin Yong's world status, the translations of his novels, and how do readers of other countries feel have not been shown. •The information about the gallery is poor. The exhibits are inadequate, and there is nothing to look at, for example, there are only a few pages of the manuscript. •The gallery mainly describes Jin Yong's personality. His story is condensed in a corner. It is too little. It's better to focus on certain characters to attract children.
Interaction is not enough	•Standing in the child's position, its influence is not very strong, because the interaction is not high enough. It might be much better if it has high interactivity, more activity, or education's corner become bigger.
Lack of publicity	•Special publicity for the Jin Yong museum is very small. •Propaganda can attract more people to visit.

Acknowledgment: This research is partially supported by the HKU Knowledge Exchange Fund KE-IP-2018/19-36 granted by the University Grants Committee.

"Ginen Tåya' CHamoru" asta Lina'la' i Fino' CHamoru ginen Tinige'/Popblikasion yan Guinahan Libiria: From "No Chamorro" to Survival of the CHamoru Language through Publications and Library Resources

PERRY J.C. PANGELINAN, ROLAND SAN NICOLAS, University of Guam

CHamoru, is the indigenous language of Guam and the Mariana Islands and is said to be a part of the Austronesian phylum, specifically, in the Malayo-Polynesian family (Cunningham, 1992). Austronesia encompasses a great part of the Pacific and southeast Asia regions and spreads out to as far as Madagascar off the coast of the African continent (Perez, 2009). Interestingly, "the languages of Polynesia are linked to Fiji, whereas the Chamorro language is related to eastern Indonesia and the Philippines. The closest language to Chamorro is Bareic in Sulawesi (Celebes)" (Cunningham, 1992, p.13). Over time, the CHamoru language was on a decline as a result of external, colonial influences. However, efforts to preserve the indigenous language of Guam and the Marianas is much more urgent today.

Colonial Threats to the CHamoru Language: "No Chamorro"

Guam's colonial history had a tremendous impact on the CHamoru language. History shows that the colonizers endeavored to:

> introduce and impose their value systems and beliefs upon the Chamorros…The first task that faced the colonizing powers was to teach the Chamorros the colonizer's language, be it Spanish, Japanese or English. After all, how could Chamorros learn and assimilate, or be absorbed into a foreign culture, when the Chamorro language could not adequately express foreign concepts found… Thus, the first casualty of the various attempts to colonize Chamorros, to superimpose foreign values and rules, was the Chamorro language (Lujan, 2009, paras. 2,3)

For example, prior to World War II on Guam, the United States Navy put in place a public educational system, from grades 1 -12, on the island. Attendees were not permitted to speak the CHamoru language. Dr. Michael Bevacqua asserted that, "the curriculum was utterly colonial, meaning that it was based on prohibiting the Chamorro language, elevating all things American and molding the Chamorro into a properly civilized subject… tens of thousands of Chamorros were intentionally not taught Chamorro, and the result on the vitality of the language has been devastating" (Bevacqua, 2009). Furthermore, under the Naval administration of Guam, the then Governor, Roy Campbell Smith imposed Executive General Order #243 banning the use of the CHamoru language in public offices. The order stated in part that, "English is the official language of the Island of Guam. All persons employed in offices will talk nothing but English during office hours. Chamorro must not be spoken except for official interpreting" (Smith, 1917, p. 1). In addition, Clement (2009) asserted that "No Chamorro" policies were in place prohibiting the speaking of the language in public schools and that such policies continued even after the war period. Students in public schools who ignored such policies were disciplined or reprimanded in one way or another (Clement, 2009). Rogers related that the "Navy viewed Chamorro insistence on speaking the indigenous language as a cognitive deficiency on the part of the islanders" (Rogers, 2011, p. 149). Thus, the various "no Chamorro" rules, policies, and executive orders by the US Naval administration certainly had a negative impact to the survival of the indigenous language of the Chamorro people. However, threats to the native language did not stop with the US naval period but continued right into the Japanese takeover of Guam.

During the harsh rule of the Japanese occupation on Guam, from December 1941 to July 1944, the CHamoru language was further threatened. The colonizers required that the CHamoru people learn to speak the Japanese language. Schools were established to meet this goal. Lujan (2009) stated:

> Though different than the circumstances under which Spain and America arrived, the Japanese colonial period in Guam featured the very same colonial objectives to claim control of the island and exercise

> political authority over the Chamorros. And like Spain and America, Japan proceeded to exert its rule by imposing its language and culture. As quickly as they arrived, the Japanese imperial army and occupation unit implemented an educational program using their language. Children between the ages of 7 to 16 were assembled in the respective schools in the outlying districts and in Hagåtña. They were taught the Japanese language by rote (Lujan, 2009, para. 17)

The colonial history of Guam certainly highlighted the ramifications that rules, policies, and orders on the prohibition placed on the people of Guam by their colonizers, during the late 19th century and into the 20th century, to speak the language of their heart had on the survival of the CHamoru language. Now, in the 21st century Guam, more than ever, various peoples and organizations continue in their quest to revive the Chamoru language.

Guam Fights for the CHamoru language

Preserving the Chamorro language has been an ongoing effort of the people of Guam. For instance, the 12th Guam Legislature passed public law #12-132 that made both the English and Chamorro languages the official languages on Guam. Thus, the Chamorro people were able to speak their language anywhere on the island (Rogers, 2011). Additionally, the *Kumision I Fino' Chamorro*/Chamorro Language Commission was established by public law #7-162 on July 7, 1964, the mission of the organization was to set language policy for Guam. Later, Public Law 25-69, was passed creating the Department of Chamorro Affairs. Of course, there were numerous other public laws that were written and passed by the Guam Legislature that focuses on the preservation of the Chamorro language.

Furthermore, throughout the years, publications on this important topic have been authored and developed by knowledgeable, experienced, and respectable local scholars and researchers who are passionate and have a deep love for the CHamoru language. Most of these publications and resources are housed and curated at the University Libraries, Micronesian Area Research Center (MARC), University of Guam. On January 15, 2011, *I Mina'Trentai Unu Na Ligeslaturan Guahan (The 31st Guam Legislature)* recognized MARC for the Grand Opening of the *Chamoru Language Reference Room*, Certificate No. 2-31 (COR).

The following CHamoru language materials is a very small sample and representation of the various types of resources in MARC's holdings and collections. This 'teaching tip' focuses on several dictionaries and grammar books that are useful, effective and beneficial teaching and learning tools for CHamoru language teachers and students at all levels of education within the Guam and the surrounding region. It is hoped that this 'teaching tip' encourages local and regional teachers, educators, and members of the community not to forget these unique items and to take full advantage of these resources in disseminating knowledge about the CHamoru language.

1. Aguon, K. (2007). *Chamorro: A Complete Course of Study. Self-Published. Agaña, Guam.* Accessed at MARC, University of Guam.

The publication is a one-year complete course of study in the Chamorro language. The book begins with a pronunciation guide that includes the vowels and consonants sounds in the Chamorro language. Additionally, the text is divided into twenty-four lessons that contain dialogues, drills and *Chamorro Grammar Notes* which will provide students a basic understanding of the Chamorro language. The author says, "If taught properly, students will reach a comfortable level of literacy, fluency and writing ability" (Aguon, 2007, pg. xi). To add to the beauty of this hard cover book, color illustrations and photographs depicting life on Guam can be found throughout the lessons.

2. Aguon, K. (1971). *Let's Chat in Chamorro. Guam Economic Development Authority (GEDA), Agaña, Guam*. Accessed at MARC, University of Guam.

The Guam Business and Professional Women's Club has played an important role in the preserving of the Chamorro language. The text will help Chamorro teachers to teach their students the Chamorro language in simple grammatical construction which are highlighted in each of the conversational episodes presented in the content. The goal of the author is to "facilitate learning of the words, phrases and sentences through memorization, practice and imitation" (Aguon, 1971).

The contents of the publication are divided into three sections: 1) conversational dialogues with appropriate musical strands, 2) greetings, idioms, and other common expressions, and 3) a glossary of the words used in the main text. Additionally, photographs of Guam sceneries, people, and events that highlight the Chamorro culture is found throughout the booklet.

3. Department of Chamorro Affairs (2009). *The official Chamorro-English dictionary = Ufisiat na deksionarion Chamorro-Engles.* Accessed at MARC, University of Guam.

This publication is one the most significant works of The Department of Chamorro Affairs. The dictionary is an addition to the Hale'ta Book Series. Within the book, readers are able to use the *Pronunciation Guide* that includes six vowel sounds in the Chamorro alphabet, gain a better understanding of the dipthong, as well as understand the eighteen consonant sounds in the Chamorro language. The authors of this unique publication intended to maintain the custom and traditions of the native tongue. The primary purpose of this project is to provide a modern text that would help students at all levels of education have a better grasp of the language. This tool is helpful to Chamorro teachers in the public school setting to effectively teach the Chamorro language.

4. Safford, W. E. (l909). *The Chamorro language of Guam: A grammar of the idiom spoken by the inhabitants of the Marianne, or Ladrones, Islands.* Washington, D. C.: W. H. Lowdermilk & Co. Accessed at MARC, University of Guam. Available on JSTOR: http://www.jstor.org/stable/659055

This publication is a reprint from Safford, W. (1903), The Chamorro Language of Guam, *American Anthropologist, 5*(2), new series, 289-311. This account provides an analysis of the structure, historical development, and idiosyncrasies of the Chamorro language. It also serves as a useful comparison between the Malayan and Philippine languages and that of the vernaculars of the Pacific islands. An orthoepy, or correct pronunciation, of the Chamorro alphabet includes an in-depth description of the vowel and consonant sounds. The vowel sounds are explained as being long, short, or guttural, with the last being pronounced from the throat. Interestingly, the author describes the vowel pronunciations of Chamorro to be similar to the Italian and German languages. An explanation of the vowel sounds reveals that proper spelling of Chamorro words is difficult due to the similar sounds of the *e* and *i*, or the *o* and *u* thus allowing for various spellings of words. For example, the word for "male", *lahe*, is often spelled *lahi*. A useful feature in this publication is the use of German, Spanish, and French words being displayed alongside English words in an attempt to explain how both vowel and consonant sounds are pronounced.

The book is divided into 14 sections with the longest being focused on *Verbs* followed by *Adjectives*. The Verb section describes the sharp distinctions between transitive and intransitive verbs, infixes, reduplication, denominatives, as well as the many forms of conjugation. The *Adjective* section gives details on simple adjectives, prefixes, suffixes, and derivatives from nouns. Other sections describe nouns, pronouns, possessives, numeration, adverbs, prepositions, conjunctions, and interjections.

5. Topping, D. M. (Ed.). (1973). *Chamorro reference grammar.* Honolulu, HI: The University Press of Hawaii. Accessed at MARC, University of Guam.

The information for this book originated from the doctoral dissertation presented by the contributor in 1963. It improves upon prior attempts at grammar books on the Chamorro language by 1) including more data, 2) offering alternative interpretations of the data, and 3) providing a resource for Chamorro language speakers to learn more about the intricacies of the language. The Introduction gives a brief history of the Chamorro people, as well as the origin of its language and the languages it is related to. Earlier studies of the Chamorro language are also mentioned with accounts of *Pale' San Vitores*, *William Sanford*, *Frtiz, P. Callistus and Kats*, *Von Pressig*, and *H. Costenoble*. The compiler also discusses the influences of the Spanish, German, Japanese, and English languages had on the evolution of Chamorro. The second chapter details information about the sound system of the Chamorro language. This section explains the distinct sounds that transpires when one speaks Chamorro. Other chapters include Morphology: Words and Their Structure; and Syntax.

6. Topping, D. M. (Ed.). (1980). *Spoken Chamorro with grammatical notes and glossary*. 2nd edition. Honolulu, HI: The University Press of Hawaii. Accessed at MARC, University of Guam.

This book is a resource intended on assisting those interested in speaking Chamorro. To do this effectively, the editors used the spelling system adopted by the Marianas Orthography Committee in 1971 in an attempt to offer a reasonably accurate system that is reflective of the pronunciation rules agreed upon by renowned native speakers a decade earlier.

The book is divided into twenty-four lessons with a glossary at the end. The glossary includes words found in the lessons as well as frequently used words used in the daily language of Chamorro. The lengthiest lessons focused on the use of future tense in dialogue. Lesson 11 and Lesson 17 are reviews that incorporate specific drills and exercises from earlier lessons to assess mastery. This formative assessment allows users to evaluate their progress through the lessons and return to earlier lessons they did not master.

7. Topping, D. M., Ogo, P. M., Dungca, B. C. (Eds.). (1975). *Chamorro-English Dictionary.* Honolulu, HI: The University Press of Hawaii. Accessed at MARC, University of Guam.

Described by the editors as an intermediate step towards a working Chamorro dictionary, this resource improves upon prior publications of Chamorro dictionaries by 1) offering more entries, 2) providing fuller English explanations, and 3) including sample sentences for the sake of illustration. The work in this book was originally intended as a lexicon for *Spoken* Chamorro. The inspiration for this publication was the preservation of the Chamorro language. The principles adopted by The Marianas Orthography Committee in 1971 governed the spelling of the Chamorro words included in this Resource.

A list of English words with Chamorro translations is also included. This list was determined by the editors with the help of Computational Analysis of Present-Day American English and the Thorndike-Century Junior Dictionary. Flora and fauna of the Marianas that were included in this resource were provided by The Flora of Guam. A list of over a hundred Chamorro nicknames was provided by Mr. Rufino Tudela of Saipan. A short section of grammatical rules was provided in the Introduction.

8. Val, F. C. (Ed.). (1967). *Chamorro-English – English-Chamorro dictionary of the Marianas Island = Isla de Marianas.* 1st edition. Hong Kong: The Green Pagoda Press LTD.

The intended audiences for this reference book are tourists or new residents to Guam and the Marianas Islands. The crux of the book is a robust list of contemporary vocabulary words in Chamorro with appropriate English translations along with a list of English words with Chamorro translations. Phonetic pronunciations of the Chamorro alphabet, surnames, and numerals precede the dictionary.

Sections on *Useful Verbs*, *Useful Adverbs*, and *Useful Adjectives* provide lists of highly used English words with the appropriate Chamorro translations, oftentimes giving two or more entries that represent the word indicated. Other useful sections include the following: *Adjectives*, *Adverbs*, *Noun*, *Pronoun*, *Interjection*, *Interrogative*, *Preposition*, *Case*, *Conjunction*, *Prefix*, *Infix*, *Article*, and *Possessive* (suffixes). These sections list Chamorro words with appropriate usage while providing instructions and translations in English. The book closes with a section on lost and old Chamorro words, numerals, customs and parts of the coconut tree.

Conclusion

Guam's colonial history has shown the negative impact that external influences has had on the CHamoru language. Through the various "No Chamorro" policies, rules, and executive orders, placed on the islanders throughout history by Guam's colonizers, the Chamoru language was and continues to be on a decline. However, the hard work and efforts through various publications of local, regional, and other experts and scholars in the preserving of the Chamoru language has not gone unnoticed.

This 'teaching tip' highlights some of those works and resources. Again, the books listed above for this 'teaching tip' are a very small sample and representation of the thousands of Chamoru resources curated at the MARC, University of Guam. Teachers, educators, and members of the general community are reminded that these publications are available for research and are very useful tools for teaching the native language of Guam and the Mariana Islands.

References

Bevacqua, M. (2009). *Chåmpada: Social Competition for Status.* GuamPedia website. https://www.guampedia.com/champada-social-competition-for-status/

Clement, M. (2009). *English and Chamorro Language Policies.* GuamPedia Website. https://www.guampedia.com/us-naval-era-language-policies/

Lujan, P. (2009). *Role of Education in the Preservation of Guam's Indigenous Language*. GuamPedia Website. https://www.guampedia.com/role-of-education-in-the-preservation-of-guams-indigenous-language/

Perez, C. (2009). *Fo'na.* GuamPedia Website. https://www.guampedia.com/fuuna/

Rogers, R. F. (2011). *Destiny's landfall: A history of Guam*. (Rev. ed.). University of Hawai'i Press.

Smith, R. (1917). *Executive General Order No. 243.* Retrieved from the MARC, University of Guam.

Using Action Research to Implement Problem-Based Learning in Tax Ethics

MARTHA G. SUEZ-SALES, University of Guam

Using Action Research to Implement Problem-Based Learning in Tax Ethics

Synopsis: This paper details how an instructor used action research to create and implement a problem-based learning activity in an undergraduate income taxation class at a small university. Action research is a methodology that relies on inquiry, collaboration, and research to implement changes in organizations and education. Problem-based learning (PBL) is a form of active learning that foments students' meta-cognitive and problem-solving skills. The PBL activity was implemented in two action research cycles during spring and fall semesters with satisfactory results. The purpose of this account is to provide an example that other educators can use in adopting new teaching methodologies to adequately prepare accounting students to face future challenges of the profession.

Keywords: action research in education, problem-based learning; tax compliance, tax ethics, teaching methods

Introduction

Results from a local quantitative survey questionnaire assessing differences in ethical sensitivity between experienced and novice tax practitioners showed certain ethical vulnerabilities among young professionals and graduating accounting seniors (Suez-Sales, 2021). Novices and seniors were found to constantly rely on superiors for technical and social guidance. They lacked a general understanding of the applicability of professional standards for tax practice in the field. The tended to shift responsibility and accountability to superiors and were fully dependent on others to recognize ethical issues. Last, they were found to be susceptible to social influences pressure in their desire to fit in the workplace. This paper describes how action research was used to implement a problem-based learning (PBL) activity in an income taxation class at a small university to address these deficiencies. The core objective of action research is to generate actionable knowledge that is both relevant and rigorous (Coghlan & Brannick, 2014; Tenkasi & Hay, 2004).

In this paper, I explain how I relied on action research's iterative process to design, analyze, and monitor the implementation of a problem-based learning activity that foments ethics in tax practice. In line with action research methodology, I define my role as a teacher-researcher. The overarching objective of this activity is to enhance students' learning by adopting pedagogy that links education with practice. In the process, I aim to answer the following, RQ1: how can I modify my pedagogy to enhance learning through active learning and critical reflection in an undergraduate income taxation course?

For this purpose, my role is multifaceted. I am a teacher-research experimenting and evaluating the effectiveness of different teaching methods to improve retention and learning. I am also a facilitator guiding, probing, and encouraging students to exercise criticality and gain meta-cognitive skills. Last, I am also a reflective practitioner as espoused by Schön (1991), becoming aware of taken for granted assumptions and engaging in self-critique. These roles are described in the two iterative action research cycles that took place in 2019 spring and fall semesters at a land-grant university. Through my account as teacher-researcher, this article aims to augment our understanding of action research in accounting education to springboard our efforts in linking the classroom with 'real world' complexities and ease the transition for graduating students. A second objective of this article is to contribute to the tax ethics education literature.

This paper is organized as follows. A literature review, theoretical framework, and research questions are presented in the next section. The research design and methods, context, and action plan are introduced later. The two action research cycles are described in accordance with the theoretical framework introduced in previous sections. Each action research cycle explains the iterative process of planning, analyzing, and monitoring. The last section includes a discussion on implications, recommendations, and conclusion.

Literature Review

Active Learning and Problem-Based Learning

Many scholars have advocated for changes in accounting education away from a traditional teacher-centered approach toward teaching methods that encourage creativity, independence in learning, and are student-centered. Albrecht and Sack (2000) investigated the status of accounting education and their findings highlighted the lack of experience-based learning and the need to hone students' skills in place of content-driven pedagogies. Instead, educators should focus on developing professional skills in students and future professionals such as intellectual, problem-solving and critical thinking, technical, communication, interpersonal, etc. (Stanley & Marsden, 2012). This highlights the importance of professional capability which is different from just being competent at a job (Lizzio & Wilson, 2004). Being professionally capable means engaging in double loop learning (Argyris, 1977), questioning assumptions that affect professionals' practice and design new ways to respond to situations. Most traditional courses in accounting treat students as vessels that need to be "filled" with knowledge, known as the transmittal approach (Saudagaran, 1996). Alternatively, interpretation of knowledge is individual because each person frames 'new knowledge' based on unique experiences. In other words, students use their experience to understand the material and extent their knowledge. Therefore, pedagogies should emphasize active learning encouraging deep learning rather than simple memorization, while at the same time, fomenting lifelong learning. The purpose for the change in teaching methods is to instill and expose students to different critical perspectives (Boyce et al., 2012), to broaden their understanding and points of view. Teaching tools such as case studies, simulations, reflection, journals, etc. encourage critical thinking and problem solving which are integral components of deep learning (Phillips & Graeff, 2014).

PBL not only fulfils the need for skills in newcomers such as cognitive and problem-solving skills, interpersonal skills, and communication skills, but also foments evaluation of self-learning and the acquisition of new skills as the profession demands. Students need to acknowledge deficiencies and find ways to meet these knowledge gaps. Thus, the PBL method has two broad education objectives: students' knowledge enhancement via meta-cognition and development of problem solving skills (Barrows & Tamblyn, 1980).

The origins of problem-based learning (PBL) may be attributed to E.L Thorndike and John Dewey for influencing the application of experiential learning in education by emphasizing the scientific method as an inquiry approach to teaching and learning (Januszewski & Pearson, 1999). PBL has been widely applied in medical education beginning at McMaster University in Canada in the late 1960s as part of their undergraduate medical curriculum (Spaulding, 1969 cited in Milne and Mcconnell, 2001). PBL is defined as "learning that results from the process of working toward the understanding or resolution of a problem" (Barrows & Tamblyn, 1980, p. 1). Essentially, PBL has the same focus as action learning (AL) in education meaning that it is a practice-based approach (Coghlan & Pedler, 2006). AL and PBL have similar implementation characteristics: a problem requiring a solution, collaborative thinking in finding solutions, self-reflection and learning directed by a facilitator. While AL is applied to real life problems, PBL utilizes the same skill set in simulations that mimic reality (Scott, 2017). With PBL, students conduct research in finding solutions for the stated problem, and in the process, they acquire new knowledge and develop problem-solving skills. This leads to students taking responsibility for their own learning and learning how to learn (Milne & Mcconnell, 2001). This is congruent with the reflection-in-action and reflection-on-action approaches espoused by Schön (1991). According to Schön, a practitioner engages in reflection-in-action when he/she encounters a puzzling experience and simultaneously, the practitioner makes a conscious effort to look at the problem or solve the problem in a different way, creating 'new' knowledge about his/her practice and capabilities. Reflection-on-action entails revisiting and analyzing actions and experiences after they have taken place.

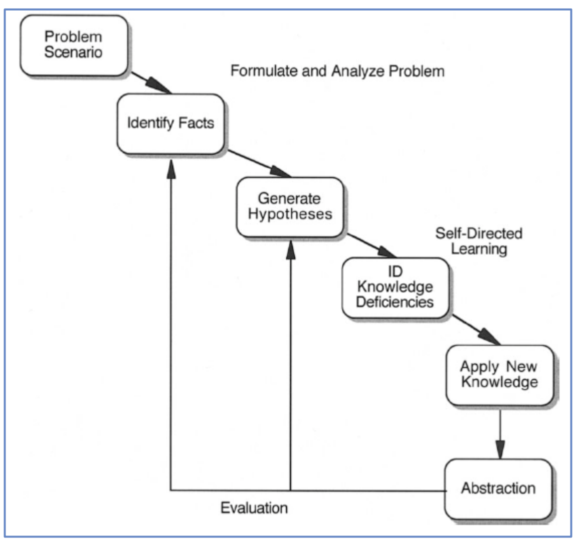
In accounting, some educators have relied on active learning strategies to teach ethical awareness in various formats, such as service learning in taxation (Christensen & Woodland, 2018); game-based learning in accounting (Adams, 2010); and mock classroom in auditing (Deno & Flynn, 2018). Active learning strategies used for ethical decision-making include PBL (Gerstein et al., 2016), reflection (Mintz, 2006), and Giving Voice to Values (GVV) (Miller et al., 2020). Outside accounting ethics education, PBL has been used to teach technical and problem solving skills mainly in financial accounting, forensic accounting, and auditing (e.g., Cottell Jr., 2010; Durtschi, 2003; Quirin & O'Bryan, 2015; Stanley & Marsden, 2012). However, published works documenting the use of PBL in a U.S. taxation course is scant.

PBL Framework

As stated, PBL is an effective educational tool aimed at developing students' capabilities through critical reflection while at the same time contributing to anticipatory socialization by exposing students' to expected professional scenarios (Lizzio & Wilson, 2004). I anticipate that implementation would be particularly challenging because most undergraduate students have limited exposure to active learning and are accustomed to traditional forms of instruction (teacher-centered as opposed to student-centered). Barrows and Tamblyn (1980) ascertained that a main characteristic of PBL is that the problem precedes knowledge. Milne and Mcconnell (2001) also highlighted this difference when comparing PBL to case studies. A case study approach takes place after students have been introduced to the content as a form of learning application. In PBL, students have none or limited prior knowledge of the concepts to be applied, and they are tasked with developing it themselves. However, Johnstone and Biggs (1998) recommended that in accounting education students should have been introduced to the content prior to PBL implementation, and that instructors acting as facilitators should possess the expertise necessary to adequately guide students' learning. These recommendations were taken into consideration in designing the PBL activity.

Following Hmelo-Silver's (2004) framework (Fig. 1), in the first step students are introduced to a complex scenario. To understand its significance and be able to design appropriate solutions, students gather relevant facts. Some of these may be obtained from the facilitator, others may require more research. Once they ascertain that they have collected sufficient data, they formulate a hypothesis and identify any areas that need further analysis and evaluation. A revision of the original hypothesis maybe necessary. In the final stages, students work collaboratively to find solutions and reflect on the new knowledge gained from this experience. Thus, in response to RQ1, PBL is an active learning strategy that seems adequate in honing novices and seniors independent thinking and ethical awareness in tax practice.

Figure 1: **The Problem-Based Learning Cycle**



Source: (Hmelo-Silver, 2004, p. 237)

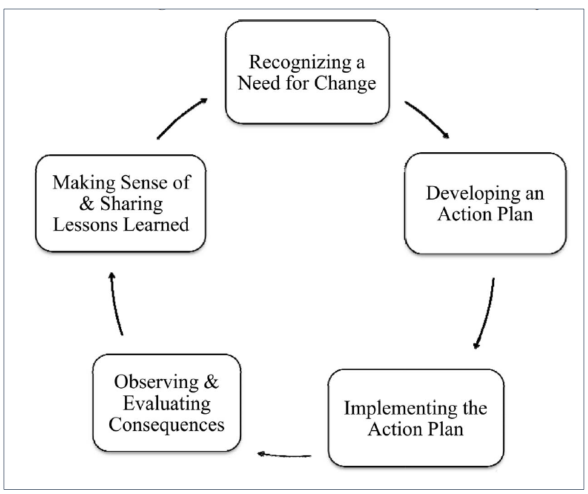
Research Design

Action Research

Action research is a scientific approach to solving organizational issues. It relies on scholarly research to find solutions to complex and ill-defined problems. In education, McNiff and Whitehead (2005) identified two main purposes of action research: to improve teaching practices and generate new knowledge. Action research has been widely used in education for practice change and development (e.g., Elliott, 1991; McNiff and Whitehead, 2005; Baumfield *et al.*, 2008; Norton, 2019), for curriculum development (e.g., Goldstein *et al.*, 2016; Oksiutycz and Azionya, 2017), and student engagement such as reflection and active participation (Gibbs et al., 2017). Action research has also been used in accounting education for the implementation of new teaching methods, tools, and activities (Cunningham, 2008; Curtis, 2017; Doran et al., 2011; McGowan, 2012) and for course development (Kelly et al., 2000).

The action research cycle begins with a definition of the problem and articulation of the research question that guide the following steps. This step of the action research cycle shown below was presented in an earlier section. The second step consist of developing an action plan informed by the literature review. A detailed action plan is introduced next. In the implementation phase, the teacher-research will collect data using a mixed method approach (QUANT => qual) to assess students' progress and effectiveness of the new teaching method. The fifth and last step involves reflecting on results and recalibrating the strategy repeating the cycle once again. Results are carefully evaluated even if they are unexpected or contrary to the initial objective. If the outcome is not what was initially expected or the problem is still unresolved to the teacher-research's satisfaction, the process is reinitiated beginning the iterative process (Coghlan & Brannick, 2014). The illustration below shows the five step action research framework relied upon for this activity adopted from (Curtis, 2017, p. 53).

Figure 2: Action Research Framework



Action Plan

Context: Background and Setting

The income taxation class meets twice per week for a total of 3.4 hours per week for 15 weeks per semester for spring (January – May) and fall (August – December). Students are required to take the class only for one semester either spring or fall to earn 3.0 credit hours towards their bachelor's degree in accounting. The course is delivered on ground at the university's campus. The content of this course is U.S. individual, corporation, and partnership income taxation and tax law. However, one of the learning outcomes of the course addresses ethics in tax practice: "understand tax-related professional and ethical obligations…" This learning objective is in accordance with the AICPA Model Tax Curriculum (Nellen et al., 2014). The PBL activity is designed to meet this course, program, and the university's institutional learning outcome as well as professional organizations. The table below shows this relationship:

Table 1: Course, Program, and Institutional Learning Outcome

Course LO	Program LO	Institutional LO	AICPA Core Competency (AICPA, 2018)
Understand tax-related and ethical obligations	Identify and analyze ethical problems that occur in the accounting/business environment.	Responsible use of knowledge, natural resources, and technology	Ethical conduct: Behave in a manner bound by ethical principles for the protection of society, including upholding the AICPA Code of Professional Conduct. Professional behavior: Practice in a manner that is consistent with the character and high standards set by the AICPA and the accounting profession.

The Tax PBL Activity

The activity was implemented approximately three to four weeks prior to the end of the semester in spring and fall in the year 2019 after completing the individual taxation section and introducing taxation of C corporation and partnership. The purpose of a PBL teaching strategy is to expose students to the problem first as they would in the 'real world' making them responsible for acquiring the knowledge needed to solve the proposed problem (Barrows & Tamblyn, 1980; Hmelo-Silver, 2004; Milne & Mcconnell, 2001). Nevertheless, some researchers recommend that technical knowledge should be introduced prior to the PBL activity (Johnstone & Biggs, 1998).

To strike a balance regarding these recommendations, students were introduced, in a short class lecture, to the AICPA Statements on Standards for Tax Services (AICPA SSTS) and IRS Circular 230 at least three weeks before the PBL activity was implemented, but they were not given any guidance during the activity to refer to these to solve the problem. Students were also introduced to tax research practices using various databases available online as part of chapter assignments in their textbook throughout the semester. The ethical situation presented in the problem is that of an intern with career ambitions searching for opportunities for advancement. Unfortunately, the work ethics of the prestigious firm where she obtained her internship is not as expected, and she is faced with the decision to either become a whistle-blower and ruin any career prospects or continue to embrace the current status quo (Suez-Sales, 2014). Although originally the case focused on AICPA SSTS (Nos. 1, 3, and 6) and Circular 230 (Sec. 10.21, 10.22, and 10.34), over the years, certain tax complexities were added mainly in relation to IRC Sec. 162(a)(1), reasonable compensation. This case is used as a conduit to raise students' awareness of ethical risks involved in working for an organization, and to become knowledgeable about their exposure to superiors and peers' actions through critical reflection.

Data Gathering

A pre and post-test was used to assess students' critical reflection. Student participants were asked to complete Kember *et al.* (2000) Reflection Questionnaire (Appendix A). The four parts tested in the questionnaire are habitual action, understanding, reflection, and critical reflection. Habitual action refers to tacit knowledge that becomes automatic involving limited cognition. Understanding involves thinking and learning using pre-existing knowledge. This is still considered superficial because the student does not know how to apply this knowledge or comprehend its rationale. Unlike habitual action and understanding, reflection focuses on the self, learning to question this new knowledge and transform perspectives. Critical reflection involves recognizing our values and beliefs system becoming conscious about our way of thinking, questioning assumptions, acknowledging strengths and weaknesses, and instigating transformation of self to improve one's practice. In a broad sense, this is what this activity aims to teach future professionals, fomenting deep and life-long learning. Students were asked to rate each item in a 5-point Likert scale (1 = "definitely agree", 7 = "definitely disagree"). The Cronbach's alpha values reported for the pre and post-tests are as follows:

Table 2: Cronbach's Alpha Values

ITEM TESTED	PRETEST	POSTTEST	Kember *et al.*, 2000
Habitual Action	0.777	0.726	0.621
Understanding	0.711	0.853	0.757
Reflection	0.794	0.767	0.631
Critical Reflection	0.684	0.872	0.675

The pre-test was administered prior to students being introduced to the PBL classroom tax ethics activity. Upon completion, the same group of students was asked to complete a post-test. Results from both the pre and post-test were compared and analyzed. Although the pre and post-tests were voluntary, the PBL activity was graded under "project". This is an integral part of students' overall grading in this course. This represents 15% of the overall grade for this course. The activity itself was graded in a scale from 0%-100%. In accordance with the university's grading system and as reported on the course syllabus. Students need to achieve at least of grade of "C" to successfully pass the course. Anyone awarded a grade less than a C (e.g., D or F) will have to repeat the course. The pre and post-test grades were not part of the students' final grade for the course and students were made aware of this before they volunteered.

Because the number of student participants was relatively low, nonparametric statistical procedures were considered to be more appropriate and effective than parametric techniques (Hollander et al., 2015). Descriptive statistics of the means and Wilcoxon signed rank test with a significance level of $p<.05$ were performed to compare the pre and post-tests for all groups of students. Inferences were made from this quantitative analysis about the effectiveness of the model in improving novices' awareness of ethical issues.

The sample for the qualitative method is the same as the quantitative strand. The blended approach was simultaneous QUAN + qual (Morse & Niehaus, 2009). To gather qualitative data, four open-ended questions were added to the post-test to give students a chance to voice their opinions about their learning and the new teaching methodology. These are: 1) What did you not like? 2) What did you like? 3) What would you change? 4) Complete the following phrase. The tax ethics activity helped me learn…

The qualitative method used to analyze students' feedback was thematic analysis following Braun and Clarke (2006). Thematic analysis is appropriate for data evaluation of students' feedback and its widely used in higher education research (Norton, 2019). Students' text responses for the above four questions were downloaded from Qualtrics as an Excel document. Each of these was read a couple of times to understand the meaning conveyed. In this respect, the questions were disregarded as to not associate or limit any emerging themes to them (Braun & Clarke, 2006). Categories that were repetitive were deleted while others were merged with the purpose of refining descriptions and concepts. For assurance, all transcripts were read again, and they were compared to the categories developed. Changes were made accordingly. The last step involved analyzing and making sense of findings in capturing students' thoughts, opinions, and critiques about the activity.

Table 3: Research Methods

Two Action Research Cycles			
Quantitative	Pre and post tests administered through Qualtrics	Number of respondents in cycle one (spring 2019 semester) and cycle two (fall 2019 semester) were 14 and 8, respectively. All	To assess the level of reflection and critical reflection achieved from the PBL activity. Students are not only expected to know practitioners' rules and regulations, but also be able to critically assess situations.

		participants were undergraduate students	
Quantitative	Grading rubrics (reports and essays (cycles one and two), forum discussions (cycle two only), reflective journal – cycle two only)	Number of participants was the same as indicated above	To assess students' performance in compliance with U.S. standards of learning in relation to the proposed learning outcomes for this activity. The learning outcomes address findings from the first stage. Examine the level of learning achieved by students (emerging, developing, proficient, or mastery).
Qualitative	Post-test open-ended questions (4)	Same as above	To allow for students to express their thoughts and opinions regarding this new teaching methodology and use these to make changes. Thematic analysis was used for this purpose.

First Cycle (Spring 2019)

Implementing the Action Plan

The learning outcomes (LOs) for the PBL tax activity are linked to the AICPA core competencies learning outcomes, and novices and graduating seniors' ethical weaknesses outlined in the Table below.

Table 4: Learning Outcomes

PBL Activity LO	**AICPA Core Competency (AICPA, 2018)**	**Ethical Weaknesses**
LO1: Apply professional codes and standards of tax practice (AICPA code of ethics, AICPA SSTS, and IRS Circular 230) in a tax compliance context.	Ethical conduct: Behave in a manner bound by ethical principles for the protection of society, including upholding the AICPA Code of Professional Conduct. Professional behavior: Practice in a manner that is consistent with the character and high standards set by the AICPA and the accounting profession.	Items a) and b)

LO2: Collaborate with peers in solving complex or difficult problems. Engage in participatory collaboration being empathic about others' positions even when presented with dissenting views.	Collaboration: work productively with diverse individuals in a variety of roles, with multiple interests in outcome to achieve acceptable and optimal results. Decision-making: objectively identify and critically assess issues and use professional judgment to develop appropriate decision models, identify and analyze the costs and benefits of alternative courses of action and recommend optimal solutions.	Items c) through f)

The PBL activity was first implemented in spring 2019 semester. The duration of the PBL activity was only for two classes (80 minutes each). Before and after class, students were asked to complete Kember *et al.*'s (2000) Reflection Questionnaire as a pre and post-test. Students were asked to form groups of three or four and discuss possible solutions for the tax issue supported by rules and standards for tax practice. There was a total of four groups. At the end of class, they were asked to submit a report online via the university's learning management system (LMS). The tax case and instructions of the PBL steps were always posted online and accessible to students.

Observing and Evaluating Action

Fourteen students volunteered to complete the pre and post-tests. Of the fourteen students, eleven students were between the ages of 20 and 24, and three were between the ages of 25 and 34. All students were in their senior year. The undergraduate accounting program requires that all students complete the Ethics for the Accountant course in their last semester prior to graduation. None of the students were currently enrolled in this course or had taken the course prior to this assignment. Results of the pre and post-tests are shown in Table 5. Three of the four constructs included in Reflective Questionnaire did not yield statistically significant results (p<.05). The Habitual Action was the only construct that was found to be significant. In this regard, the PBL activity did not improve students' criticality in practice and fail to foment deep learning.

Table 5: Pre and Post-test Results – First Cycle

	PRE-TEST (n=14)		POST-TEST (n=14)		DIFFERENCE TEST (p-value)	
VARIABLES	MEAN	MEDIAN	MEAN	MEDIAN	WILCOXON TEST	
HABITUAL	2.45	2.00	3.19	3.50	0.002	*
UNDERSTANDING	4.51	5.00	4.71	5.00	0.076	
REFLECTION	3.60	3.50	4.02	3.50	0.444	
CRITICAL REFLECTION	3.20	3.50	3.55	3.50	0.251	

*Indicates statistical significance at p<.05

LO1 was assessed using a grading rubric to evaluate students' inquiry, analysis, and writing mechanics. To assess LO2, students were asked to complete a peer evaluation where they were required to grade teammates' contributions to the group. Students used the same grading system for peer ratings. These grades were incorporated in their individual assessment of this project. The table below shows a synopsis of assessment results.

Table 6: Assessment Results – First Cycle

Learning outcome	**Assessment tool or measure**	**Target or benchmark**	**Assessment responsibility, analysis, and dissemination**
LO1	Reports & Essays grading rubric	Students will achieve a grade of "C" or better (70% is a passing grade)	All students (n=14) met this outcome achieving a grade of "B" (80% or higher).
LO2	Peer evaluations	Students will achieve a grade of "C" or better (70% is a passing grade)	86% of students (n=12) met this outcome. 79% of students (n=11) achieved Mastery level (includes a student that did not complete the RQ), 7% Proficient (n=1), 0% Developing; and 14% Emerging (n=2).

All fourteen students met LO1, and 86% (n=12) of students met LO2. This also includes students' peer evaluations where 91% rated their teammates' performance as deserving a grade of 90%-100% or A. The high grade in peer evaluations may be attributed to students' desire to remain in good terms with classmates in fear that negative evaluations may lead to discourse and confrontations. Even though these evaluations are confidential, because of the small class size and the low number of individuals per group, it is relatively easy for students to guess the identity of the evaluator. Although most students met the benchmarks stated for the two learning outcomes for this activity, they did not demonstrate an improvement in their ability to engage in reflection or critical reflection as shown in the pre and post-test findings discussed above.

Thematic analysis was used to analyzed students' feedback. Three themes emerged from this analysis. These are discussed below.

Theme: Emotions

The first theme that emerged from the analysis was emotions. Students experienced frustration and anxiety from the unstructured issues present and characteristic of problem-based learning. There was emphasis on vagueness and level of difficulty which they attributed to a lack of proper guidelines. They were uncomfortable with finding solutions to this type of problem. Hence, there was a tremendous backlash from almost all student participants (refer to Appendix B for sample quotes, coding, and themes).

Because the intent of PBL is to imitate reality, students are placed in complex situations with limited guidance from the instructor (Barrows & Tamblyn, 1980). Although, students were introduced to tax practitioners' standards of practice early in the semester, they did not consult these until later in the case. This anxiety and uncertainty is somewhat typical and aids in the process of sensemaking and deep learning (Mesa, 2019). These emotions may also be related to accounting students' personality traits. Accounting students tend to choose the profession based on how well their perception of stereotypes fits with their personality and preferences, and in general, accountants prefer unambiguous and structured situations (Rosen et al., 1984).

These negative emotions were counterbalanced by a sense of accomplishment that students seemed to enjoy and value. It could be assumed that while wrestling with emotions, students achieved a certain level of confidence in solving this type of unstructured problems as part of the process. It is also possible that students have become synthetized or institutionalized to 'cookie cutter' type of assignments based on traditional learning approaches where answers could easily be found online with limited thinking leading to surface learning (Dolmans et al., 2016).

Theme: Learning to Learn

There are several sub-themes that were part of the process of learning to learn. These are authenticity, meta-cognition, value of collaboration, and awareness. Authenticity was related to students' perception of the problem as being realistic, a true portrait of a 'real life' situation. According to Hung (2006) context is important in establishing a 'real world' feel to the problem and keep students focused. In this respect, the PBL activity seemed to have achieved this aim. Meta-cognition pertains to students' realization of their learning, formulating strategies for learning leading to moments of discovery.

Related to acknowledging ways of learning, students valued insights gain from collaboration. They perceived these interactions to enhance their learning and understanding of the topic. Another student found value in discourse and open discussion of issues and alternatives. The last sub-theme under this theme is awareness. Although the pre and post-test resulted in no statistically significant ($p<.05$) change to reflection or critical reflection, some students demonstrated a certain level of awareness about the meaning of the ethical situation portraited and its relevance to their own state of alertness.

Theme: Avoidance

Three students did not answer the question about what they did not like about the activity. Additionally, out of fourteen students, only eight provided any feedback (58%). This is what I call 'avoidance' meaning that students avoid having to make a stance, voice their opinions, or participate in the discussion. Typical answers include "n/a", "nothing", "anything", etc. Some scholars identify this behavior as communication apprehension (Gardner et al., 2005). Communication apprehension can be manifested in oral and/or written forms of communication. Some scholars have attributed this behavior to accounting students' personality characteristics assuming that they would choose careers that are perceived to have minimal interaction (Daly and Stafford, 1984 cited in Gardner *et al.*, 2005). However, it may also be related to culture. This topic is explored further in the second AR cycle, but students may be reluctant to provide negative opinions to someone of a position of power either out of respect or fear of retaliation (students were told that their answers were anonymous). Another possibility is that students may perceive that their input has no value to the instructor, and so they may think of it as a waste of time.

Making Sense: Review & Reflect

In evaluating the implementation of the first cycle, I observed that students were struggling to meet the time limit of 160 minutes (two class times) without being previously introduced to the PBL situation and context. The short period of time did not allow for quality professional research, collaborative discussion/discourse, and critical reflection. This shortfall should be taken into consideration in designing the second cycle for fall 2019 semester. Given that the course is spread over 15 weeks and that it was originally designed to focus on tax content, I will rearrange the schedule to allocate a maximum of 2 weeks to the PBL activity. This means that technical content will have to be truncated to fit the revised timetable.

Another issue highlighted during the first cycle implementation was the lack of critical reflection assessed by the pre and post-tests. This aspect was challenging for the teacher-researcher in achieving the 'right' balance in her role as facilitator without taking away students' ownership of their learning (Milne & Mcconnell, 2001). Because students lack practical and classroom experience with critical reflection, I acknowledged that this concept maybe difficult to grasp from the learner's perspective. As a result, in the future the teacher-research would initiate a line of inquiry to introduce students to criticality. Inquiry is an essential aspect of action learning (Argyris, 1977; Raelin, 2003), but it may not come naturally to students at this level without previous exposure and in a short period of time as is the case with this PBL activity. Furthermore, from previous classroom observations, a great number of accounting students were reluctant to openly ask questions or answers them. Thus, in order to improve student reflection, they will be required to complete a personal journal (Hmelo-Silver, 2004) for the duration of the activity. In summary, the PBL activity will be redesigned based on the findings from the first cycle.

Second Cycle (Fall 2019)

Implementing the Pedagogical Changes

Concerns identified in the first cycle were: (1) limited time; (2) lack of critical reflection; (3) communication apprehension (open dialogue). Learning outcomes 1 and 2 outlined in the first cycle remained intact. The most significant change in comparison to the first cycle was the incorporation of two new student learning outcomes (LOs). A personal value portrait (Gibson, 2008) was introduced to encourage reflection and understanding of students' value and belief system in respect to others defining their moral identities (Sheehan & Schmidt, 2015). This helps to assert clearly and concisely the student's ethical positioning and creates the lenses use to recognize, judge, intent, and behave ethically. A fourth SLO was added to specifically address and measure critical reflection. The PBL learning outcomes were aligned with the AICPA core competency learning outcomes, and novices/students' ethical weaknesses.

One junior and eight seniors undergraduate accounting students enrolled in the Income Taxation course for fall 2019 semester. Students spent a total of four classes (320 minutes), or two weeks, on this activity instead of two as done in the first cycle. This does not include time spent outside the classroom which is estimated to be approximately two to three hours or 120 to 180 minutes. In response to students' negative feedback regarding lack of clarity or instructions for this activity, a schedule was handed out in class on the first day detailing the various steps and requirements of each stage. To circumvent the short amount of time that we could dedicate to PBL without disrupting the prescribed course curriculum, students were asked to complete parts of this assignment outside the classroom. The purpose of these pauses was also to allow students to think, reflect, and respond more effectively. Hence, a hybrid method was adopted offering continuity between face-to-face meetings and online discussion. As mentioned in the previous section and to encourage open communication, I was willing to experiment by allowing students to engage in discussions online in the hope that this medium would encourage discourse and reflection.

Furthermore, the PBL activity was broken down into four mini assignments detailed in the table below. The grading scale was the same used in the first cycle. Three separate grading rubrics were used for assessment. One rubric was used to assess the quality of the online forum discussions; one was used to assess the quality of reflection and critical reflection based on three parts: introspective (personal value portrait), extrospection (collaborative participation), and transformation; and the third rubric was the same used in the first cycle. The latter was used to assess students' effective writing and technical knowledge. All rubrics incorporated the same four levels of learning explained in the first cycle.

Table 7: Tax Ethics PBL Activity Learning Steps- Second Cycle

Activity	Step	Timing
Classroom: Introduction to the PBL activity (context). Form groups. Discussion of the Personal Value Portrait assignment. Individual Homework assignment: Complete and prepare the personal value portrait (Gibson, 2008) as instructed in your personal journal.	Problem scenario	Day 1
Online Forum: Using your personal value portrait, read the scenario posted in LMS, and identify the ethical issue. Post your findings in the online forum designated for this case.	Problem scenario (cont'd), Identify fact, Research	Day 2

Online Forum: Post one insightful question to two different classmates' posts (one question per post). (HINT: challenge your classmates' assumptions and preconceptions). Answer your classmates' questions.	Generate hypothesis, ideas, research	Day 3
Classroom Group Assignment: Discuss with your group members possible solutions for this problem supported by rules and standards for tax practice. Submit your answers via LMS at the end of class.	ID knowledge deficiencies, research, Decide and Execute	Day 4
Personal journal DUE: a) Write your honest thoughts, ideas, questions/answers, reflections about the case and this project (i.e., I was surprised..., I learned that..., I wonder about..., etc.). b) What are your assumptions and beliefs about ethics and taxation, and the accounting profession in general? c) As a recent graduate student, what do you think your responsibilities and obligations will be in the workplace? d) How would you rate your ethical awareness and why? e) What role do you think that management and/or supervisor(s) have when there is an ethical dilemma? What is your role?	Apply new knowledge, abstraction/Reflection	N/A – students were required to turn in their journals before class (Day 5)

Observing and Evaluating Action

All nine students (four males and five females) enrolled in the fall 2019 semester Income Taxation course volunteered to take the pre-test that was administered on Day 1 of the tax ethics activity via Qualtrics. Only eight students volunteered to complete the post-test that was administered on Day 5, one student dropped the class prior to this day. Thus, the latter student's answers were deleted from the results reported here. Six students were between the ages of 20 and 24, and two were between the ages of 25 and 34. Table 8 below shows the statistical results of the Wilcoxon signed-rank test along with descriptive statistics for the variables tested. The habitual action and critical reflection variables were found to be statistically significant ($p<.05$). Like results in the first cycle, students' habitual action was improved by the tax ethics activity integrating and incorporating this knowledge in a routine fashion. However, for the second cycle, the activity also fomented and improved students' capacity for reflection. The latter being the focus of this PBL classroom activity.

Table 8: Pre and Post Test Results – Second Cycle

	PRE-TEST (n=8)		POST-TEST (n=8)		DIFFERENCE TEST (p-value)	
VARIABLES	MEAN	MEDIAN	MEAN	MEDIAN	WILCOXON TEST	
HABITUAL	2.33	2.00	3.39	3.50	0.024	*
UNDERSTANDING	4.78	5.00	4.67	5.00	0.564	
REFLECTION	4.06	4.00	4.39	4.00	0.343	

CRITICAL REFLECTION	3.44	3.50	4.28	4.00	0.037	*

*Indicates statistical significance (p<.05)

Table 9 summarizes the assessment results for each of the learning outcomes outlined earlier. Three students were non-native English speakers (37.5%). These students only achieved an "emerging" learning level (less than 70%) for the individual reflection assignments (personal value portrait, online forum discussion, and personal journal) of this activity. They had a difficult time expressing themselves and understanding the meaning of reflection and critical reflection. This may explain the low number of students that met LOs 2-4. Same as the first cycle, LOs 1 and 2 were met, but the percentage of students that met LO2 was lower (75%) when compared to the previous cycle (86%).

Table 9: Assessment Results – Second Cycle

ASSESSMENT PLAN MATRIX			
Learning outcome	**Assessment tool or measure**	**Target or benchmark**	**Assessment responsibility, analysis, and dissemination**
SLO1	Case Analysis	Students will achieve a grade of "C" or better (70% is a passing grade)	All students (n=8) met this outcome achieving a grade of "B" (80% or higher).
SLO2	Online Forum Discussions	Students will achieve a grade of "C" or better (70% is a passing grade)	75% of students (n=6) met this outcome. 50% of students (n=4) achieved Mastery level, 25% Proficient (n=2), 0% Developing; and 25% Emerging (n=2).
SLO3	Personal Value Portrait	Students will achieve a grade of "C" or better (70% is a passing grade)	62.5% of students (n=5) met this outcome. 12.5% of students (n=1) achieved Mastery level; 37.5% Proficient (n=3); 12.5% Developing (n=1); and 37.5% Emerging (n=3).
SLO4	Personal Journal	Students will achieve a grade of "C" or better (70% is a passing grade)	62.5% of students (n=5) met this outcome. 25% of students (n=2) achieved Mastery level; 12.5% Proficient (n=1); 25% Developing (n=2); and 37.5% Emerging (n=3).

Qualitative thematic analysis was also conducted on students' feedback upon completion of the PBL activity. Two themes emerged from the data: learning to learn and avoidance. These are discussed next.

Theme: Learning to Learn

The uncertainty and vagueness that students were preoccupied with in the first cycle was not as obvious in this cycle. It may be that the time spent reading and analyzing the problem increased the level of understanding and it became more manageable for students. Instead, the following sub-themes are discussed: authenticity, meta-cognition, value of collaboration, and awareness. Once again students corroborated findings from the first cycle and agreed that the PBL activity was perceived as depicting a complex 'real world' situation. This is in accordance with Hung's (2006) recommendations to enhance the effectiveness of this teaching tool.

Students were also cognizant about any new skills acquired from their participation in the activity. In comparison with other teaching methods that I have previously adopted, based on students' feedback and responses to the problem, the activity was valuable in fomenting meta-cognitive skills. Another sub-theme was collaboration. The importance of discussion and participation was also found to be valuable in the first cycle. For many, it serves as a springboard for thoughts and flow of ideas to find solutions to unstructured problems.

Awareness was mentioned in the first cycle, but it was not as frequent as it was in this cycle. I coded as 'awareness' any complexities in the ethical dilemma presented in the PBL activity. It indicates an 'aha' moment for students. It was not clearly stated or obvious, but there was a hint of awareness permeating through their narratives. These moments of awareness or realization were pertinent not only to the PBL scenario but also to students' current job positions or future roles as accounting professionals.

Theme: Avoidance

As in the first cycle, the theme avoidance refers to students 'dodging' the question by providing brief answers or ignoring it completely. Eight students (100%) provided feedback to questions one through three included with the post-test, and only six (75%) answered the fourth question about what they did not like about the case. In the second cycle, participation was 100% for Q1-3 as all students provided some type of feedback. This was a great improvement from the first cycle where only 58% of students provided feedback. Students were also willing to critique the activity more freely than in the first cycle. For example, some students found this activity to be disruptive and intrusive,

> *This was a very **subjective matter**. Ethics has too little criteria in creating conclusions**. I am uncomfortable with expressing my opinions.** I do not want **to ever encounter** an ethical issue that **places responsibilities on myself**, but I have to do what I have to do…I am not sure if I need to change my way of thinking because **I normally get provided with the right answers,** if I get any feedback at all. However, such a feedback may be inapplicable in this case, given the subjectivity and abstractness of ethics.* [Student P19].

In this respect, students in the second cycle were more willing to communicate as compared with the first.

Making Sense: Review and Reflect

In evaluating student learning outcomes, LO1 was met satisfactorily in both cycles. This confirms that students can effectively apply professional standards for tax compliance. LO2 was measured in both cycles, however, different instruments were used rendering any comparisons meaningless. In the first cycle, I used peer evaluations. However, after completing the course, some students stated that they were not being completely truthful. Thus, to increase objectivity of grading for collaboration, the following modifications were made. First, students' engagement was formally recorded in online forum discussions through the university's LMS in asynchronous format. The contributions of each participant were evaluated using a grading rubric providing a more accurate measure of learning for this outcome than on the first cycle. This could be the reason why the percentage of students that met this objective was lower on the second round than the first. LO3 was only measured in the second cycle. Only 62.5% (n=5) of students met this objective directed at inciting self-reflection of values and beliefs and verbalizing these in their personal journals. The premise behind this assignment is that students' core values are made implicit and can be used as a point of reference to compare their behavior with others. Finally, LO4 was newly introduced in the second cycle because the critical reflection was not incorporated in any learning outcome in the first cycle. The addition of LO3 and SLO4 yielded favorable results demonstrated by the statistically significant ($p<.05$) differences between the pre and post-test for the reflection construct.

Duke and Appleton (2000) concluded in a one-year long seminar for nursing students that reflective practice is achieved over time (developmental) and that some reflective abilities are more difficult to develop than others. Only three out of eight students received a grade of "A" (90% or higher) for this classroom activity (the average of combined grades received for the PBL mini assignments) with two students receiving grades below the 70% benchmark for the learning outcomes. Students' inability to engage in a critical reflective practice may be attributed to students' reluctance to share thoughts and experiences with classmates and/or the instructor. This could be due to cultural, or personality (introvert versus extrovert) differences. Some students struggled to articulate feelings, thoughts, and attitudes, and/or did not fully understand the project's purpose or importance. However, some students demonstrated an ability to critically reflect on their practice and ways to improve; discovering weaknesses such as social influence pressure reflected in their feedback or recognizing strengths by gaining the confidence to express themselves in front of others. Nevertheless, results from the second cycle highlight the need for continued evaluation and monitoring of teaching strategies. It also emphasized the importance of matching and adapting these strategies to accommodate students' idiosyncrasies in improving learning and meeting the prescribed student learning outcomes.

The following actionable knowledge was achieved from this activity:

a) <u>Lacking an understanding of the importance of the accounting profession:</u> as an instructor, I cannot with certainty state that student-participants have achieved this outcome because it was not directly measured or questioned. The feedback received only pertained to an appreciation for tax laws, standards, and regulations and its application, but there was no mention of the profession. It is only assumed that by learning the importance of the application of these standards that students would gain an appreciation and commitment for the profession.
b) <u>Lacking knowledge of professional standards for tax practice, their relevance and applicability in the field</u>: students achieved this objective in both AR cycles. This outcome was specifically assessed quantitatively in the first and second cycles as LO1. Additionally, students provided direct feedback (qualitative) on their renewed understanding of their applicability.
c) <u>Through e) these include overreliance on superiors, shifting responsibilities to others, and susceptibility to social influence pressure</u>: students' feedback (qualitative) acknowledged these issues. This was analyzed thematically under the theme 'Learning to Learn' in the second AR cycle where it was most clearly stated by participants. This 'awareness' process was very emotional for some students as they engaged in self-learning leading to criticality and awareness.
d) <u>Lacking initiative and leadership:</u> it was assumed that by engaging in collaborative participation students would gain leadership skills. However, neither the peer evaluation in the first cycle nor the grading rubric in the second cycle explicitly measured this outcome. Thus, I am unable to ascertain whether students have achieved this objective.

Although the second AR cycle was successful in implementing reflection in the classroom, not all students achieved learning outcomes 2-4. To increase the percentage of students that attain these outcomes, the following recommendations are proposed for a third AR cycle (outside the scope of this article):

- Experienced-based learning strategies such as PBL should be peppered throughout the income taxation course, not just ethics, and it should be incorporated in other accounting courses (financial and managerial accounting, and auditing) to expose students to different contexts and situations (Hung, 2006) to enhance their understanding of accounting practices.
- Introduce professional standards early in the program to stimulate tacit knowledge and contribute to anticipatory socialization.
- It is implied from the findings described that students had a challenging time understanding, applying, and achieving critical reflection and transformation. Most of them were overwhelmed and some were even reluctant to critically think about their personal values and ways of improving. Watson and Kenny (2014) suggest having students define what critical reflection means to them and to introduce these skills gradually and repeatedly to develop its practice.

Conclusion

The tax ethics PBL activity was designed to engage students in critical reflection, questioning assumptions and biases in dealing with ethics for tax practice to answer the research question, how can I modify my pedagogy to enhance learning and application in the income taxation course at a small university? The changes implemented during the first and second cycle yielded significant results ($p<.05$) related to two constructs: habitual learning and critical reflection. Ethics cases focused on tax technical aspects are invaluable, but may not be sufficient to prepare students to face social pressures from colleagues, peers, family, or superiors in the workplace (Baker, 2014). Reflection in and on action (Schön, 1991) was introduced by having students reflect on their practice while completing the various steps of this assignment and after submitting their answers to the online forum and group assignment in their personal journals. A comparison between the two cycles was described and differences were analyzed. Recommendations were made for future classroom applications. The PBL activity was effective in achieving the set learning objectives and this pedagogy will be adopted permanently in the classroom and the undergraduate accounting program in general.

Although the majority of the PBL outcomes were achieved, its effectiveness was only measured in one or two weeks as part of this study. There is no reassurance that students would apply these skills, knowledge, and awareness to the workplace once they enter the workforce. However, it is expected that the implementation of experienced-based learning rather than traditional teaching methods provided a glance of 'real' ethical situations that are commonly encountered by professionals and the skills that are needed to overcome these complexities. This portrayal should help ease the transition from the dependability and comfortability of the classroom to the uncertainties, ambiguities, and responsibilities of the business environment.

References

Adams, B. L. (2010). Using Game-Based Learning to Raise the Ethical Awareness of Accounting Students. *Business Education Innovation Journal*, *2*(2), 86–93. Business Source Complete. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=58141722&site=eds-live&scope=site

AICPA. (2018). *The AICPA Pre-certificationCore Competency Framework*. AICPA.

Albrecht, W. S., & Sack, R. J. (2000). *Accounting Education: Charting the Course through a Perilous Future: Vol. No. 16*. American Accounting Association. http://aaahq.org/pubs/AESv16/toc.htm

Argyris, C. (1977). Double loop learning in organizations. *Harvard Business Review*, *55*(5), 115–125.

Baker, D. F. (2014). When Moral Awareness Isn't Enough: Teaching Our Students to Recognize Social Influence. *Journal of Management Education*, *38*(4), 511–532. ehh. http://search.ebscohost.com.ezproxy.liv.ac.uk/login.aspx?direct=true&db=ehh&AN=96935738&site=eds-live&scope=site

Barrows, H. S., & Tamblyn, R. M. (1980). *Problem-based learning. An approach to medical education.* (Electronic Resource 0). Springer Pub. Co.; cat00003a. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00003a&AN=lvp.b3066500&site=eds-live&scope=site

Baumfield, V., Hall, E., Wall, K., & Baumfield, V. (2008). *Action research in education: Learning through practitioner enquiry* (Electronic Resource 0; Second edition.). SAGE.

Boyce, G., Greer, S., Blair, B., & Davids, C. (2012). Expanding the Horizons of Accounting Education: Incorporating Social and Critical Perspectives. *Accounting Education*, *21*(1), 47–74. http://www.tandfonline.com/doi/abs/10.1080/09639284.2011.586771

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Christensen, A. L., & Woodland, A. (2018). An Investigation of the Relationships Among Volunteer Income Tax Assistance (VITA) Participation and Ethical Judgment and Decision Making. *Journal of Business Ethics*, *147*(3), 529–543. https://doi.org/10.1007/s10551-015-2957-x

Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organization* (4th ed.). Sage. Kindle

Coghlan, D., & Pedler, M. (2006). Action learning dissertations: Structure, supervision and examination. *Action Learning: Research and Practice*, *3*(2), 127–139. https://doi.org/10.1080/14767330600885797

Cottell Jr., P. G. (2010). Shreffler Stores Accounting Issues Related to Consumer Receivables, Asset Impairment, and Discontinued Operations: A Problem-Based Learning Unfolding Problem. *Issues in Accounting Education*, *25*(4), 775–787. bth. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=55546012&site=eds-live&scope=site

Cunningham, B. M. (2008). Using Action Research to Improve Learning and the Classroom Learning Environment. *Issues in Accounting Education*, *23*(1), 1–30. https://doi.org/10.2308/iace.2008.23.1.1

Curtis, S. M. (2017). Pathway to Reform: Developing Action Research Capacity in Accounting Education. *Issues in Accounting Education*, *32*(3), 51–79. https://doi.org/10.2308/iace-51586

Deno, C. F., & Flynn, L. (2018). Ethical Standards for Accounting Students: A Classroom Exercise on Internal Controls. *Journal of Business & Educational Leadership*, *7*(1), 4–13. Business Source Complete. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=129817796&site=eds-live&scope=site

Dolmans, D. H., Loyens, S. M., Marcq, H. l., & Gijbels, D. (2016). Deep and surface learning in problem-based learning: A review of the literature. *ADVANCES IN HEALTH SCIENCES EDUCATION*, *5*, 1087. edsbl. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN380814503&site=eds-live&scope=site

Doran, J., Healy, M., McCutcheon, M., & O'Callaghan, S. (2011). Adapting Case-Based Teaching to Large Class Settings: An Action Research Approach. *Accounting Education*, *20*(3), 245–263. https://doi.org/10.1080/09638180.2011.583742

Duke, S., & Appleton, J. (2000). The use of reflection in a palliative care programme: A quantitative study of the development of reflective skills over an academic year. *Journal of Advanced Nursing*, *32*(6), 1557–1568. https://doi.org/10.1046/j.1365-2648.2000.01604.x

Durtschi, C. (2003). The Tallahassee BeanCounters: A Problem-Based Learning Case in Forensic Auditing. *Issues in Accounting Education*, *18*(2), 137. Business Source Complete. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9990073&site=eds-live&scope=site

Elliott, J., Dip. Phil. Ed. (1991). *Action research for educational change.* (Sydney Jones Library Grove Wing Ground Floor 13). University of Liverpool Catalogue. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00003a&AN=lvp.b1621647&site=eds-live&scope=site

Gardner, ClareT., Milne, MarkusJ., Stringer, CarolynP., & Whiting, RosalindH. (2005). Oral and written communication apprehension in accounting students: Curriculum impacts and impacts on academic performance. *Accounting Education*, *14*(3), 313–336. https://doi.org/10.1080/06939280500077269

Gerstein, M., Winter, E., & Hertz, S. (2016). Teaching Accounting Ethics: A Problem-Based Learning Approach. *Journal of Accounting Ethics and Public Policy*, *17*(1). https://papers.ssrn.com/abstract=2732093

Gibbs, P., Cartney, P., Wilkinson, K., Parkinson, J., Cunningham, S., James-Reynolds, C., Zoubir, T., Brown, V., Barter, P., Sumner, P., MacDonald, A., Dayananda, A., & Pitt, A. (2017). Literature review on the use of action research in higher education. *Educational Action Research*, *25*(1), 3–22. https://doi.org/10.1080/09650792.2015.1124046

Gibson, P. (2008). Teaching ethical decision making: Designing a personal value portrait to ignite creativity and promote personal engagement in case method analysis. *Ethics & Behavior*, *18*(4), 340–352. jlh. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=jlh&AN=105605754&site=eds-live&scope=site

Goldstein, B. L., Ick, M., Ratang, W., Hutajulu, H., & Blesia, J. U. (2016). Using the Action Research Process to Design Entrepreneurship Education at Cenderawasih University. *Procedia - Social and Behavioral Sciences*, *228*, 462–469. edselp. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S1877042816309971&site=eds-live&scope=site

Hmelo-Silver, C. E. (2004). Problem-Based Learning: What and How Do Students Learn? *Educational Psychology Review*, *16*(3), 235. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.23363859&site=eds-live&scope=site

Hollander, M., Chicken, E., & Wolfe, D. A. (2015). *Nonparametric statistical methods* (Electronic Resource 0; 3rd ed.). John Wiley & Sons, Inc.

Hung, W. (2006). The 3C3R Model: A Conceptual Framework for Designing Problems in PBL. *Interdisciplinary Journal of Problem-Based Learning*, *1*(1), 55–77. eric. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1055414&site=eds-live&scope=site

Januszewski, A., & Pearson, R. (1999). *Problem-Based Learning: A Historical Analysis.* eric. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED436165&site=eds-live&scope=site

Johnstone, K. M., & Biggs, S. F. (1998). Problem-based learning: Introduction analysis, and accounting curricula implications. *JOURNAL OF ACCOUNTING EDUCATION*, *3/4*, 407. British Library Document Supply Centre Inside Serials & Conference Proceedings. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN055375574&site=eds-live&scope=site

Kelly, M., Davey, H., & Haigh, N. (2000). Use of the Action-Research Methodology in the Development of Accounting Education. *Accounting Educators' Journal*, *12*, 1–11.

Kember, D., Leung, D. Y. P., Jones, A., Loke, A. Y., McKay, J., Sinclair, K., Tse, H., Webb, C., Wong, F. K. Y., Wong, M., & Yeung, E. (2000). Development of a Questionnaire to Measure the Level of Reflective Thinking. *Assessment & Evaluation in Higher Education*, *25*(4), 381–395. ehh. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=3990961&site=eds-live&scope=site

Lizzio, A., & Wilson, K. (2004). Action Learning in Higher Education: An investigation of its potential to develop professional capability. *Studies in Higher Education*, *29*(4), 469–488. ehh. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=13886320&site=eds-live&scope=site

McGowan, S. (2012). Going Beyond the Numbers in Teaching Financial Accounting: The Newsletter as an Assignment Option. *Issues in Accounting Education*, *27*(4), 1095–1117. https://doi.org/10.2308/iace-50207

McNiff, J., & Whitehead, J. (2005). *Action research for teachers. A practical guide.* (Electronic Resource 0). David Fulton Publishers; cat00003a. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00003a&AN=lvp.b4314497&site=eds-live&scope=site

Mesa, W. B. (2019). Accounting students' learning processes in analytics: A sensemaking perspective. *Journal of Accounting Education*, *48*, 50–68. Scopus®. https://doi.org/10.1016/j.jaccedu.2019.06.003

Miller, W. F., Shawver, T. J., & Mintz, S. M. (2020). Measuring the value of integrating GVV into a standalone accounting ethics course. *Journal of Accounting Education*, 100669. https://doi.org/10.1016/j.jaccedu.2020.100669

Milne, M. J., & Mcconnell, P. J. (2001). Problem-based learning: A pedagogy for using case material in accounting education. *Accounting Education*, *10*(1), 61–82. bth. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=5180797&site=eds-live&scope=site

Mintz, S. M. (2006). Accounting ethics education: Integrating reflective learning and virtue ethics. *Journal of Accounting Education*, *24*(2), 97–117. ScienceDirect. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S074857510600039X&site=eds-live&scope=site

Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Left Coast Press. Kindle

Nellen, A., Nichols, N., Purcell III, T., Rhoades-Catanach, S., Rubin, J., Sawyers, R., & Spilker, B. (2014). *AICPA Model Tax Curriculum*. AICPA. https://www.aicpa.org/content/dam/aicpa/interestareas/tax/careers/downloadabledocuments/model-tax-curriculum.pdf

Norton, L. (2019). *Action research in teaching & learning: A practical guide to conducting pedagogical research in universities* (Second). Routledge, Taylor & Francis Group. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1926353

Oksiutycz, A., & Azionya, C. (2017). Using Action Research for Curriculum Development and Improving the Learning Experience: A Case Study. *South African Journal of Higher Education*, *31*(3), 193–208. ehh. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=123945682&site=eds-live&scope=site

Phillips, M. E., & Graeff, T. R. (2014). Using an In-Class Simulation in the First Accounting Class: Moving From Surface to Deep Learning. *Journal of Education for Business*, *89*(5), 241–247. bth.

https://liverpool.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=96920721&site=eds-live&scope=site

Quirin, J. J., & O'Bryan, D. (2015). The Marriage of Sharon and Henry Sawbones: A Forensic Case Illustrating the Use of a Tax Return in a Litigation Advisory Services Context. *Issues in Accounting Education*, *31*(3), 347–354. https://doi.org/10.2308/iace-51206

Raelin, J. A. (2003). *Creating leaderful organizations: How to bring out leadership in everyone*. Berrett-Koehler. Kindle

Rosen, L. S., Amernic, J. H., & Beechy, T. H. (1984). Accounting Students' Performance and Cognitive Complexity: Some Empirical Evidence. *Accounting Review*, *59*(2), 300. Business Source Complete. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=4488927&site=eds-live&scope=site

Saudagaran, S. M. (1996). The First Course in Accounting: An Innovative Approach. *Issues in Accounting Education*, *11*(1), 83–94. bth. https://liverpool.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9605080854&site=eds-live&scope=site

Schön, D. A. (1991). *The reflective practitioner: How professionals think in action.* (Leahurst Campus Library HD8038.A1.SCH). London : Ashgate, 1991.; cat00003a. https://liverpool.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat00003a&AN=lvp.b1807527&site=eds-live&scope=site

Scott, K. S. (2017). An Integrative Framework for Problem-Based Learning and Action Learning: Promoting Evidence-Based Design and Evaluation in Leadership Development. *Human Resource Development Review*, *16*(1), 3–34. edselc. https://doi.org/10.1177/1534484317693090

Sheehan, N. T., & Schmidt, J. A. (2015). Preparing accounting students for ethical decision making: Developing individual codes of conduct based on personal values. *Journal of Accounting Education*, *33*(3), 183–197. ScienceDirect. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S0748575115000469&site=eds-live&scope=site

Stanley, T., & Marsden, S. (2012). Problem-based learning: Does accounting education need it? *Journal of Accounting Education*, *30*(3–4), 267–289. edselp. https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S0748575112000498&site=eds-live&scope=site

Suez-Sales, M. G. (2021). A Comparative Study in Ethical Awareness of Experienced and Novice Tax Practitioners in Guam. *Manuscript Submitted for Publication*.

Tenkasi, R. V., & Hay, G. W. (2004). Actionable knowledge and scholar-practitioners: A process model of theory-practice linkages. *Systemic Practice and Action Research*, *17*(3), 177–206. http://link.springer.com/article/10.1023/B:SPAA.0000031697.76777.ac

Watson, G. P. L., & Kenny, N. (2014). Teaching Critical Reflection to Graduate Students. *Collected Essays on Learning and Teaching*, *7*(1). https://eric.ed.gov/?id=EJ1060232

APPENDIX A

Reflection Questionnaire

Please fill in the appropriate circle to indicate your level of agreement with statements about your actions and thinking in this course.

5—Strongly agree

4—Agree

3—Neither agree nor disagree

2—Disagree

1—Strongly disagree

Habitual Action

1. When I am working on some activities, I can do them without thinking about what I am doing.
5. In this course we do things so many times that I started doing them without thinking about it.
9. As long as I can remember handout material for examinations, I do not have to think too much.
13. If I follow what the lecturer says, I do not have to think too much on this course.

Understanding
2. This course requires us to understand concepts taught by the lecturer.
6. To pass this course you need to understand the content.
10. I need to understand the material taught by the teacher to perform practical tasks.
14. In this course you have to continually think about the material you are being taught.

Reflection
3. I sometimes question the way others do something and try to think of a better way.
7. I like to think over what I have been doing and consider alternative ways of doing it.
11. I often reflect on my actions to see whether I could have improved on what I did.
15. I often re-appraise my experience so I can learn from it and improve for my next performance.

Critical Reflection
4. As a result of this course I have changed the way I look at myself.
8. This course has challenged some of my firmly held ideas.
12. As a result of this course I have changed my normal way of doing things.
16. During this course I discovered faults in what I had previously believed to be right.

Source: (Kember et al., 2000)

APPENDIX B

Students' Feedback: Representative Participants' Quotes for Each Theme Identified			
Theme	**Sub-Theme**	**AR1: SPRING 2019**	**AR2: FALL 2019**
Emotions	**Emotions**	**CODES: Uncomfortable dealing with vagueness, how to handle difficult situations, finding solutions**	**CODES: Uncomfortable with vagueness, annoyed,**
		"I did not like how difficult it was to find the answer. I feel like there was a couple possible answers and deciding which was the most appropriate made it more difficult" [P6]	"I did not like how unethical the company was. I was getting annoyed reading about the unethical things that they have done." [P6]
		"I liked reading the case given. It was interesting and enjoyable to find solutions for the case" [P2]	

Learning to Learn	Authenticity	**CODES: Realistic, happens in the real world,**	**CODES: Realistic, happens in the real world,**
		"I really liked the content of the case study. The situation felt very possible to happen". [P7]	"[T]the story line of the assignment. It portrays the real world where there will be a lot of pressure and sometimes the right way is in the gray area" [P4]
	Meta-cognition	**CODES: Knowing, new found abilities, learn to use and understand**	**CODES: How to handle difficult situations, critical thinking skills, learn from mistakes**
		"I liked how my group members and I had the freedom to just write about what we thought about the whole scenario and having to find the tax information needed on our own. It allowed us to independently learn" [P1]	"This activity helped me become aware of possible situations that may happen in real life and it helped me learn from my mistakes". [P7]
	Value of Collaboration	**CODES: Another person's insight, class participation, debate, hear all perspectives**	**CODES: Communicate with colleagues**
		"I would not change anything at all...it was fun for class participation where each group competed with each other and debated which solution or route should Jessica take. By doing this, it allowed students to hear all perspectives" [P8]	[I liked] "having a discussion forum with my classmates, so that I can learn about their thoughts and take it into consideration into trying to form my own decision-making skills that is fair and ethical" [P3]
	Awareness	**CODES: Realization**	**CODES: Unaware of possible conflict of interest**
		"I actually liked how the case made me analyze and think about the ethical issues that were happening within the firm. It also made me understand the importance of cross-checking even the top managers or bosses of a company" [P4]	"People behave different in terms of ethicality & perceive ethics in unique ways because they place higher importance/value on different aspects of their work life and their personal life than others. This difference can, ultimately, influence how ethical behaviors are practiced" [P8]
Avoidance	Avoidance	**CODES: Avoidance**	**CODES: Avoidance**
		CATEGORY: Avoidance	**CATEGORY: Avoidance**
		"Nothing at all." [P1]	"Nothing." [P2]

'Oceans of Energy within Micronesia' Micronesian Adult Learners in Education: University of Guam Partnerships within Micronesia and the Western Pacific

JACKYSHAW N. GREEN, JOANN DIEGO, University of Guam

Introduction

As a region of Oceania, the Micronesian islands are separated by oceans of energy culturally motivated by self-determination and distant learning rooted in indigenous perseverance. Indigenous people despite the colonization or influence of countries retain various influences of social, economic, cultural, and political institutions in alignment with their conquerors (United Nations Educational, Scientific, and Cultural Organization, Hamburg (Germany). Inst. For Education, 1999). Individuals or Indigenous people identify with a distinct cultural and social group sharing collective ancestral ties to the geographic location and natural resources of which they settle. Geographic location, limited resources, and the inclination to advance with modern society has motivated many Indigenous groups in the Western Pacific to search for ways to improve education based on collective determination fostered through fulfillment of responsibilities, positive relationships with oneself, one's family, and the community (University of Guam, 2021a). Many Indigenous groups in the Western Pacific engage in distance learning programs at the University of Guam (UOG), particularly the School of Education (SOE) include natives of Yap, Pohnpei, Kosrae, and Chuuk (University of Guam, 2021b).

Adult Learner

Andragogy, modernly known as adult learning theory, originated with theorist Malcom Knowles in 1968. Knowles (1968) aimed to demonstrate the distinct differences between the learning styles of adult and children by conducting research amid a business professional development. Five assumptions developed through this process include: (a) self-concept, (b) adult learner experience, (c) readiness to learn, (d) orientation of learning, and (f) motivation to learn (Benakanahalli, 2021). For adults, learning is a tool leading to success. Adult learners are motivated by self-directed interest and desired outcomes (Benakanahalli, 2021). Adult learners are motivated through the merit, value, and objective of the education being sought otherwise the learner will quickly disengage (New England Institute of Technology, 2021).

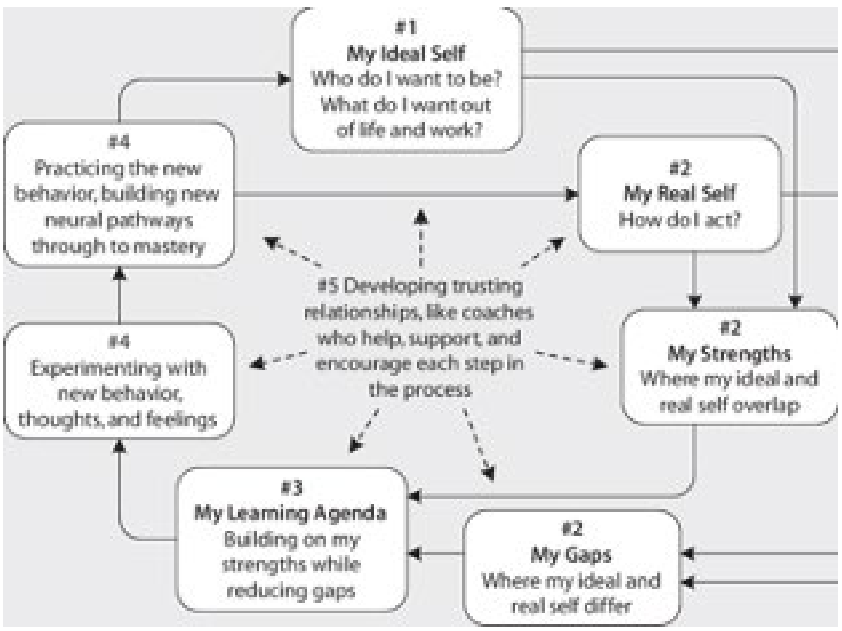
Throughout the learning process, adult learners serve as facilitators applying life experiences as guiding vessels to help navigate conceptual understanding (Robinson & Persky, 2020). Comprehension of skills are derived from real-life experiences, relatable events, and forges on current experiences generating relevance and conceptual understanding (Robinson & Persky, 2020). Although adult learners are equipped with individual experiences, it is essential that adult learners are conscious of individual perceptions that may result in misinformation (New England Institute of Technology, 2021). Adult learning involves personal aspirations thus being intentional and purposeful. Adult learners strive to meet their aspirations personally or professionally; nevertheless, the learning process deems successful with the identification of vivid, attainable, realistic, and timely goals for the learner who is driven and engaged in the process. Energy channeled towards the learning process effectuates goal attainment.

Adult education is centered on highlighting short-term concepts and long-term goals relevant and practical to meet learner expectations (New England Institute of Technology, 2021). Instructional material inclusive of daily scenarios increase learner ability to utilize knowledge and experiences to solve problems. Additionally, adult learners gain insight through the mentorship program. Through mentoring, relationships mentor-learner relationships are cultivated by shared learning experiences. This process allows increased knowledge of current practices while preventing future mistakes. As self-directed learners, it is critical that adult learners are given ownership in the learning process from the development of the course to the evaluative stage. Feedback helps to improve the quality and focus of instruction (New England Institute of Technology, 2021).

Self-Directed Learner

Adult learners can regulate their learnings through the development of self-concept thus, being self-directed (Leong, 2020). "The concept of self-directed learning surfaced parallel to Knowles' andragogy" (Leong, 2020). Self-directed learning theory was developed by Dr. Boyatzis based on the ideology that an individual needs to be empowered through five stages of mentorship and deep understanding of one's exigency to meet educational goals. The five stages involve individual ability to be held accountable for personal learning, setting goals, deciding on a course of study, delivery of instruction, and defining the value of learning for the adult (Leong, 2020). The objective of self-directed learning is a "collaborative process between the teacher and the learner" (Leong, 2020). Relationships developed through this process are of mutual respect between the self-directed learner and the instructor. The goal of the educator in this process is to ensure that he or she serves as an empowering agent in meeting the desired goals based on the direction of the learner (Garbauskaite-Jakimovska, 2020). The process of self-directed learning leads to self-directed change, modernly known as intentional change.

The diagram below illustrates Boyatzis' theory of self-directed change or intentional change (as cited by Seal, Boyatzis & Bailey, 2006):



Step 1: Ideal Self Phase

Specific ideologies are developed to determine the perception of the learner based on intrinsic expectations of oneself without the influences of others' beliefs. This process can be conducted personally by the learner or facilitated by the educator and is an implication that the learner should know what is best for him or herself (Seal et al., 2006).

Step 2: Real Self Phase

Reflective process is initiated independently or with the assistance of a facilitator involving various techniques relative to inquiry. This process provides concrete evidence to help the learner identify current strengths to achieve identified goals in the learning process (Seal et al., 2006).

Step 3: My Learning Agenda and Plan Phase

Learner independently or with the assistance of an educator identifies present strengths and learning gaps between the Ideal Self and the Real Self establishing a learning strategy pertaining to accomplishment of the learning targets. Standards of performance are set by the learner while the learner implements strategies to focus on an affirmative attitude in one 's capability and ambition towards refinement (Seal et al., 2006).

Step 4: Experimentation Phase

Implementation of the learning plan takes place and learners engage in experiential learning (Boyatzis et al., 1995). Learners engage in new experiences or interpret an experience in a new way. Learners develop a deeper understanding of current individual experiences and develop and engage in innovative ideas to make necessary modifications to meet learning targets (Seal et al., 2006).

Step 5: Developing Trusting Relationships Phase

Relationships based on support and feedback are vital components to the process of creating the ideal self and attaining the learning goals identified in the learning process (Seal et al., 2006).

With adult learners, the concept of self-directed learning has become an important concept in adult education. In the study conducted by Tekkol and Demirel (2018), the results revealed that university students' self-directed learning scores were above the median score of the scale. Self-directed learning skills did not vary based on university, year of study, income level. However, gender, field of study, university entrance score type, academic success, and the desire to pursue a graduate degree made a significant difference on university students' self-directed learning skills. Finally, a moderate positive relationship was detected between self-directed learning skills and lifelong learning tendencies. In summary it can be said that undergraduate students have self-directed learning skills, and these skills are related to lifelong learning.

Educating the Indigenous People of Micronesia

Through continued collaboration and outreach to neighboring islands the University of Guam (UOG), School of Education (SOE) has set precedence in Micronesia providing programs to assist fellow Micronesians to attain an Elementary Education Bachelor of Arts in Education (BAE) for seven academic years. Two-off campus programs were established serving the Federated States of Micronesia (FSM) through a partnership program with the College of Micronesia (COM) (2-year community college program in FSM) and through the Individualized Degree Plan (IDP). Partnerships established through SOE within the region are institutional investments for both UOG, SOE, and the FSM. Collaboration with the UOG faculty and the College of Micronesia initiated the interest of the COM to establish a 4-year Elementary Education BAE degree program in 2019.

Partnership BAE in Elementary Education

School of Education (SOE) supported one off-campus program that served the Federated States of Micronesia (FSM) through a partnership program with the College of Micronesia (COM). The FSM has four individual states separated by hundreds of miles of ocean: Yap, Chuuk, Pohnpei, and Kosrae. COM's main campus is in Pohnpei. The partnership program, the regional program for SOE, was a collaborative program leading to a Bachelor of Arts degree in Elementary Education. Governance of the program was under SOE with collaboration among faculty from both institutions. This partnership program required all teacher candidates to meet the same program student learning outcomes as the on-campus Elementary Education students at UOG.

The off-campus program teacher candidates were subject to the same rigor and were guided by the SOE Conceptual Framework. A Memorandum of Understanding (MOU) spelled out what each institution's duties and responsibilities were in support of the teacher candidates. During the last semester (Fanuchånan 2019) of the Partnership BAE program, thirteen students completed the program with Bachelor of Arts degree in Elementary Education.

Table 1
Partnership BAE Degree Completers (7 Academic Years (AY))

Academic Year (AY)	Number of degree completers
AY 2012-2013	16
AY 2013-2014	26
AY 2014-2015	21
AY 2015-2016	15
AY 2016-2017	16
AY 2017-2018	14
AY 2018-2019	13
Total:	**121**

Individualized Degree Plan Program (IDP)
The IDP program has been in place and offered in the Micronesian Region (FSM & Marshall Islands) since 1979 (40+ years). This program produces a baccalaureate degree completer in Elementary Education. The program caters to in-service teachers in the Region, by offering courses during the summer break taught on-site by SOE (UOG) full-time professors and part-time instructors on the respective islands. To date, only Yap is actively participating in the IDP program every summer.

Table 2
IDP BAE Degree Completers (9 Academic Years (AY))

Academic Year (AY)	Number of degree completers (Island)
AY 2012-2013	2 (Kosrae & Yap)
AY 2013-2014	2 (Chuuk)
AY 2014-2015	2 (Chuuk)
AY 2015-2016	None
AY 2016-2017	1 (Chuuk)
AY 2017-2018	None
AY 2018-2019	2 (Yap)
AY 2019-2020	None
AY 2020-2021	7 (Yap)
Total:	**16**

In alignment with the University of Guam's mission--Ina, Deskubre, Setbe *(To Enlighten, to Discover, to Serve)* the School of Education was enlightened *(Ina)* by the Federated States of Micronesia's to expand learning opportunities for teachers from FSM through discovery *(Deskubre)* and service *(Setbe)* faculty were able to enrich and enhance current skills by understanding cultural and community needs and emerging island wisdom with westernized practices.

Conclusion
Indigenous people of Micronesia obtain characteristics of a high context culture based on social classes. The use of oral language methods held heavy meaningful information in conversation and instruction. Given the context of the conversations discussed in class based on the audience and the topic at hand, oral language and nonverbal elements were in place. In the spirit of *Setbe* (Serve), culturally responsive pedagogy was the core program that steered the constructivist approach of instruction with Indigenous knowledge in mind, articulating local ideas, actions, and comprehension patterns. SOE Faculty curriculum and approach to learning were based on constructivism and self-directed learning theories. The spirit of *Ina* (enlightenment) and *Deskubre* (discover) collaborative learning in group problem solving, group inquiry, simulations, and discussions SOE faculty strived to embrace the collective cultural practices and provide a safe space for discussion in respect of the cultural norms and roles based on gender and

social chase or classes. Relationships beyond the social norm were created based on support and feedback and played as vital components to the process of enlightening each learner and attaining the learning goals for courses.

References

Benakanahalli, R. (2021, March 9). *Malcolm Knowles theory of adult learning.* Retrieved from https://blogs.klminstitute.com/malcolm-knowles-theory-of-adult-learning/

Boyatzis, R.E., Cowen, S.S., and Kolb, D.A. (1995). *Innovations in professional education: Steps on a journey from teaching to learning.* San Francisco, CA: Jossey-Bass.

Garbauskaite-Jakimovska, J. (2020, February 22). *Boyatzis' theory of self-directed learning. Retrieved from* https://www.trainerslibrary.org/boyatzis-theory-of-self-directed-learning/

Leong, S. (2020, August 3). Self-directed learning: A core concept in adult education. *Education Research International*, vol. 2020, Article ID 3816132. Retrieved from https://doi.org/10.1155/2020/3816132

New England Institute of Technology (2021, April 8). *What is adult learning theory?* Retrieved from https://www.neit.edu/blog/what-is-adult-learning-theory

Robinson, J.D. and Persky, A.M. (2020, March 1). Developing self-directed learners. *American Journal of Pharmaceutical Education, 84*(3); Retrieved from https://doi.org/10.5688/ajpe847512

Seal, C., Boyatzis, R. & Bailey, J. (2006). Fostering emotional and social intelligence in organizations. *Organization Management Journal. 3*. 190-209. Retrieved from https://www.researchgate.net/figure/1-Boyatzis-theory-of-self-directed-learning-Goleman-Boyatzis-and-McKee-2002_fig1_247479521

Tekkol, I.A. and Demirel, M. (2018, November 23). *An investigation of self-directed learning skills of undergraduate students*. Frontiers in Psychology. 9. Retrieved from https://doi.org/10.3389/fpsyg.2018.02324

United Nations Educational, Scientific, and Cultural Organization, Hamburg (Germany). Inst. For Education (1999). *Cultural citizenship in the 21st century: Adult learning and indigenous peoples. Adult Learning and the challenges of the 21st century*. A series of 29 booklets documenting workshops held at the fifth international conference on adult education. Hamburg, Germany. https://eric.ed.gov/?id=ED434993

University of Guam. (2021a). Sharing island wisdom. Retrieved from https://www.uog.edu/student-services/rfk-library/island-wisdom

University of Guam. (2021b). School of Education: Regional programs. Retrieved from https://www.uog.edu/schools-and-colleges/school-of-education/regional-programs

Viewing Writing and Mathematics as One Intertwined Process

RAYMOND M. PAULINO, University of Guam

Abstract
University students often have the misconception that mathematics is only about writing down the numbers, math symbols, and calculations. They are often focused only on computations and reaching a final answer, and therefore they may not fully grasp the logic and thought process that goes on when doing mathematics. In this paper I discuss the benefits of learning to read and write mathematics well. I mention the views of education researchers on how writing can help students understand mathematics better. I go over some of the common misconceptions and provide recommendations on how students can improve their mathematical writing.

Introduction

Great mathematical writing, like great mathematics thinking, is a skill which must be practiced and developed for optimal performance. Most students who take only a few math courses, usually never learn to write a paper in a math class. At UOG, the work that students do in the 100 and 200 level courses consists of requiring students to write calculations (numbers, algebraic expressions, equations, or inequalities) as their answers to assignments, and they are usually not required to provide any explanations. Once a math major gets into the 300-400 level math courses, they will start to learn to explain their work with complete and logical sentences as they learn to write proofs. The purpose of this paper is to help UOG students in reading and writing mathematics and I hope it can serve as a supplement to improve the writing of their assignments in our math courses. I present ideas by math education researchers on the connection between mathematics and writing to improve learning. I share my thoughts and examples from my past teaching experiences on common problems that arise when writing math assignments. I explain how learning to write math for understanding can aid these students to do better in their assignments.

Importance of writing in learning math

The great mathematicians spend a lot of time writing. Bangert-Drowns et al. (2004) determine that writing and learning are isomorphic to each other. Being able to write math is just as important as doing computations with expressions and solving equations. It is also an important skill to write mathematically for non-mathematicians. As our students take more math courses here at UOG, they will know more mathematics than most other people. When students graduate from UOG we want them to learn a good amount of mathematical knowledge. But also, with this we want them to be able to explain their work and express their thinking process to another person, perhaps their future boss, a coworker, a colleague, or an elected official. By being able to communicate mathematics competently, our students can advance well in their careers.

In math courses at the university level, the ideas are more complex and sophisticated. The mathematics in these classes cannot be expressed just by mere mathematical symbols. As a student progresses through a mathematics program, being able to express their mathematical ideas becomes more important. It is less important to just show the calculations, and it is also not good to just have the final answer, instead it is vital to explain in words how one reaches that final answer. For example, when one watches a movie, we do not just fast forward to the ending, the joy comes from watching the whole movie from start to finish. Success is not the destination; it is the journey.

All students majoring in math are required to write math with words to some extent, but then unlike in the teaching of other languages there is seldom a course that particularly teaches students how to write properly in the mathematical language. There is MA 302 which teaches how to write proofs, but this class focuses on logical symbols and proof methods rather than learning the grammar to write mathematics, and appropriate use of mathematical symbols. This course is usually where students who major in Math first learn to write sentences.

Most often students confuse writing mathematics with “showing your work”. But these are not the same. Writing mathematics, is not the same as just working out the homework problems. Rather, it is better to write enough to demonstrate how well one understands mathematical ideas and concepts. Anyone can provide a list of calculations without any context or explanation, but this only demonstrates that one has spent some time doing computations. However, a list of calculations without any explanations, leaves out the important ideas that are useful in solving problems which lead to general methods of solving. These ideas and generalizations are the mathematics itself. Ultimately a page of computations without any writing or explanation contains no useful mathematics.

Beneficial For Both Students and Teachers

Students usually do not write complete sentences, and paragraphs, together with the calculations. This is due to habits learned in secondary schools. A common misconception by students entering the university is that mathematical writing should be composed only of mathematical symbols. This is simply not true, and it is not helpful for students to think of math this way. There are many great advantages to learning how to write math well. A benefit of being able to write math with sentences is so that the reader can understand the mindset of the writer. This is good for the student when they are studying for an exam and as they read their notes filled with complete sentences, they can recall their thoughts and this understanding will help in learning to do problems correctly during an exam. By writing out the sentences with the equations they can read and follow the logic that is behind their solution. David Pugalee (2005), who researches the relationship between language and mathematics learning, asserts that writing supports mathematical reasoning and problem solving and helps students internalize the characteristics of effective communication. He also suggests that teachers read student writing for evidence of logical conclusions, justification of answers and processes, and the use of facts to explain their thinking (Pugalee, 2005). By letting students communicate their mathematical ideas through writing, then we may instill in them a higher level of self-confidence and critical thinking skills (Quitadamo & Kurtz, 2007).

When students write math well it is also helpful for the teacher. When a student writes about their methods and calculations, the instructor can read what the student is thinking and therefore, the instructor may be able to better understand and think of the best way to guide the student. Kuzle (2013) writes about a teaching seminar in which teachers were asked to write about integrating writing with mathematics in the classroom. Kuzle notes the following about the results of the seminar. "Those who used writing as a method to support meta-cognitive processes while exploring mathematics tended to respond positively to the writing process. The others used writing merely as a method to produce a formal document to be evaluated by the instructor. Consequently, those who viewed writing and doing mathematics as an intertwined process expressed a positive attitude towards using writing in their mathematics classroom. This was, unfortunately, not the case when writing and doing mathematics were seen as two separate processes" (p. 41). Kuzle reports that many researchers have called for the advocation of writing in mathematics classrooms for many years. But despite this, many mathematics teachers are reluctant to use writing in their lessons. Consequently, there is a gap between positive research results and with what goes on practice. This disconnection probably lies in a popular view that writing is distinct and far removed from the process of problem solving (Kuzle, 2013). To help UOG students understand mathematics better with writing, I agree with Kuzle in that it is our role as mathematics educators to move teachers towards a view of writing and mathematics as a deeply related and intertwined process, rather than as two disjointed processes.

Beneficial During Covid-19 Pandemic

During the start of the pandemic, UOG faculty had to quickly adapt to online learning. One of the main concerns of math faculty when teaching online courses is that students may engage in cheating by copying each other's mathematical computations. One way to alleviate this problem is to assign required discussion problems, in which students are asked to write their thinking process together with their computations. Reynolds et al. (2020) showed that "writing assignments can be incredibly flexible in terms of how they are implemented online and can be designed to reduce the possibility of cheating and plagiarism" (p. 12573). By giving writing assignments, the instructor can read what their students are thinking, and this would make it harder for them to mimic each other's work. Reynolds et al. (2020) claim the following: We have claimed that of the American Association of Colleges and University's list of 11 high-impact educational practices, the easiest for science faculty to adopt during these difficult times is writing-intensive courses. We are not naïve in believing that it is easy to convert an existing course into one that is writing-intensive; we acknowledge that little about teaching during a pandemic is easy. Instead, we suggest that writing assignments can be powerful tools for faculty who seek rigorous assignments that promote deep engagement with the subject matter and among students through the iterative process of writing, giving, and receiving feedback, reflection, and revision (p. 12578). I think it would be an excellent idea to allow students to read and review their peer's writing to help each other understand the mathematical process better. They can read the logical reasoning that is written as complete sentences, rather than just staring at computations with no explanations.

Basic Principles

The first basic principle when writing mathematics is to write structurally in complete sentences. One should capitalize the first letter of the first word of the sentence and at the end of the sentence, there should be a period. Consider the sentence: $2x^2 + x + 3 = 0$ *has no real solutions because its discriminant is less than zero.*
This statement starts out with an equation, which maybe ok to some but it is better to write the following.
The equation $2x^2 + x + 3 = 0$ *has no real solutions because its discriminant is less than zero.*

One may write the following: $ab = 0$ *implies that* $a = 0$ *or* $b = 0$.
Instead, here are a couple of better ways to state this in complete sentence form.
Let a *and* b *be real numbers, then the equation* $ab = 0$ *implies that* $a = 0$ *or* $b = 0$.
If two real numbers a *and* b *satisfy* $ab = 0$, *then either* $a = 0$ *or* $b = 0$.

Mathematical symbols, expressions and equations can also be on the paper, and they can sometimes represent full sentences themselves, or they may symbolize a phrase as part of the sentence, so we have a mixture of English words and math symbols. You can pick any good math textbook, you will notice that when the author writes an example, it is mostly complete sentences that explain the mathematical symbols. It is also a useful skill to be able to change the mathematical symbols into English words, phrases, and complete sentences.

Table 1

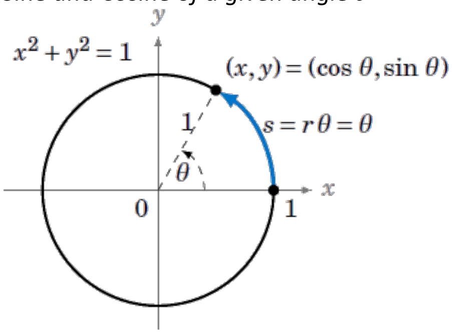
Converting a phrase or sentence with mathematical symbols into words

Phrase or sentence(s) containing math symbols	How it can be read with words
If $x = 5$, *then* $x^2 = 25$.	*If a variable,* x, *has the value of* 5, *then the square of* x, x^2, *has the value of* 25.
Hence $y + 3 < 49$.	*Hence* y *plus* 3 *is less than* 49.
$log_2 8 = 3$	*The base* 2 *logarithm of* 8 *is equal to* 3. *(Or equivalently, and in my opinion will help students understand logarithms more):* *The exponent of* 2 *that will yield* 8, *is equal to* 3, *that is,* $2^3 = 8$.
$cos\,\pi = -1$	*The cosine of* π *is equal to* -1. *Or better:* *The* x*-coordinate of the intersection point of the terminal line segment of the angle of* π *radians, with the unit circle, is* -1.
$\forall x \in R$, $x^2 \geq 0$, *and thus* $x^2 + 1 \geq 1$.	*For every real number* x, *we have* x^2 *is greater than or equal to* 0, *and thus* $x^2 + 1$ *is greater than or equal to* 1.
$\lim_{x\to a} f(x) = L$ *is equivalent to the following statement.* $\forall \varepsilon > 0$, $\exists\, \delta > 0$, *such that* $\forall\, x \in \mathbb{R}$, $0 < \lvert x - a\rvert < \delta$ *implies that* $\lvert f(x) - L\rvert < \varepsilon$.	*The equation* $\lim_{x\to a} f(x) = L$ *is equivalent to the following statement.* *For every* $\varepsilon > 0$, *there exists a* $\delta > 0$, *such that for all* $x \in \mathbb{R}$, $0 < \lvert x - a\rvert < \delta$ *implies that* $\lvert f(x) - L\rvert < \varepsilon$.

Students are taught about logarithms in precalculus, and they learn to compute them and are exposed to their properties, but often they do not know what exactly a logarithm is. Students are familiar with the symbol, $\log_b a$, but only a few know it to be the symbol for the real number that is the "exponent of b that yields a". This is also true for the two main trigonometric functions: cosine and sine. By learning the fundamental definition of $\cos\theta$ and $\sin\theta$, of a given angle θ, one can easily tackle assignments in trigonometry and calculus courses more efficiently.

Figure 1

Sine and Cosine of a given angle θ



Note: This image is helpful in visualizing the definition of sine and cosine. The dashed line segment is the terminal side of angle θ. It is usually drawn in the first week of a trigonometry class, which is MA161b at UOG.

Absolute value is another important topic that can be made clearer for students, this can be done by having them think of absolute value as distance. For example, when solving the equation $|x - 7| = 4$, it is a common error for students to drop the absolute value, and they incorrectly change the equation to $x - 7 = 4$, and get the single answer of 11. By thinking of absolute value as distance, the equation $|x - 7| = 4$ can be read as the "the distance between x and 7 is four". From this I hope that students can see that there are two numbers, that are at four units, from 7, they are $x = 3$ and $x = 11$. Or for a more step by step approach, the idea is not to drop the absolute value, rather instead change the original equation, $|x - 7| = 4$, to two equations $x - 7 = 4$ and $x - 7 = -4$, which yields $x = 3$ and $x = 11$.

Correct English Usage

It is essential that a piece of mathematics be written in correct English so that the reader can better follow the reasoning. I present some examples here of how correct grammar can help the reader read the mathematics better. Grammar is the way words are put together to form sentences. We go over some instances of grammar errors when writing mathematics.

The use of articles when writing math is important. The definite article "the" is used to specify a noun that the reader may have come across before. In mathematical terms, "the" is used for uniqueness. For example, we can say, "The quadratic formula can be used to solve a quadratic equation." There is one quadratic formula. Also, we say, "the number eight, not "a number eight". The variable x is used and typically represents any real number. The student will learn that x is arbitrary, and its value is varied and not fixed, unless specified, so in this case we use the indefinite articles "a" or "an". We can say "an x" or "a variable x". These articles are used for nouns that represent more than one thing. The word that follows determines whether to use "a" or "an.

Table 2

Use of articles: the and a/an

Incorrect	Correct
Suppose n is the negative integer.	*Suppose n is a negative integer.*
Suppose n is the integer that solves $n^2 = 9$.	*Suppose n is an integer that solves $n^2 = 9$.*
Suppose n is a positive integer that solves $n^2 = 4$.	*Suppose n is the positive integer that solves $n^2 = 4$.*

In the second example of Table 2, it is correct grammar to use "an", because there are two integers that solve the equation, $n^2 = 9$, they are n = -3 and $n = 3$. In the third example, it is correct grammar to use "the", because there is only one positive integer such that $n^2 = 4$, it is $n = 2$.

Table 3

Use of zero article and definite article

Incorrect	**Correct**
If f is a polynomial, then the f is continuous.	*If f is a polynomial, then f is continuous.*
	If f is a polynomial, then the function f is a continuous function.

As we can see in the examples in Table 3, when naming something with a letter, for example a function, f, use the zero article. When using the noun, function, use the definite article, for example "the function f".

Table 4

Singular vs. Plural Noun

Incorrect	**Correct**
$(1, 2, 3)$ *is the only minima.*	$(1, 2, 3)$ *is the only minimum.*
Every circle are ellipse.	*Every circle is an ellipse.*
All circles is an ellipses.	*All circles are ellipses.*
Suppose we have an m by n matrices M.	*Suppose we have an m by n matrix M.*

As we can see from the examples in Table 4, it is highly recommended to use the correct choice between a singular and plural noun.

Table 5

Verb Forms

Incorrect	**Correct**
In between any two real numbers there exist a rational number b.	*In between any two real numbers there exists a rational number b.*
There exists real numbers x and y such that $0 < \|x - y\| < 1$.	*There exist real numbers x and y such that $0 < \|x - y\| < 1$.*

Some verbs have different forms, and we need to be careful which one to use. From the examples in Table 5, we can see that the use of exists and exist depends on whether it is followed by a singular or plural noun, respectively.

Table 6

Verb to be vs. Verb to do

Incorrect	**Correct**
The series is converge.	*The series does converge.*
The series does convergent.	*The series is convergent.*

As in writing English papers, a "verb to be" is often confused with a "verb to do". According to Table 6, we see that this is also true when writing mathematics.

Table 7

Introducing information

Incorrect	Correct
For every $\varepsilon > 0$, *it is a* $\delta > 0$...	*For every* $\varepsilon > 0$, *there is a* $\delta > 0$....
For every $\varepsilon > 0$, *there has a* $\delta > 0$...	*For every* $\varepsilon > 0$, *there exists a* $\delta > 0$....

Referring to the first example in Table 7, the words "it is" is used only when there is a variable or something introduced before, in this example a δ should be mentioned before, and since we are introducing δ we should write "there is" instead. For the second example, "There has a" is a grammatical mistake; always use "there is/are" (the verb-to-be). The phrases "there is" or "there exists a" are usually used to introduce new information.

Table 8

Order and choice of words

Ok but can be improved on	Better
Let a real number be x.	*Let x be a real number.*
The largest value of $1 - x^2$ *possible is* 1.	*The largest possible value of* $1 - x^2$ *is* 1.

The order and choice of words is important in any writing, and from the two examples in Table 8, we can see that this is no different when writing mathematically. We can consider reordering the way a sentence is worded to make the words flow better.

Use of Mathematical Symbols

In this section we discuss the correct use of mathematical symbols in the Calculus sequence (MA 203, 204, and 205), Linear Algebra (MA 341), and Statistics sequence (MA 151 and 385). The symbols $=$, $\neq$, $\rightarrow$and $\Rightarrow$are sometimes used incorrectly. When one uses the equals symbol, $=$, one must make sure that the two quantities on the left and right sides, are indeed equal. For the unequal sign,$\neq$, one must make sure that the two sides are not the same quantity. The $\Rightarrow$and $\rightarrow$symbols have a few uses consisting of implication, corresponding to, specifying the next step, or when writing limits.

In MA 203 Calculus I, students learning limits sometimes incorrectly write:

$$\lim_{x\to 7}\frac{x^2-49}{x-7} = \frac{(x-7)(x+7)}{x-7} = x + 7 = 14.$$

It is wrong to omit the notation "$\lim\limits_{x\to 7}$" at the intermediate steps, and because of this, the red equals are ambiguous and incorrect since on one end we are assuming x is changing with the limit, or more precisely x is approaching 7 from both sides, above and below 7. While in the expressions where the limit notation is omitted, the variable x can take a single value and is not changing with the limit. Dropping the limit notation is incorrect. The correct way is to write:

$$\lim_{x\to 7}\frac{x^2-49}{x-7} = \lim_{x\to 7}\frac{(x-7)(x+7)}{x-7} = \lim_{x\to 7} x + 7 = 14.$$

An alternative to the limit equation: $\lim\limits_{x\to a} f(x) = L$ is to write this using arrow notation: $f(x) \rightarrow L$ as $x \rightarrow a$. Which in words, means that the value of $f(x)$ approaches the number L as the value of x approaches the number a. We can alternatively write the above example as follows.

$$\frac{x^2-49}{x-7} = \frac{(x-7)(x+7)}{x-7} = x + 7 \rightarrow 14, \text{ as } x \rightarrow 7$$

It is important to distinguish when it is appropriate to use an equal sign, and when to use an arrow. In our example above, the arrow signifies that the limit is being applied, or one can think of the arrow as a synonym for the word "approaches".

To find the second derivative of $x^8 + 3e^{4x}$, someone may incorrectly write,

$$x^8 + 3e^{4x} = 8x^7 + 12e^{4x} = 56x^6 + 48e^{4x}.$$

This is a common mistake for many students in MA 203 when taking derivatives for the first time, the issue here is use of the equals sign is incorrect as the original expression does not equal its derivative, and which in turn does not equal the second derivative. The correct way is as follows.

To find second derivative of $x^8 + 3e^{4x}$, we write this using the Leibniz's notation "dy/dx" .

$$d^2(x^8 + 3e^{4x})/dx^2 = d(8x^7 + 12e^{4x})/dx \;\; = 56x^6 + 48e^{4x}.$$

Or if we are given the function notation, $f(x) = x^8 + 3e^{4x}$, then the first derivative of f is $f'(x) = 8x^7 + 12e^{4x}$, and hence the second derivative is $f"(x) = 56x^6 + 48e^{4x}$. Notice how I have written this as a complete sentence, with the equations mixed in with the words.

In MA 204 Calculus II, A common mistake when learning integration is not learning to write the notation correctly. There are many dropped notation errors when integrating. Just like with the limit and derivative notations above a student may incorrectly write the following.

$$\int x(5x^3 - 6x + 7)dx = 5x^4 - 6x^2 + 7x = \mathrm{x}^5 - 2\mathrm{x}^3 + \frac{7}{2}x^2 + C$$

The integral should not be removed in the second step because the removal signifies that one is done with integration, but this is not performed until the antiderivative is found at the final step. Do not omit writing the integral until you actually integrate. Likewise, the second equals sign is incorrect as the two expressions are not equal necessarily. The correct way to do this is to write the following.

$$\int x(5x^3 - 6x + 7)dx = \int (5x^4 - 6x^2 + 7x)dx = x^5 - 2x^3 + \frac{7}{2}x^2 + C$$

Another common error is that students often write,

$$\int 4x^3 - \mathrm{e}^{-x} - \sin(x) + 6$$

where they omit writing dx to close off the integral. The problem here is that the dx is important and it tells us when the integral ends. Students must learn to always include the dx. Parenthesis can make it clearer where the expression being integrated starts and ends. The correct way is to write the following.

$$\int (4x^3 - \mathrm{e}^{-x} - \sin(x) + 6)dx$$

Now when you do the work and integrate this or any integral in general, be sure to keep writing the integral symbol together with the dx at each intermediate step. Keep doing this until the final step where the integral is applied, and the antiderivative is found.

Finally, do not forget to add the constant C that goes with an antiderivative.

$$\int (4x^3 - \mathrm{e}^{-x} - \sin(x) + 6)dx = x^4 + \mathrm{e}^{-x} + \cos(x) + 6x + C$$

Without the dx a reader is left to try and find where exactly the integral ends. A good way to think of this is that parenthesis always come in pairs "(" and ")". You do not open a set of parentheses without closing it. Likewise, when one integrates with respect to x, the integral symbol must always be paired up with a dx. You can always think of the symbol $\int$ as the opening parenthesis and the dx as the closing parenthesis.

The dx is extremely important in MA 205 Multivariable Calculus. It comes up when integrating with respect to another variable, for example, dy. See the difference between these two indefinite integrals.

$$\int (4x^3y - \mathrm{e}^{-x} - \sin(xy) + 6)dx = x^4y + \mathrm{e}^{-x} + \frac{1}{y}\cos(xy) + 6x + C$$

$$\int (4x^3y - \mathrm{e}^{-x} - \sin(xy) + 6)dy = 2x^3y^2 - y\mathrm{e}^{-x} + \frac{1}{x}\cos(xy) + 6y + C$$

When integrating with respect to x we treat y as a constant, and when integrating with respect to y we treat x as a constant.

Now when it comes to definite integrals, there is another common error with dropped notation. Students tend to drop the limits of integration after the first step and do the rest of the problem with implied limits of integration as follows.

$$\int_0^2 3x(x-1)dx = \int (3x^2 - 3x)dx = x^3 - \frac{3}{2}x^2 = (8-6) - (0-0) = 2$$

Do not equate (mix-up) a definite integral with an indefinite integral. They are not equal and must be kept separate. The definite integral is an actual real number (a constant), while the indefinite integral is an expression whose value depends on a variable usually x, y, t, or θ. The correct way is to write the limits of integration at each step, in other words keep it a definite integral until the final answer.

$$\int_0^2 3x(x-1)dx = \int_0^2 (3x^2 - 3x)\,dx = \left(x^3 - \frac{3}{2}x^2\right)\Big|_0^2 = (8-6) - (0-0) = 2$$

In MA 341 Linear Algebra, students learn to row reduce a matrix via elementary row operations, and they incorrectly use the equals sign between steps.

$$\begin{bmatrix} 2 & 4 \\ 0 & 7 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ 0 & 1 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

But writing equals is incorrect as it goes against the definition of equality of two matrices. Instead, since elementary row operations are performed to change the matrix, then we must use arrows to signify the transition.

$$\begin{bmatrix} 2 & 4 \\ 0 & 7 \end{bmatrix} \rightarrow \begin{bmatrix} 1 & 2 \\ 0 & 1 \end{bmatrix} \rightarrow \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

In MA 151 Introduction to Statistics and MA 385 Applied statistics, students study the standard normal distribution curve. They sometimes incorrectly write equals between the *z*-values and the corresponding area. For example, they incorrectly write

$$z = 0.00 = 0.5000 \text{ and } z = -2.33 = 0.0099.$$

These are incorrect because they are saying that two unequal numbers are equal, which is a contradiction. While they probably actually meant that the corresponding area to the left of $z = 0.00$, is 0.5000 and the corresponding area to the left of $z = -2.33$, is 0.0099, it is better that they use arrows instead,

$$z = 0.00 \rightarrow 0.5000 \text{ and } z = -2.33 \rightarrow 0.0099.$$

They later learn to use probability notation

$$P(z < 0.00) = 0.5000 \text{ and } P(z < -2.33) = 0.0099$$

which is a great improvement.

The inequality, symbols, $<, >, \leq$, and $\geq$, are also many times used incorrectly. For inequalities one must make sure that one side is indeed the larger number, and the other the smaller number, for example $100 \geq 99$ and $\frac{\pi}{3} < \frac{\pi}{2}$. In applied statistics students learn to find confidence intervals of the population mean, μ. It is important to follow the natural order of the real numbers for example,

$$7.38 < \mu < 5.41$$

is incorrect since 5.41 is not bigger than 7.34, and so there is no such number μ. The correct way is

$$5.41 < \mu < 7.38.$$

Certain math problems cannot be done simply by doing computations and reaching a numerical answer. Instead, some problems require a solution by writing complete sentences with equations. This is evident in some calculus problems. We see this type of scenario in a first semester calculus course, which is MA 203 here at UOG. We first recall two well-known theorems studied in calculus.

Intermediate Value Theorem: *Suppose that f is a function that is continuous on a closed interval $[r, s]$, and let N be any number between $f(r)$ and $f(s)$, where $f(r) \neq f(s)$. Then there exists a number t in between r and s, such that $f(t) = N$.*

Rolle's Theorem: *Let f be a function that is continuous on a closed interval $[a, b]$, differentiable on an open interval (a, b), and that $f(a) = f(b)$, then there is a number c in (a, b) such that $f'(c) = 0$.*

A well know assignment that is associated to Rolle's Theorem is to ask a student to show that certain equations have exactly one root.

Problem: *Show that the equation $3x^5 + x - 3 = 0$ has exactly one root.*

Solution: *First we define the function $f(x) = 3x^5 + x - 3$. Since $f(0) = -3 < 0$ and $f(1) = 1 > 0$, and since f is a polynomial, it is continuous, then by the Intermediate Value Theorem, we know there is a number t between 0 and 1 such that $f(t) = 0$. Hence, we have shown that f has at least one root. To show that there is exactly one root, assume for the sake of contradiction that there are two roots a and b, then $f(a) = f(b) = 0$, and since f is continuous on $[a, b]$ and differentiable on (a, b), then by Rolle's Theorem there is a number c in (a, b) such that $f'(c) = 0$. But for all real numbers x, since $x^4 \geq 0$, then $f'(x) = 15x^4 + 1 \geq 1 > 0$. In other words, $f'(x)$ is never equal to 0 for any choice of x, in particular, $f'(c) \neq 0$. We have a contradiction, and so our assumption is false. Thus, there is exactly one root.*

From this example we see that just writing down a final numerical answer in an assignment does not complete the task at hand. As presented in this example we sometimes have a question that does not ask for one single numerical solution, rather a logical and reasonable argument is to be presented. In solving this Calculus problem, a sequence of sentences mixed with mathematical equations is given to display sound logical arguments that when placed all together make up the entire solution to the problem. This is the beginning of learning to write proofs. Theorems are the foundation of basic mathematics. I highly recommend that students read theorems carefully. Think of them as your "friendly guide" to learning mathematics, and they will help you to complete assignments more easily. Theorems not only help students to solve mathematical problems more efficiently, but their proofs also aid in developing a deeper understanding of the underlying concepts. Developing excellent deductive skills are attained when students have a good understanding of theorems and their proofs.

Epilogue

Learning to read and write mathematics is not the easiest thing to do, it is a skill which takes a few years to practice. To students reading this, we have many resources here at the University of Guam, which are available to you, to help you with your mathematical writing. Among these are the UOG Math Tutor Lab and the UOG EMC^2 student organization. You can seek advice by asking your junior and senior classmates for their experiences, and you can also contact me or any of your math professors for help with your mathematical writing. If you have not written mathematics before, then it may feel frustrating at first. But learning to write mathematics can only be done by doing it. It will be challenging, but as you gain more experience, you will get better at it, and more importantly I guarantee you that you will understand the mathematics better than you did before.

Being able to write mathematics well is a great skill to learn, and one which you will keep for a lifetime. I end this paper with a quote from the famous Japanese Philosopher and Samurai, Miyamoto Musashi. "A man cannot understand the art he is studying if he only looks for the end result without taking the time to delve deeply into the reasoning of the study.

References

Bangert-Drowns, R., Hurley, M. and Wilkinson, B. (2004). The effects of school-based writing-to-learn interventions on academic achievement: a meta-analysis. Rev. Educ. Res., 74, 29–58.

Kuzle, A. (2013). Promoting writing in mathematics: prospective teachers' experiences and perspectives on the process of writing when doing mathematics as problem solving. Cent. Educ. Policy Stud. J., 3, 41–59.

Pugalee, D.K. (2005). Writing to develop mathematical understanding. Norwood, MA: Christopher-Gordon.

Quitadamo, I. & Kurtz, M. (2007). Learning to improve: using writing to increase critical thinking performance in general education biology. CBE Life Sci. Educ., 6, 140–154.

Reynolds, JA, Cai, V, Choi, J, et al. (2020.) Teaching during a pandemic: Using high-impact writing assignments to balance rigor, engagement, flexibility, and workload. *Ecol Evol*. 2020; 10: 12573–12580.

Self-Care Among Counseling Students: A Call to Action

DULCE AMOR IMBO, University of Guam

Abstract
The practice of self-care is not only seen as an important component for the counseling profession but is recognized as an ethical mandate for counselors in the field as well as counseling students who are training to become mental health practitioners. Engaging in self-care behavior may help in preventing or reducing stress, compassion fatigue, or burnout that counselors are at increased risk for in their line of work. Preventing burnout is one way that can help with the retention rate in the counseling profession and in turn positively impact the clients they serve, especially in communities like Guam that show a critical need for mental health professionals and services. Given these findings, it is crucial for graduate level counseling students to not only recognize the benefits of engaging in self-care behavior but also learn and develop the skills and tools to practice self-care and promote wellness. A call to action urges counselor educators and counselor education programs including the Master's in Counseling program at the University of Guam to cultivate a culture of wellness and develop and implement a holistic education for counseling students.

Keywords: self-care, wellness, stress, burnout, counseling students

~~

Self-Care Among Counseling Students: A Call to Action

The World Health Organization (WHO) defines self-care as referring to deliberate activities or behaviors that aim to promote and maintain good health (2009). The practice of self-care can also be thought of as attending to one's mind, body, and soul, or one's own holistic wellbeing (Posluns & Gall, 2019). It can include different activities and behaviors and can be as simple as getting adequate sleep and going on a relaxing walk. Practicing self-care is not only about doing activities that maintain and promote health but is also about having "a caring attitude toward oneself" (Posluns & Gall, 2019, p. 3). Self-care also involves much self-reflection and self-monitoring in knowing and understanding one's needs and doing the work to seek out the resources to help achieve those needs.

For the counseling field, self-care is recognized as a vital component for its practitioners. The American Counseling Association (ACA) emphasizes that practicing self-care is a necessary part of the professional responsibility of counselors (ACA, 2014). It is neither a luxury nor a special intervention only done in times of crisis for the professional counselor. It is considered an ethical imperative for counselors to engage in self-care activities in order to prevent counseling impairment. According to the ACA Code of Ethics (2014), counselors have the responsibility to monitor their well-being and to engage in self-care activities that will ensure that they can carry out their professional duties effectively. Furthermore, the Council for Accreditation of Counseling and Related Programs (CACREP) standards include "self-care strategies appropriate to the counselor role" (2016) as part of the learning objectives required of accredited counselor education programs.

Engaging in self-care behavior is not only important for counselors practicing in the field, but it is also equally important to those who are studying and training to become helping professionals, including graduate students in counseling programs. It is general knowledge that college students including graduate students can experience great levels of stress during this time in their lives. Graduate students may also be particularly prone to stress due to juggling more demands that come with multiple life roles being both a student, a parent, a financial provider, and/or a worker, the greater academic rigor of graduate studies, and worries about financial uncertainty and insecurity (Foster, 2010). In one study, the researchers found that graduate students in one university experienced high levels of stress with a third of the respondents indicating that they did not manage their stress level well (Oswalt & Riddock, 2007).

Counseling students experience the same stressors as their graduate school counterparts. They are faced with balancing their personal and academic endeavors but also the stress and energy depletion that may come with their counseling training and being in a one-way therapeutic relationship focused on the client's needs and problems (Sadler-Gerhardt & Stevenson, 2011). A study found that lower levels of wellness was related to higher levels of psychological distress among first-year counseling students (Smith et al., 2007). Another study examining the practice of self-care among master level counseling students found that lower levels of self-care increased the levels of stress among the students (Mayorga et al., 2015). Furthermore, 85% of one sample of counseling students were found to have some degree of indication that burnout is either something they need to be aware of and paying attention to or they are demonstrating indication that they are burned out (Wardle & Mayorga, 2016). These negative outcomes highlight the need for counseling students to recognize the critical importance of practicing self-care to help them cope with the stresses and the psychological distress they experience during their training to become counselors.

As counseling students delve into deep and intense exploration about the field of counseling and develop their professional skills in graduate programs, they need to learn that "it costs to care for others" (Sadler-Gerhardt & Stevenson, 2011, p. 1) and that the duties and responsibilities inherent in the work of counseling put practitioners at an increased risk for stress, compassion fatigue, burnout, and impairment (Lemmons & Zanskas, 2019; Mayorga et al., 2015; Posluns & Gall, 2019; Sadler-Gerhardt & Stevenson, 2011; Wardle & Mayorga, 2016). Just like how the skills and knowledge they obtain from their graduate studies will carry over to their work in the field when they graduate, the way counseling students approach their well-being in graduate school will likely influence their clinical and professional lives. Because of the occupational hazards that accompany the work of mental health professionals, it is imperative that counseling students not only recognize the importance of practicing self-care to decrease their levels of stress and increase their levels of wellness but also consciously incorporate a mindset of maintaining wellness and continually engaging in self-care to avoid professional impairment.

Impairment has serious consequences in the counseling profession. It is not only that the counselor themselves experience a decrease in wellness and functioning in their personal lives, but it can also have grave consequences for the clients they serve. A task force on impaired counselors created by the ACA in 2003 stated that while impairment did not necessarily imply unethical behavior, questionable ethical behavior may be a symptom of impairment (Sadler-Gerhardt, 2011). Burnout, a work-related phenomenon that is characterized by emotional exhaustion, depersonalization and reduced personal accomplishment (Posluns & Gall, 2019; Wardle & Mayorga, 2016), affects the overall therapeutic effectiveness of mental health practitioners. Counselors who are on their way to "burning out" or have already reached the level of being "burnt out" may experience "an inability to 'care responsibility'" (Lemmons & Zanskas, 2019, p. 2) and may exhibit behaviors including missing appointments, decreased or lack of interest in job-related tasks, showing up to work late or not at all, cynicism, and distancing themselves from clients (Lemmons & Zanskas, 2019; Sadler-Gerhardt & Stevenson, 2011; Wardle & Mayorga, 2016). All these behaviors lead to decreased professional competency which reduces the quality of care they can provide and affect client welfare (Lemmons & Zanskas, 2019). Burnout can also potentially lead to inappropriate or more serious behaviors that can ultimately create harm to clients (Posluns & Gall, 2019). With poor quality of life and reduced competency and performance rate, burnout can eventually lead to the decision to quit working as a counselor (Wardle & Mayorga, 2016). Addressing burnout by focusing on the practice of self-care among counseling students can be one of the ways to help the retention rate of the counseling profession and to address the critical need of mental health practitioners in the country.

The implications of addressing the issue of self-care among counseling students for the field of counseling and the mental health services in Guam and our region cannot be understated. A 2019 report by the American School Counselor Association (ASCA) shows that Guam only had 86 school counselors in the school year 2018-2019. The island had a student-to-school-counselor ratio of 346:1, higher than the ASCA recommended ratio of 250:1 (ASCA, 2019), signifying a shortage of school counselors on island. According to the director of Guam Behavioral Health and Wellness Center, treating mental health patients during the Covid-19 pandemic has been a major challenge due to a shortage of mental health professionals (Cagurangan & Cruz, 2020). The director also stated that the shortage of mental health and substance abuse providers has always been an issue for Guam. This statement is supported by data from the Health Resources and Services Administration (HRSA) which shows that there are still sites on Guam designated as mental health care professional shortage areas (HSPAs) such as the Department of Corrections and the Northern Community Health Center (2020). These facts are alarming as Guam's suicide rate continues to be greater than that of the national average, and the number of suicide cases are predicted to be higher than that of last year (Cagurangan & Cruz, 2020).

Counseling students enrolled in the University of Guam's graduate program are set to fulfill a critical need in a community lacking the adequate and recommended number of counselors and mental health practitioners. Their success in fulfilling the necessary requirements to graduate and entering the counseling profession would mean the increase in the number of people providing the necessary mental health services on island. Therefore, the retention of counselors practicing in the field as well as counselors studying and training in graduate school has a major impact on the mental health services and resources in Guam and the region.

With such a critical need for counselors in the local community as well as nationwide, it is imperative for graduate counseling programs, including the counseling program at the University of Guam, to implement a program of self-care into the training of counseling students. It is time to cultivate a culture in wellness and to actively incorporate current wellness and self-care information into the modules and courses in the curriculum focusing on avoiding and reducing high stress levels, compassion fatigue, energy depletion, and burnout. It should not be included just as an option but be regarded as a professional and ethical responsibility to the students.

Counselor educators and counselor training programs must go beyond merely talking about self-care and its importance to their students and move into creating and developing training, lessons, and activities and providing free and/or affordable resources that allow counseling students to not only learn about different self-care strategies but directly practice them. In one study, counselors-in-training had indicated a desire for a "comprehensive and developmentally appropriate approach to self-care interwoven throughout their counseling training, with actual practice of self-care skills rather than 'face talk'" (Thompson et al., 2011). While counselor education programs have emphasized the importance of self-care, due to the demands of academic coursework and clinical training, there has been little opportunity for directly teaching the strategies and tools for self-care to students. It is also perceived as the individual responsibility of the student to engage in these practices (Newsome et al., 2006). Unfortunately, due to the multiple demands of graduate school life, students may not be practicing or find it difficult to regularly engage in self-care due to lack of time, energy, and resources (Shapiro et al., 2007 as cited in Mayorga et al., 2015; Wolf et al., 2014). Therefore, supervisor, faculty and institutional support are critical in promoting and fostering a culture of wellness and self-care in the counselor training program (Wolf, Thompson, & Smith-Adcock, 2012).

Proactively integrating self-care as a preventative approach in counseling programs can help students deal with the stresses in their training that may carry over when they graduate and transition to work (Posluns & Gall, 2019). It can also help counseling students in building resilience and coping self-efficacy needed to prevent the negative hazards inherent in the nature of counseling work (Lemmons & Zanskas, 2019; Posluns & Gall, 2019; Mayorga et al., 2015; Sadler-Gerhardt & Stevenson, 2011). A culture of self-care and wellness in the counseling education program also promotes and allows students to gain greater self-awareness about their own stressors and the strategies they employ as intervention to a road that may lead them to compassion fatigue and burnout.

There are different ways to integrate wellness and self-care into counselor education. A wellness program may involve faculty as role models, curriculum integration and co-curriculum integration. Partnerships with professional organizations to help provide training, information, and resources on self-care and wellness to counseling students can also be sought. Coordination with university student services and other institutional departments that can provide supplemental services and facilities for students to learn and engage in self-care can also be beneficial to not only counseling students but to other university students as well. Trainings and programs can include mindfulness practices such as meditation, yoga and qigong (Campbell & Christopher, 2012) , wellness workshops based on The Indivisible Self Model of Wellness (Wolf et al., 2014), mindfulness-based stress reduction training (Newsome, et al., 2006), and self-compassion practices (Nelson et al., 2017). It is important to note however that a cultural shift towards wellness in counselor education may take time to fully flourish. According to one study examining wellness in counselor preparation, "just as one course in multicultural counseling does not create a culturally competent counselor, a limited wellness curriculum does not reinforce effective and ongoing wellness strategies" (Wolf, Thompson & Smith-Adcock, 2012, p. 174).

Whichever wellness model, theoretical framework and major activities counselor educators and counselor training programs use to incorporate self-care in their curriculum, an important recommendation is to ensure that the culture of wellness and self-care is holistic. A literature review on the topic of self-care suggests addressing the areas of awareness, balance, flexibility, physical health, social support, and spirituality to ensure a holistic education and training on self-care (Posluns & Gall, 2019). It is recommended that specific self-care practices that fit within each of these areas and also meet the needs of each individual counseling student are promoted to best serve the students.

Practicing self-care is an important element for the counseling profession, for both practitioners and counselors-in-training. Self-care is an ethical mandate, playing a vital role in preventing or decreasing stress and burnout that may lead to professional impairment and client harm. Therefore, it is critical for counseling students who are burdened by the rigorous and multiple \demands of graduate school to not only learn about the benefits of practicing self-care but to also directly engage in self-care activities that will promote their wellbeing throughout their training and career as a professional counselor. This is not only a call to action for counseling students to recognize the need to engage in self-care but also for counselor educators and counselor training programs to cultivate a culture of wellness within their programs that will allow counseling students to gain awareness about their levels of stress and possibility of burnout, recognize the benefits of self-care practices in their personal and professional lives, and learn different concrete self-care strategies and tools they can carry with them as they transition to work. As this paper has shown, self-care can no longer be put on the back burner, inserted into brief discussion at the start of a course, or only employed as a reactionary intervention to an overwhelmed student. The issue of self-care among counseling students, especially those on Guam, have widespread repercussions for not only the counseling profession but for the greater community they serve. The words of a dear friend and a community counselor rings true, "once you can heal yourself, you heal others" (G. Castillo, personal communication, September 3, 2020).

References

American Counseling Association. (2014). ACA code of ethics. Counseling.org. https://www.counseling.org/Resources/aca-code-of-ethics.pdf

American School Counselor Association. (2019). *Student-to-school-counselor ratio 2018-2019* [GraphicData].Schoolcounselor.org. https://www.schoolcounselor.org/asca/media/asca/home/Ratios18-19.pdf

Bamonti, P. M., Keelan, C. M., Larson, N., Mentrikoski, J. M., Randall, C. L., Sly, S. K., Travers, R. M., & McNeil, D. W. (2014). Promoting ethical behavior by cultivating a culture of self-care during graduate training: A call to action. *Training and Education in Professional Psychology, 8*(4), 253-260. http://dx.doi.org/10.1037/tep0000056

Chaturanga, M. V. & Cruz, P. V., Jr. (2020, October 15). Gruesome twosome: Amid suicide surge triggered by Covid-19, Guam is facing a shortage of mental health professionals. *Pacific Island Times*. https://www.pacificislandtimes.com/single-post/2020/10/15/Gruesome-twosome-Amid-suicide-surge-triggered-by-Covid-19-Guam-is-facing-a-shortage-of-mental-health-professionals

Campbell, J. C. & Christopher, J. C. (2012). Teaching mindfulness to create effective counselors. *Journal of Mental Health Counseling, 34*(3), 213-226. https://doi.org/10.17744/mehc.34.3.j75658520157258l

Council for Accreditation of Counseling and Related Programs. (2016). 2016 CACREP Standards. http://www.cacrep.org/wp-content/uploads/2017/08/2016-Standards-with-citations.pdf

Foster, T. (2010). Encourage student wellness: An expanded role for counselor educators. *The Journal of Counselor Preparation and Supervision, 2*(1) 10-22. http://dx.doi.org/10.7729/21.0112

Health Resources and Services Administration. (2020). *HPSA find.* Retrieved November 5, 2020. data.hrsa.gov. https://data.hrsa.gov/tools/shortage-area/hpsa-find

Lemmons, R, & Zanskas, S. (2019). Residential counselors and self care: A retrospective qualitative study of archival interview data. *Health Services Research and Managerial Epidemiology, 6*, 1-9. doi:10.1177/2333392819867017

Mayorga, M. G., Devries, S. R., & Wardle, E. A. (2015). The practice of self-care among counseling students. *Journal of Educational Psychology, 8*(3), 21-28. https://eric.ed.gov/?id=EJ1098125

Nelson, J. R., Hall, B. S., Anderson, J. L., Birtles, C., & Hemming, L. (2017). Self-compassion as self-care: A simple and effective tool for counselor educators and counseling students. *Journal of Creativity in Mental Health, 13*(1), 1-13.
http://dx.doi.org/10.1080/15401383.2017.1328292

Newsome, S., Christopher, J. C., Dahlen, P., & Christopher, S. (2006). Teaching counselors self-care through mindfulness practices. *Teachers College Record, 108*(9), 1881-1900.

Oswalt, S.B. & Riddock, C.C. (2007). What to do about being overwhelmed: Graduate students, stress, and university services. *The College Affairs Journal, 21*(1), 24-44.

Posluns, K. & Gall, T. L. (2019). Dear mental health practitioners, take care of yourselves: A literature review on self-care. *International Journal for the Advancement of Counselling, 42,* 1-20. http://doi.org/10.007/s10447-019-09382-w

Sadler-Gerhardt, C. J. & Stevenson, D. L. (2012). When it all hits the fan: Helping counselors build resilience and avoid burnout. *VISTAS 2*(1), 1-7. https://www.counseling.org/Resources/Library/VISTAS/vistas12/Article_24.pdf

Smith, H. L., Robinson III, E. H., & Young, M. E. (2007). The relationship among wellness, psychological distress, and social desirability of entering master's-level counselor trainees. *Counselor Education and Supervision, 47,* 96-109. doi: 10.1002/j.1556-6978.2007.tb00041.x

Thompson, E. H., Frick, M. H., & Trice-Black, S. (2011). Counselor-in-training perceptions of supervision practices related to self-care and burnout. *The Professional Counselor, 1*(3), 152-162. doi:10.15241/eht.1.3.152

Wardle, E. A. & Mayorga, M. G. (2016). Burnout among the counseling profession: A survey of future professional counselors. *Journal of Educational Psychology, 10*(1), 9-15. https://eric.ed.gov/?id=EJ1131850

Wolf, C. P., Thompson, I. A., & Smith-Adcock, S. (2012). Wellness in counselor preparation: Promoting individual well-being. *The Journal of Individual Psychology, 68*(2), 164-181.

Wolf, C. P., Thompson, I. A., Thompson, E. S., & Smith-Adcock, S. (2014), Refresh your mind, rejuvenate your body, renew your spirit: A pilot wellness program for counselor education. *The Journal of Individual Psychology, 70*(1) 57-75. https://doi.org/10.1353/jip.2014.0001

World Health Organization. (2009). *Self-care in the context of primary health care*. https://apps.who.int/iris/bitstream/handle/10665/206352/B4301.pdf

Smartphone Use: Perceptions and Opinions of Undergraduate Students

KATHRINE J. GUTIERREZ, MARY JANE MILLER, University of Guam

Abstract

Students use of smartphones is quite ubiquitous across contexts of academic life and social life. This article discusses the opinions and perceptions of a sample of undergraduate students at the University of Guam. Much has been written about both the benefits and harms that can come from extensive use of smartphones among college students. However, during recent years the COVID-19 pandemic has occupied student lives and may have impacted their use of technology, particularly the use of smartphones. The data findings may be useful in looking for changes in undergraduate students' use of smartphones over the course of time and as a possible consideration for incorporating smartphones intentionally into teaching and learning.

~~

Students have a propensity to use smartphones for not only academic life but social life. Smartphone defined as "… an advanced technology gadget that has all mobile phone features as well as computer capabilities" (Iqbal & Bhatti, 2020, p.1 of 16). The recent years of the pandemic may have had students' rely on smartphones to stay connected with peers and more so a probable reliance on smartphones as an extension or replacement of in-person connections both for academics and for social connectedness with each other. Given the onset of the pandemic, academic institutions and students have had to rely on technology for "doing learning". Yet, smartphones can be used and are used for much more than linking into e-learning. It is a device where you can link to and engage in social media, browse the Internet, and to be entertained. Flanigan and Kiewra (2018), have written on a phrase called "cyber-slacking". They write,

> Today's traditional-aged college students are avid users of mobile technology. Commonly referred to as the Net Generation, today's college students spend several hours each day using their smart phones, iPads, and laptops. . . . college students frequently use mobile technology for off-task purposes while attending classroom lectures or doing schoolwork outside of class—a phenomenon known as cyber-slacking. (Flanigan & Kiewra, 2018, p. 585)

According to the Pew Research Center (2021), as of their survey results Feb. 8, 2021, roughly 85% of the American population surveyed possess a smartphone and noted there is a 35% increase in ownership from their survey conducted in 2011. Further, the Pew Research Center (2021) reports 96% of Americans ages 18-29 and 95% ages 30-49 own a smartphone according to their survey conducted Jan.-Feb.,2021. The study by Iqbal and Bhatti (2020) noted "Smartphones have become a primary device to access the Internet as well as the most commonly used infotainment gadget among the Generations Y and Z (those born in the 80s and 90s)" (p. 1 of 16).

Interestingly, a web search of articles and study's about students and smartphone use show a high concentration of writings focused on technology use (smartphones included) during the pandemic and on-going. This article will present an overview of some literature, as context to situate the discussion of the results reported herein this paper, written about smartphone use: (a) connection to the pandemic and (b) its possibility of effecting one's well-being and/or addictive proclivities to using smartphones. Next discussed is the data gleaned from the perceptions of undergraduate students at the University of Guam. Conclusions and reflections follow thereafter.

Smartphone Use and the Pandemic

As educational contexts across the globe relied on online learning given the onset of the pandemic in 2020, students accessed e-learning through some form of technological device. There have been specific studies written about students' smartphone use as premised upon the pandemic phenomenon. For instance, a recent published study by Adalar (2021), described teacher candidates' smartphone use during the pandemic from a population of university students in Turkey and their associated metaphors attributed to explain the perceptions of such use. Adalar (2021) reported that there was a dichotomy or dilemma of the candidates' perceptions of smartphone use as one "in control" of the device and also as "dependent" on the device (p. 391). Adalar (2021) further described several metaphorical musings of the candidate's descriptions of their smartphone use and generated five (5) themes to report a holistic understanding of their perceptions – "socialization/communication; spending happy time; correct usage; functionality; dependency" (p. 392, Fig. 1). As a takeaway from reviewing Adalar's (2021) study, we can surmise that the teacher candidates' described in the study maybe expressing reliance on the smartphone use for coping through the pandemic – a need for socialization and also a need to "do learning" as part of the educational expectations.

Smartphone Use and the Possibility of Effecting One's Well-Being

How addictive or dependent can one be to their smartphone? Several studies across different disciplines have reported on the effects of smartphone use. Dowdell and Clayton's (2019) study reported on student's sleep interruptions by use of cell phone during sleeping hours. Interestingly, their survey asked respondents about the location of cell phone in proximity to sleeping (Dowdell & Clayton, 2019). They also noted that 100% of their participants, college students, described their cell phone as being a smartphone (Dowdell & Clayton, 2019). Their (Dowdell & Clayton, 2019) survey questions about sleep and cell phone included questions as: "*What type of sleeper are you?*" (p. 642) "*Have you ever answered your cell phone in your sleep?*" (p. 642) "*Do you put the cell phone in bed with you?*" (p. 642) "*Do you feel using a cell phone at night influences your sleep?*" (p. 642) "*Have you ever texted in your sleep?*" (p. 642). Dowdell and Clayton (2019) concluded that sleep texting affects the quality of one's sleep and "a growing trend in a college student population" (p. 640).

Sohn, Krasnoff, Rees, Kalk, and Carter (2021) recently reported on their study results of "smartphone addition and sleep" with young adults in the United Kingdom (p. 1). They concluded "39% young adults reported smartphone addiction. [Where] Smartphone addiction was associated with poor sleep, independent of duration of usage . . ." (p. 1).

Further, a multi-perspective, cross-cultural study of smartphone use with university students from United States, Spain, and Columbia conducted by Panova, Carbonell, Chamarro, and Puerta-Cortés (2020) found that certain "problematic smartphone use contributed to anxiety scores" (p. 944) and such usage varied among the cultural contexts: US - game playing was a contributor to anxiety, Spain – browsing the internet was a contributor to anxiety, Columbia – nothing as a specific use affected or contributed to anxiety (p. 944). The authors concluded "[W]hile specific smartphone uses and their consequences on the user might vary in part depending on cultural context, problematic mobile phone use, as characterised[sic] by dependence and over-attachment to the device, may be associated with higher anxiety regardless of culture" (Panova et al., 2020, p. 953).

The three aforementioned studies detail instances where university students self-reported the effects of their smartphone use. Intriguingly, the small study reported on in this paper depicts similar viewpoints of how undergraduate students' perceptions of their smartphone illuminated their behavioral dependency with the device. The following method section explains the results.

Method

Data collection and analysis was informed by a Moodle survey of students in an undergraduate course at the University of Guam with data collected for three years, 2020, 2021, and 2022 supplemented with student responses to follow-up questions.

Data Sample and Data Collection

The sample and data collection depict the amount of time undergraduate students in a typical undergraduate course at the University of Guam report using their smartphones on a daily basis. It looks at phone use in broad terms without asking for specific Apps, games, or programs but sought information on the amount of time students report devoting to each general category. The information was collected from student responses to surveys, questions and assignments in Moodle (the learning management system used by the university) during three consecutive years.

While this is a small sample, the results are quite telling in terms of students' self-reported perceptions of their daily reliance on the smartphone.

In 2020, the number of students was 78 (n = 78); in 2021, the number of students was 54 (n = 54); in 2022 the number of students was 48 (n = 48). In 2021 and 2022 an additional question was asked of the students and as a result of the information gathered from that question, another question was added in 2022.

Data was collected and analyzed using *Question Pro Online Survey Software* and supplemented with student comments and responses to online assignments. Descriptive Statistics were used to report findings.

Results

During recent years the COVID-19 pandemic has entered student lives and may have impacted their use of technology, particularly the use of smartphones. The findings of the data collected 2020, 2021, 2022 depict a rich understanding of the undergraduate students' self-assessment of their smartphone use. These results may be useful in looking for changes in undergraduate students' use of smartphones over the course of time and as a possible consideration of incorporating smartphones intentionally into teaching and learning.

In *Question Pro*, the students were asked the following questions:

1. About how much time per day do you spend using social media, email or text messaging on your phone?
2. About how much time per day do you spend searching the internet or reading newsfeeds on your phone?
3. About how much time per day do you spend playing games on your phone?
4. Altogether, about how much total time per day do you spend using your phone (email, internet, games, social media etc., etc.,)?

These questions can be themed into understanding students' use of the smartphone as a) Frequency of Use (how much time using the device) in reference to question #4, while specific to b) Types of Uses (how much time on a particular activity) in reference to questions #1, 2, 3. In looking at the results, it should be noted that 2020 is the year the COVID-19 pandemic hit and students and their families were locked down in their homes for weeks on end without the ability to visit friends or other family members. While pandemic ramifications certainly continue to work among our students, 2020 was the year of greatest required isolation.

<u>Question 1:</u> About how much time per day do you spend using social media, email or text messaging on your phone?

Table 1 shows student reported phone use during 2020, 2021 and 2022. In all three years, students most frequently said they spent 3 to 5 hours engaged with social media, email, or text messaging on a daily basis. In general, 2021 showed the least amount of time dedicated to social media phone uses, and 2020 showed the greatest use of phones for social or communication purposes.

Table 1

Percent of Students Using Social Media, Email or Text Message per Hours per Day

Year	10+ hours	6-9 hours	3-5 hours	1-2 hours	1 hour or less
2022	11%	29%	36%	18%	6%
2021	6%	26%	45%	12%	11%
2020	28%	27%	29%	10%	6%

It is noteworthy that in 2020, 55% of students said that they spent anywhere from 6 to more than 10 hours per day on their phones which is significantly more than in either 2021 (32%) or 2022 (40%). It should also be noted that at this time (in 2020), students had suddenly been required to transition from face-to-face classes to all online classes as lockdown was initiated across the island. This means that students were also spending much larger amounts of time using their computers. The many hours spent on social media, emailing or text messaging using smartphones is not surprising as students reached out to friends and family during the lockdown situation when they could not meet, or to get assistance from each other in addressing problems with what was, for most, a new format for learning: Moodle.

It is rather surprising that 11% (2021) or even 6% (2020 and 2022) of students report that they use their phones less than one hour per day, even during that first pandemic year. The figure may be accurate for some students, however, it may also be higher than expected due to a reporting bias since the questions, although reported anonymously in Question Pro, were asked through a Moodle class.

Question 2: About how much time per day do you spend searching the internet or reading newsfeeds on your phone?

Table 2 below shows fairly consistent use of smartphones over the three years with 64% of students reporting that that they spent a total of 1-5 hours daily searching the internet or reading newsfeeds, 63% in 2021 and 58% in 2020. At 40%, 1-2 hours was the most frequently reported amount of time that students claim to use their phones for searching the internet or reading newsfeeds in 2021 and in 2022, an equal number of students state 1-2 hours daily as 3-5 hours. Both categories stand at 32% in 2022.

Table 2
Percent of Students Searching Internet or Reading Newsfeeds per Hours per Day

Year	10+ hours	6-9 hours	3-5 hours	1-2 hours	1 hour or less
2022	4%	14%	32%	32%	18%
2021	6%	11%	23%	40%	20%
2020	13%	12%	34%	24%	17%

Again, 2020, the pandemic lockdown year, shows a larger percentage of students reporting that they spent anywhere from 6 to more than 10 hours on their phones than in 2021 or 2022. Responses in 2020 indicated that 25% students used their phones to search the internet or read newsfeeds between 6 and 10 or more hours per day. Total for the same number of hours in 2021 was 17% and in 2022 it was 18%.

Question 3: About how much time per day do you spend playing games on your phone?

The various answers for this question are interesting, but not surprising, especially since it was asked as part of a class assignment. One would expect students might say that they spend little time playing games on their phones and, in general, that is what Table 3 shows. The greatest number of students in each of the three years report using phones for 1 hour or less to play games. Although this may be accurate, reporting bias can fairly be considered.

Table 3
Percent of Students Playing Games on Phones per Hours per Day

Year	10+ hours	6-9 hours	3-5 hours	1-2 hours	1 hour or less
2022	4%	4%	7%	21%	64%
2021	0%	19%	13%	17%	51%
2020	6%	9%	10%	26%	49%

What is more surprising, is that 6% in 2020 or even 4% in 2022 would admit to spending 10 or more hours per day playing games on their phones while taking online classes. Although none (0%) of students in 2021 said they play games on their phones for 10 or more hours, a whopping 19% claimed 6 – 9 hours of daily game play.

During a lockdown situation, such as in 2020, it would be reasonable to suppose that more students would spend larger amounts of time playing online or phone app games. However, only 15% of students in 2020 reported they spent 6 to more than 10 hours playing games on their phones while in 2021 the total was 19% and in 2022 the total is 8%. So, it may be that students in 2021 rather than in the lockdown year (2020) spent more time playing games on their phones.

<u>Question 4:</u> Altogether (email, internet, games, social media, reading news, etc.), about how much total time per day do you spend using your phone?

Students from the year 2020 lead in the largest number of total hours reported using their smartphones. In 2020, 75% of student acknowledged spending at least 6 and possibly more than 10 hours on their phones every day. In 2021 this number was 66% and in 2022 it was 57%. This is shown in Table 4.

Table 4
Percent of Students Reporting Total Time on Phone per Hours per Day

Year	10+ hours	6-9 hours	3-5 hours	1-2 hours	1 hour or less
2022	21%	36%	29%	11%	3%
2021	30%	33%	33%	2%	2%
2020	38%	37%	19%	4%	2%

Even looking at the smallest percentage of the 6 to 10 hours or more users, 57%, it is rather mindboggling that every day these undergraduate students, spend 6 to 10 or more hours on their phones. This begs the question of whether students are experiencing a condition often cited in the literature as smartphone addiction.

Because of the responses to the Question Pro item in 2020 showing such extensive phone use, another question was asked of students in Moodle for years 2021 and 2022. Students were shown a video about cell phone addiction and its symptoms. The question then *asked whether students believed they could be addicted to their smart phones.* Responses to this question are shown in Table 5.

Table5 5
Percent of Students Reporting Likelihood of Smartphone Addiction in 2021 and 2022

Year	Might Be Addicted to Smartphone	Probably Not Addicted to Smartphone
2022	93%	7%
2021	87%	13%

Given information about the signs of smartphone addiction, many students in both 2021 and 2022 were very forthcoming about the possibility that they could be addicted as shown in Table 5. In 2021, 87% said they might be addicted to using their phones with the remaining 13% stating that they believe they are not addicted. In 2022, the percentage leaned further into the possibility of phone addiction with 93% of students saying there believe they might be addicted to frequent phone use and only 7% saying they are likely not addicted.

Phone Use Behavior and Responses
Because so many students indicated that they are likely addicted to their phones, three more videos about smart phone use were shown and two additional items were added to Moodle in 2022. The first Moodle item asked students for specifics of how and when they used their smartphones each day: *Please describe when you use your smartphone including whether you check it throughout the night.*

In response to this item, almost everyone said they check their phones first thing upon waking in the morning. Only a few students, about1%, said they have coffee and relax or do chores or other activities before reaching for their phones. The others said they look for their phones first thing in the morning.

Student responses talked about morning and nighttime use as well as how they use their phones throughout the day. Phone use in the mornings included many versions of the same idea. Almost everyone commented that they check their phones immediately upon waking in the morning, with such comments as:

- I reach for my phone as soon as I open my eyes
- As soon as I wake up I am searching for my phone
- The first thing I do in the morning is check my phone
- Right when I wake up I reach for my phone to check the time.

In further describing their initial interaction with their phones most students said they check their alarm or clock. Otherwise, the most universally reported subsequent activities are: The first thing I do is check all my social media to catch up on whatever I missed or what is interesting. Student comments included noting:

- The first thing I do is read text messages and news.
- It is important that I always check my schedule or calendar for the day to remind me what I have to do.
- I need to check assignments for school and work.

The most frequently stated items are the first two on the list. Checking social media was by far the most frequently mentioned morning use of the students' smart phones. Student comments went on to describe their typical phone use in their morning routine:

- I constantly check my phone for the time while getting ready for the day.
- I always play music on my phone while showering and dressing.
- I play music in my car while driving to school or work
- I eat breakfast while watching YouTube or a TV series on my phone
- I usually get up when I have finished reading my social media or I get bored.
- Sometimes I'm on my phone for hours before showering or eating.
- I always wake up early enough to give plenty of time to check my phone

When mentioning the specifics of what they do on their phones in the morning, student comments include the following items with the most frequently stated responses at the top and the less frequently stated responses at the bottom:

- Phone used as alarm
- Instagram, Twitter, TikTok, Snapchat
- Play music
- Read email
- Check schedule or calendar for the day
- Contact school or work groups
- Check in with parents
- Apps for workout

In discussing how students used their smartphones during the day, 100% provided comments describing their typical smartphone use. Nobody said that they do not check or use their phones every day. A small number, about 2%, commented that they believe they use their phones appropriately even though they check them frequently and a few said they use them primarily for school or work. Almost everyone stated that they use their phones for social media and communication purposes.

When talking about the frequency of their phone use, the majority of students said they are on their phones frequently or constantly every day. The student responses include various phrasings of the following:

- I check my phone often during the day
- I have to look at my phone at least every hour every day
- Throughout the whole day
- Constantly using my phone every day
- When I'm not in class I'm on my phone most of the time
- I check my phone every two minutes.
- All the school day to stay in touch with classmates and keep up with assignments.
- I have to use my phone throughout the workday to communicate with coworkers
- Whenever I'm not driving

The final items on the frequency list are notable in that some of the students spoke of using their phones frequently but appropriately, commenting:

- I don't check my phone constantly but I always keep it next to me for texts and other messages.
- I check my phone frequently but not as much as some of my friends. Using it that much isn't healthy.
- I use my phone a lot but I use it appropriately and I'm not addicted.
- I'm on my phone many times in a day, but not as much as my parents think.
- I have cut back on how much I'm on my phone, especially social media.

The following are the most frequently mentioned reasons for students' frequent phone use. Although the bottom 5 items on this part of the list were reported multiple times, the first three items, using phones when bored, to keep up with friends and family, and to play music, were the most frequently stated purposes for their phone use.

- I mostly use it when I am bored
- To keep up with friends and family (social media)
- Play music while doing chores or driving
- Text and call/video chat with girlfriend/boyfriend/significant other
- While cooking and eating
- I need to communicate with work groups or ask about assignments
- To play games
- To look at or take photos
- I use my phone to relax

The following responses pertaining to how students use their phones were noteworthy in that they reflect a different mindset from the reasons expressed in the first portion of the list:

- I definitely think I am addicted to my phone
- It's an essential part of my everyday life
- Life revolves around my phone
- I use it for almost everything all day
- Sometimes I do not realize I have lost track of time and hours have passed.
- Try not to use it during f2f classes but it's really hard
- I should stop using my phone at the dinner table.
- All this phone time causes me lower productivity. I have to cut back.

A few students mentioned further reasons for their phone use. The potential to use phones to avoid people on a continual basis may be a reason for concern.

- Use it to avoid others
- I use it at social gatherings so I don't have to talk to people
- When I feel anxious around people

In describing how they use their phones at night, student responses were varied and interesting. Few students stated that they absolutely only use their phones during the day and never at night. Less than half of the students claim to use their phones after they are in bed and before sleep but not during the night. A few students said that they use their phones after they are in bed but throughout the night they only check the time or make sure the alarm is set. All the rest of the students reported using their phones at least occasionally during the night with many describing frequent use of their phones throughout the night.

Student comments regarding evening use:

- I use my phone in the evening but not after bed
- Never throughout the night
- Only to set/check alarm for the next day
- Play soft music to help me fall asleep

Other comments categorized as reported phone use after bedtime but before sleep:

- I always pick up my phone when I first lay down
- Every night I check my phone before I go to sleep
- I lay in bed and scroll through everything
- Sometimes I'm on my phone from 8pm until I sleep
- Usually go through all of social media/email then other apps like news
- Use phone for 5 or 6 hours before sleep
- On phone for hours watching TikTok/Netflix/YouTube.
- Video call with girlfriend/boyfriend/significant other

A number of students explain they keep their phones with them at night but do not check throughout the night other than to look at the time or to check the alarm. With comments concluding as:

- I sleep with it next to me
- Only check the time in the night but sometimes I check a lot

Many students admit to checking their phones routinely and frequently throughout the night. Several commented that they get anxious and a few can't sleep until they look at their phone. The first three items were given many times.

- Yes, I check my phone throughout the night
- I do check my phone during the night
- Wake up in the night to check messages/social media
- Always need my phone to check time but I check so frequently it causes me to lose sleep.
- I check my phone throughout the night because I am anxious
- If I wake up I can't get back to sleep until I check my phone.
- During the night I watch YouTube or TV
- I often use the phone's light at night

A few students also commented that they often feel tired or not refreshed when they wake up in the morning.

The second question posed to students in 2022 had to do with anxiety or dependence upon their phones: *If you left your phone at home, would you feel anxious or return home for it even if it meant being late for class or work?*

In response to this question, about twice as many students said they would feel anxious or return home for their phones as said they would not. Although other reasons were given for the need to have the phone with them at all times, by far the most frequently cited reason for returning home was for use in case of an emergency and for keeping in touch with parents or family.

Comments from students who say they would feel anxious or return home for their phones even if it meant being late for class or work:

- I would go back to have it for emergencies
- I would be late because it's needed to communicate all day and for any emergency
- Needed in case of any emergencies or if my car breaks down
- I wouldn't really feel anxious but I need the phone for emergency use
- I would miss class or be late for work
- I wouldn't miss class but I'd be late for work
- I would miss class but not work
- I would go back if I know I will be out for the whole day

Students often mentioned that their families are important reasons why they need their phones:

- My parents would be worried.
- I would be in trouble if my parents tried to call and I did not have my phone
- My parents would lecture me.
- My family might need to reach me.
- I need to know if family is picking me up.
- I'm responsible for my children and must have my phone with me for emergency.
- If I don't keep my phone all the time then my parents are just wasting their money to pay for it.
- I don't want to miss a call from family/friends/work.

There were also comments about the anxiety that would be experienced if students left their phone at home and did not have it.

- I get anxious if I don't have my phone.
- I would be too worried not to go back.
- I'd be stressed out if I didn't have my phone.
- I must have my phone at all times.
- I'd have to go back.
- I'd be so afraid I lost it I'd have to go back no matter what.
- I would feel anxious because I need my calendar and apps.
- My phone is the only thing that keeps me in contact with others throughout the day.

Some comments from students who say they would not go back for their phones if it meant they would be late for class or work sound very sure and some even offer "proof" from experience.

- There are times I have forgotten my phone and did not go back.
- I have forgotten my phone a couple of times and did not go back.

- I could borrow a phone from a friend if I had to.
- I use my phone a lot but I'm not addicted and would not go back.
- Absolutely not.
- I live too far and it would take too much gas.
- I would not miss class.
- No, it's ok if I forget my phone.

It is interesting that a number of the comments in the "no I would not go back" group sound a little unsure or perhaps even hopeful.

- I think I would not go back for it if I ever left my phone at home.
- Maybe I'd go back
- I don't think I would be late for work
- Probably not. I take school and work seriously.
- I think/hope I would not go back.

One area of student response was particularly interesting is the group of students who said that leaving their phones behind is something that just could never happen.

- This never happened
- I would not ever leave home without my phone.
- I make sure I do not leave my phone at home.
- Parents always ask if I have phone, pepper spray and keys. I can't forget it.
- I would never forget my phone
- I have never forgotten my phone.
- This hasn't ever happened
- I always have my phone. My dad/mom always reminds me to charge my phone and take it with me.

Reflections and Concluding Remarks

The context and results of this study is limited in scope to students surveyed in an undergraduate course at the University of Guam and the data collected from three years 2020, 2021, and 2022. However, a more extensive and specific study about smartphone use and its associated effect on undergraduate students at the University of Guam would be a useful study to explore on a greater scale. Further research and an expansive literature review on smartphone use and its possible addictive impact on university students would make a rich contribution to further situating the small-sample results noted in this paper to a larger body of empirical literature.

The biggest takeaway from the results of the small sample described in this paper relate to the self-reported behaviors of the undergraduate students' dependency on the smartphone device. This as seen in the qualitative responses to the questions asked to students in the years 2021 and 2022 centered on their self-reported perceptions of possible dependency to the smartphone and reasons for such reliance on the device. Looking across the empirical literature there are connections to other contexts that have reported similar understandings or perceptions of university students' self-reported opinion of their smartphone use. In particular, Atas and Celik (2019) employed a cross-sectional study of undergraduate and graduate students in Turkey with a large sample size of "842 university students studying in 101 different universities" (p. 63) and reported results of such students' perceptions per "patterns of use, purposes of use, and situations of use" (pp. 64-66) regarding smartphone. Their typology of sensemaking the perceptions of their respondents data are interesting viewpoints to consider, as we unpack the data results described from our small sample and our own sensemaking of such data we herein describe in this paper. Yet for us and our discussion in this paper, the results from the undergraduate student data can be themed into two main constructs of understanding students' smartphone use as a) Frequency of Use (how much time using the device) in reference to question #4 asked, while specific to b) Types of Uses (how much time on a particular activity) in reference to questions #1, 2, 3 asked. Yet a further and more telling description can be noted as a theme of Dependency of Use, as some students' noted awareness of their possible compulsion to a need or anxiety to always have the device, the smartphone, with them as evident with the question asked in 2022 – *If you left your phone at home, would you feel anxious or return home for it even if it meant being late for class or work?* The specific comments students' provided on being anxious if the smartphone was not with them, do illuminate strong feelings of some need or dependency on the smartphone such as the comments given "I get anxious if I don't have my phone" and other comment as "I'd be stressed out if I didn't have my phone". Yet we reemphasize, the results reported here are from a small and isolated sample of students in one undergraduate course. The responses of the undergraduate student sample from the University of Guam detail a contrast of the majority respondents in 2022, n= 48, noting "might be addicted" 93% to "probably not addicted" 7% to the smartphone – quite a stark difference in the self-reported perceptions.

Conclusion

In conclusion, as educators and researchers in higher education, we are mindful not to make direct correlations of one context to another – however, such understandings from other studies such as from Atas and Celik (2019) support our reflection that we can and should consider ways to harness the potential to incorporate smartphone applications to support teaching and learning. As Atas and Celik (2019) stated, "Smartphones are central to the lives of many university students. Although smartphones and social media do not formally exist in the curriculum, they are used by students for their education. . . . As educators, we need to find meaningful ways to incorporate these devices into learning. . . ." (p. 67).

References

Adalar, H. (2021). Smartphone perception and experiences of teacher candidates during Covid 19 process: What is my smartphone for me? *Education Quarterly Reviews, Vol.4*, No. 2, 384-395. ISSN 2621-5799DOI:10.31014/aior.1993.04.02.288. Access online at: https://www.asianinstituteofresearch.org/

Atas, A. H., & Celik, B. (2019). Smartphone use of university students: Patterns, purposes, and situations. *Malaysian Online Journal of Educational Technology, 7*(2), 59–70. https://doi.org/10.17220/mojet.2019.02.004

Dowdell, E.B., & Clayton, B.Q. (2019) Interrupted sleep: College students sleeping with technology. *Journal of American College Health, 67*(7), 640-646, DOI: 10.1080/07448481.2018.1499655

Flanigan, A. E., & Kiewra, K. A. (2018). What college instructors can do about student cyber-slacking. *Educational Psychology Review, 30*(2), 585–597. https://doi.org/10.1007/s10648-017-9418-2

Iqbal, S., & Bhatti, Z.A. (2020). A qualitative exploration of teachers' perspective on smartphones usage in higher education in developing countries. *International Journal of Educational Technology in Higher Education* 17:29 (pp.1-16). https://doi.org/10.1186/s41239-020-00203-4

Panova, T., Carbonell, X., Chamarro, A., & Puerta-Cortés, D. X. (2020). Specific smartphone uses and how they relate to anxiety and depression in university students: a cross-cultural perspective. *Behaviour & Information Technology, 39*(9), 944-956, DOI: 10.1080/0144929X.2019.1633405

Pew Research Center (2021, April 7). *Mobile fact sheet*. Retrieved from https://www.pewresearch.org/internet/fact-sheet/mobile/ on May 2, 2022.

Sohn, S.Y., Krasnoff, L., Rees, P., Kalk, N.J., & Carter, B. (2021). The association between smartphone addiction and sleep: A UK cross-sectional study of young adults. *Frontiers in Psychiatry* 12:629407. DOI: 10.3389/fpsyt.2021.629407

Social-Emotional Learning and Mindfulness

GENEVIEVE C. LEON GUERRERO, University of Guam

Abstract
For K-12 students, the impact of COVID-19 has contributed to lower mental health outcomes. School districts, such as those on Guam and the Pacific Islands, have had to alternate between distance and face-to-face learning, disrupting critical social and cognitive development. Classroom teachers face the overwhelming challenge to support both academic achievement and cater to the social-emotional needs of their students. This paper has synthesized a range of scholarly literature describing the influences of COVID-19, potentially traumatizing events impacting the young, long-term effects, and classroom intervention approach to support students.

Revisiting Social-emotional Learning
Schools are charged with the basic goal of educating children which involves the development of both cognitive and non-cognitive abilities. Yet, education today serves under the shadow of the COVID-19 pandemic which has been a major disruption for both the education and well-being of students around the globe. The Covid-19 pandemic has had a particular impact on the mental health of children and adolescents (Grazzani et al., 2022; Zieher et al., 2021). One such example is Sustainable Future Schools, a Canadian pilot program that envisions primary and secondary schools adopting a comprehensive 'whole school" approach to promoting the school and emotional wellbeing of children and young people (Elliot, 2021). The sustainable education paradigm embraces three dimensions of transformative learning: seeing, knowing, and doing. The recent framework integrates socio-cultural and technological as part of thinking tools for K-12 students. (Bosevska & Kriewaldt, 2020).

Background and Problem
Children have not experienced the mortality rates from COVID that adults have, but there is evidence that they may be among its hardest-hit victims, especially families from low and middle social economic status (Sharma et al., 2021). The social rhythm of children's lives and routines have been profoundly disrupted (Yang et al., 2021). These children often experience both mental and physical health problems related to school closures and community lockdown, including anxiety, depression, lower physical activity, food insecurity, and school disengagement (Alves et al., 2021; Sharma et al., 2021).

The effects of the COVID-19 pandemic and related school closures on the availability of education, learning resources, and social-emotional well-being have been severe for most children (Council of the Great City Schools, 2020). Reinke et al. (2011) research addressing the social-emotional challenges of students of overt behavior patterns of student cognitive flexibility reported by classroom teachers the need for professional development and focused training to support the social-emotional needs of students. For example, a recent survey of 5–16-year-olds in England found a significant rise in mental health problems between 2017 and 2021 (Newlove-Delgado et al., 2021). The rate of reported mental health issues (e.g., trouble sleeping, feelings of loneliness) increased from a 10.8% average in 2017 to 16.0% in July of 2020 (Newlove-Delgado et al., 2021). This frequency has increased as the COVID-19 pandemic continues, and comparable results would be expected among United States children.

In a typical class of thirty students, there is potential for several mental disorders due to everyday circumstances of life that students may experience. A meta-analysis by Durlak et al. (2021) lists the following examples of events that are often cited as contributing factors.

Table 1
Potentially Traumatizing Events that Impact Mental Health of Students

Student Response	Traumatizing Event
1	Has experienced the death of a parent (a)
4	Lives in a single-parent household (b)
5	Has diagnosed mental health difficulties (c)
5	Lives deep in poverty (d)
7	May have self-harmed (e)
11	Has experienced bullying (f)

Note: This table shows the number of students in the left column and the potentially traumatizing events they have experienced in the right column. The specific notes below a, b, c d, e, f are aligned with scholarly literature.

[a] Fauth, B., Thompson, M. & Penny, A. (2009) Associations Between Childhood Bereavement and Children's Background, Experiences and Outcomes: Secondary analysis of the 2004 Mental Health of Children and Young People in Great Britain data. (viewed on 19 September 2021)

[b] Office for National Statistics 2021 Families and households in the UK: 2020 (viewed 19 September 2021)

[c] NHS Digital (2020) Mental Health of Children and Young People in England, 2020: Wave 1 follow up to the2017 survey (viewed on 19 September 2021)

[d] Department for Work and Pensions, 2021 Households Below Average Income, Statistics on the number and percentage of people living in low income households for financial years 1994/95 to 2019/20, Table 4_2tr (viewed 19 September 2021)

[e] Brooks, F., Klemera, E., Chester, K., Magnusson, J. and Spencer, N. (2020) HBSC England National Report:Findings from the 2018 HBSC study for England. Hatfield, England: University of Hertfordshire (viewed 19 September 2021)

[f] Brooks, F., Klemera, E., Chester, K., Magnusson, J. and Spencer, N. (2020) HBSC England National Report: Findings from the 2018 HBSC study for England. Hatfield, England: University of Hertfordshire (viewed 19 September 2021)

Mental health is more than just the absence of mental illness. Mental health is a state of well-being where people can meet their learning potential, cope with normal stresses, and are connected to a community and their friends (McCann et al., 2022). However, research has shown that for many people mental health issues begin when they are children and half of all mental disorders emerge by the time people are 14 years old. Even for older students, three-quarters of those suffering from mental disorders are diagnosed by age 25 (Durlak et al., 2021). This is the time when most young people are in school. (Durlak et al., 2021; McCann et al., 2022).

This trend of mental disorders at an early age has the potential to be even more acute among youth who have lived through the complications of the COVID pandemic. Notably, mental illnesses that begin in childhood can cause significant lifelong costs because of their high incidence and elevated level of impairment (Durlak et al., 2021). Most children do not have access to interventions, especially in low- and middle-income countries, even though there is ample evidence to suggest that mental problems in children have serious consequences (Gawrysiak et al., 2018). Disability, emotional disturbances, and disruptive behavior problems are among the list of top 10 mental health-related causes of worldwide child mortality, and school-based policies and programs can play a significant role in helping children cope with or prevent mental disorders (Jones & Doolittle, 2017). School-based interventions have been reported to help children develop social-emotional skills and cognitive abilities while helping to prevent mental health concerns throughout their lives (Gawrysiak et al., 2018).

Good mental health affects many aspects of one's well-being including the emotional, behavioral, and cognitive responses of an individual (Gawrysiak et al., 2018). Researchers and educators widely recognize that a child's emotional health and well-being influence their learning and their cognitive development (Durlak JA, 2011; Public Health England, 2021) as well as their physical and social well-being and their mental health in adulthood (NICE, 2008; NICW, 2009).

Schools are one of the most important environments for promoting child wellbeing, positive mental health, and social-emotional security (Council of the Great City Schools, 2020). For a child, going to school means connecting with friends and teachers, expanding their cognitive development, and accommodating to new environments and situations (Racine et al., 2022). It can also provide an opportunity to ask for help. For some students a teacher, school psychologist, or principal may be the trusted adult they turn to if their home life is problematic (Racine et al., 2022).

COVID-19 has compounded coping skills for adolescents between 13 and 18 years old (Yang et al., 2021; Zieher et al., 2021; Zhu et al, 2022). The challenges for traumatized students may be exhibited through impaired executive functioning, difficulty concentrating, missed assignment submissions, anxiety in group engagement, insubordination, and excessive absences (Brunzell et al., 2016). Below is a table of mental disorders and the percentage of mental health impairment (NIMH, 2018).

Mental Disorders	Percentage of Mental Health Impairment
Major Severe Depression	20
Major Depression	13
Anxiety	32
Post-traumatic Stress Disorder	5

Note: This table illustrates adolescents' mental health disorders and the percentage of mental health impairment.

When it comes to socio-emotional development, it is not just home that matters. A school helps connect children with the community. School, teachers, family, and friends can positively shape a child’s life (Dyson et al., 2021; Pemberton & Edeburn, 2021). There is good evidence to support the association between good mental health and education engagement and academic achievement (Dyson et al., 2021). The benefits of preventing mental health problems in children and young people from arising, and intervening early where they do, can be significant for schools. For example, it may result in improved attainment, attendance, reductions in behavioral problems, as well as happier, more confident, and resilient children and young people (Dyson et al., 2021; Pemberton & Edeburn, 2021).

Social-Emotional Learning

One of the most researched methods that schools can employ to promote student learning and well-being is a program that promotes positive Social-Emotional Learning (Yoo, 2021). Social-emotional learning encompasses the process by which people go about identifying and managing their emotions, comprehending another's viewpoint, being empathetic, setting and accomplishing positive objectives, building, and maintaining good relationships, and making responsible choices toward promoting prosocial behavior (Espelage et al., 2015). Yoo (2021) describes SEL as "the ability to recognize and manage emotions, solve problems, build positive relationships with others, and build skills and competencies essential for all children and adolescents." These learned behaviors are then used to help students make positive, responsible decisions, create frameworks to achieve their goals, and build positive relationships with others (Dyson et al., 2021).

Jones and Doolittle (2017) state that SEL is part of a suite of essential 21st-century skills, including soft skills and metacognition skills. Social-emotional skills are important in teaching and improving children’s academic learning but also in promoting positive behaviors and citizenship. Incorporating SEL in the classroom can be as simple as teaching specific skills like recognizing emotions or using specific statements, with a teacher demonstrating these abilities for the students and guiding them through practicing them for a specified period, and then they help students go to the next skill (Jones et al., 2017). Providing these skills to students is necessary, as people with strong social-emotional skills are better able to cope with everyday challenges and benefit academically, professionally, and socially. From effective problem-solving to self-discipline, impulse control to emotion management and more, SEL provides a foundation for positive, long-term effects on kids, adults, and communities (Jones & Doolittle, 2017).

Modern SEL researchers agree on five core competencies that form the basis of social-emotional skills (Davis et al., 2021; Lawson et al., 2019). Table 2 illustrates these core competencies.

Table 2

Core Competencies of Social-Emotional Learning

Core Competencies	Social-Emotional Learning Information
Self-Awareness	The ability of individuals to recognize their own emotions and how these emotions impact their behavior.
Self-Management	The ability of individuals to take ownership and control their thoughts, emotions, and actions in stressful situations. This includes goal setting and working toward the accomplishment of those goals.
Social Awareness	The ability of individuals to understand others' point of view, to "put themselves in the shoes of another person" who may be from a different culture or background. This includes the ability to act with empathy and in an ethical manner in any potential setting.
Relationship Skills	The ability of individuals to initiate, build and maintain healthy relationships with people from a variety of diverse backgrounds. This includes the ability to listen to and communicate with others, peacefully resolve conflicts, and the ability to know when to ask for or offer help.
Make Responsible Decisions	The ability of individuals to choose how to act or respond to a situation based on learned behaviors such as ethics and safety and to weigh the consequences of their actions. This includes the ability to consider the well-being of others as well as themselves.

Supporting Research

Taylor et al.'s (2017) research examined the theory of change, an approach aimed at linking activities or interventions, in this case, Positive Youth Development (PPD), and outcomes or achievement of long-term goals. The research was a meta-analysis of 82 school based SEL programs (N = 97,406) serving students of low socioeconomic status (mean of 41.1 on a 100 point scale). The intervention program focused on the building of social skills to influence positive relationships and self-image. The skills taught included recognizing interpersonal insights, strengthening peer relationships, developing inhibition, and building long-term pathway goals. Pathway goals consist of six stages: identifying long-term goals, prerequisite conditions to accomplish goals, identifying the basic assumptions of the intervention, identifying prescribed intervention for best result, development assessment for the first measure, and narrative to deliver out the interference. The findings suggest gains in social-emotional skills and attitudes as variables that contribute to overall learner well-being.

Erwin and Robinson (2016) examined the increased use of mindfulness practices in early childhood education. Mindfulness is the contemplative practice of active reflecting on a student's emotional and physical centeredness. Increasing trends of mindfulness practice are notable in both corporations and professional athletes as mindfulness is valued for positively influencing productivity and building a supportive environment for overall individual mental wellness. Mindfulness strategies influence positive behaviors, such as concentration, self-regulation, improved attendance, and psychological distress.

An overview of the efficacy of elementary school-based SEL programs was conducted by Jones et al. (2017) with a focus on social and emotional competencies. In this study, SEL skills for elementary school learners included three competencies of cognitive regulation, emotional processing, and social/interpersonal skills. Cognitive regulation interventions focused on building skills such as concentration, planning, and problem-solving. Emotional processing interventions built the skills of self-identification, self-regulation, and understanding of others' emotions. Social and interpersonal skills combine the two areas intending to engage with others positively. Skills were practiced through role-play scenarios to build learner confidence and social problem-solving self-assurance.

Jones et al. (2017) found programs function best with an understanding of learners' level of development as a prerequisite in aligning program and prescriptive intervention efforts to maximize the best learner outcome. The theory of change functions in SEL programs as a conductor of intervention objectives and short-term and long-term outcomes. The emphasis is grounded on the SEL setting (on-campus/off-campus), SEL domain emphasis (cognitive, social, and emotional), program support (caretakers and external support links), and outcomes (individual, classroom, and school). For example, student-level outcomes for a middle school learner might focus on executive functioning skills of planning and goal setting, the emotional processing skills of self-regulation, and the social skill of reducing aggressive behavior.

Jones et al. (2017) found that intervention-focused programs suggest positive outcomes with increased intervention exposure. Therefore, integration of SEL programs as part of the day-to-day curriculum is recommended. This will build SEL strength in the school environment, with the inclusion of extended service providers for non-teaching staff.

Social-Emotional Learning in Schools

Social-emotional learning advances educational equity and excellence through authentic school-family-community partnerships to establish learning environments and experiences that feature trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation. SEL can help address various forms of inequity and empower young people and adults to co-create thriving schools and contribute to safe, healthy, and just communities (Pemberton & Edeburn, 2021).

The school's role in supporting and promoting mental health and well-being to its students includes several aspects. Early implementation to identify issues and provide effective support for students is crucial (Dyson et al., 2021). Schools and secondary schools should be supported in adopting a comprehensive, 'whole school' approach to promoting the social and emotional well-being of children and young people (NICE, 2008; NICE, 2009).

The emphasis of the intervention approach is based on the developmental, physical, and mental stages of the learner (Casper, 2021). For example, if the goal is to regulate self-control, the prescribed approach will differ based on the specific developmental, physical, social, and emotional level of the learner, which should be aligned with research findings. For a young student (between three and eight years of age), an external reward system of stickers is research prescribed, while an older student may respond better to the granting of special privileges or responsibilities (Jones et al., 2017). Interventions cannot be a one-size-fits-all approach (Jones et al., 2017). If applied consistently and comprehensively, social-emotional programs contribute toward protecting and promoting children and young people's mental health and wellbeing (Darling-Hammond et al., 2020; Pemberton et al., 2021; Sharma et al., 2021; Yoo, 2021).

Student SEL is both a collective and individual responsibility for all staff at a school. Most importantly, senior leadership needs to champion efforts to promote mental health and well-being throughout the student body, ensuring SEL efforts are accepted and embedded into the school and staff culture (Jones & Doolittle, 2017; NICE, 2008; NICE, 2009). Schools are encouraged to identify a senior mental health led to direct the implementation of SEL efforts. Whoever leads needs to be empowered to effect meaningful change and understand how a whole school approach will benefit everyone, not just mental health and well-being but more broadly improve attainment, attendance, reductions in behavioral problems, as well as happier, more confident, and resilient children and young people (Langford et al., 2014; Mehta et al., 2014).

Recommendations

The research supporting the value of SEL-based learning is overwhelming (Durlak et al., 2011). An education that promotes SEL has a positive impact on a wide range of outcomes, including academic performance, healthy relationships, and mental wellness (Jones and Doolittle, 2017). Three fundamental areas that teachers and schools can implement with few additional resources are lessons on self-awareness, self-management, and social awareness/relationship skills.

Self-Awareness

A component of SEL, self-awareness practice can be as simple as allowing a few minutes before class for learners to settle and focus on mindfulness (Jones and Doolitte, 2017). Unless used as a component of cooperative group learning, distracting cellular devices, and social media should be stored safely away from students' attention. Teachers should provide a few minutes for learners to self-review (either alone or in groups) the material from previous lessons. In the initial stages of the course, students should be engaged to set goals for both their future professional self and in the course. These goals can then be shared in collaborative groups.

Self-Management

Self-management is focusing on taking responsibility for one's behavior and success (Jones and Doolittle, 2017). Teachers can improve students' self-management skills by providing lessons focused on setting realistic goals, allocating time, and recognizing and dealing with anxiety. Improving self-management will strengthen learner accountability and planning skills, aiding them in goal setting, identifying academic obstacles, and designing an improvement plan (NICE, 2008; 2009). Self-management also helps in the recognition of academic challenges and judging the effectiveness of action plans to overcome those challenges. Further, it aids learners in identifying and maximizing strengths and compensating for weaknesses.

Social Awareness/Relationship Skills

Building social awareness and relationship skills is a lifelong and iterative process. Teachers can, however, contribute to this endeavor. For instance, communicating with students in groups to provide feedback, support, and follow-up on material instead of one-on-one. Grouping seating arrangements in pairs with face-to-face seating or groups of four students together will encourage social interaction between students. Additionally, seating students from diverse backgrounds together will expand horizons and foster social awareness. Finally, building a strong teacher-student relationship is paramount. Teachers serve as the social model for their students, so frequent positive interactions are necessary to aid students in developing social skills.

In the educational field researchers relating SEL and COVID-19) echo that academic accountability for students is leading to greater concern for learner psychological safety, which influences stress, anxiety, and absent-mindedness.

Future Research Directions

For both public and private schools, SEL programs can be effectively integrated and implemented within the educational system, thus future research direction should focus on educating instructors to adopt these methods.

Conclusion

SEL skills are valuable. Students who cultivate their SEL skills benefit academically and emotionally (Durlak et al. 2011; Jones and Doolittle, 2017). Most importantly, this value does not end after graduation. SEL skills are desired by employers, and people who have developed them fare better professionally (Durlak et al., 2021). However, these skills are suffering under the COVID-19 pandemic (Grazzani et al., 2022; Yang et al., 2021; Zhu et a., 2022; Zieher et al., 2021). Teachers, with the right assistance, can work to reverse the backslide students have recently suffered, and SEL-focused education can help them. Student-centered approaches coupled with inquiry-based learning and cultural meaning, such as literature circles, writer’s workshops, eco-literacy, and eco-technology would provide intersecting learning experiences.

There are opportunities throughout the school day for teachers to focus on SEL skills and these opportunities should be seized. Start with traditionally teaching SEL in the classroom, then go beyond by incorporating an EdTech tool to help students further build their SEL skills. The tool can work in conjunction with what is learned in the classroom and assist each student, no matter their learning style, in fostering each of the core competencies that are contained by SEL, expanding culturally responsive learning, extending learning time, and strengthening and commit to the assessment of student needs (Pemberton et al., 2021; Darling-Hammond et al., 2020).

References

Alves, J. M., Yunker, A. G., DeFendis, A., Xiang, A. H., & Page, K. A. (2021). BMI status and associations between affect, physical activity and anxiety among U.S. children during COVID-19. *Pediatric Obesity*, *16*(9), 1–10. https://doi.org/10.1111/ijpo.12786

Bosevska, J., & Kriewaldt, J. (2020). Fostering a whole-school approach to sustainability: Learning from one school's journey towards sustainable education. I*nternational research in Geographical & Environmental Education. 29(1), 55-73.* https://doi.org/10.10382046.2019.166112

Brunzell, T., Stokes, H., & Waters, L. (2016). Trauma-informed positive education: Using positive psychology to strengthen vulnerable students. Contemporary School Psychology, 20(1), 63–83.

Caspar, E. A. (2021). A novel experimental approach to study disobedience to authority. *Scientific reports*, *11*(1), 1-10.

Council of the Great City Schools. (2020). *Addressing Mental Health and Social-Emotional Wellness in the COVID-19 Crisis: A Resource Guide for School Districts*. Council of the Great City Schools.

Darling-Hammond, L., Schachner, A., Edgerton, A. K., & Learning Policy Institute. (2020). Restarting and Reinventing School: Learning in the Time of COVID and Beyond. In *Learning Policy Institute*. Learning Policy Institute.

Davis, K., Hammett, R., Seagraves-Robinson, T., Christian, D. D., & Low, G. (2021). Research Review and Notes: Social Emotional Learning: An Appreciative Approach to Teacher Development. *AI Practitioner*, *23*(3), 122–135. https://doi.org/10.12781/978-1-907549-48-9-16

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development*, *82*(1), 405-432.

Dyson, B., Howley, D., & Shen, Y. (2021). 'Being a team, working together, and being kind': Primary students' perspectives of cooperative learning's contribution to their social and emotional learning. *Physical education and sport pedagogy*, *26*(2), 137-154.

Elliott, S. (2021). A Whole-School Approach to Teaching the UN SDGs. *Education Canada*, *61*(1), 19–22.

Erwin, E. J., & Robinson, K. A. (2016). The joy of being: Making way for young children's natural mindfulness. *Early Child Development and Care, 186*(2), 268-286. doi:10.1080/03004430.2015.1029468

Espelage, D. L., Low, S., Polanin, J. R., & Brown, E. C. (2015). Clinical trial of Second Step© middle-school program: Impact on aggression & victimization. *Journal of Applied Developmental Psychology*, *37*, 52-63.

Gawrysiak, M. J., Grassetti, S. N., Greeson, J. M., Shorey, R. C., Pohlig, R., & Baime, M. J. (2018). The many facets of mindfulness and the prediction of change following mindfulness-based stress reduction (MBSR). *Journal of Clinical Psychology, 74*(4), 523-535. doi:10.1002/jclp.22521

Grazzani, I., Agliati, A., Cavioni, V., Conte, E., Gandellini, S., Spagnolo, M.L., Ornaghi, V., Rossi, F.M., Cefai, C., Bartolo, P., Camilleri, L., & Oriordan, M.R. (2022). Adolescents' Resilience During COVID-19 Pandemic and Its Mediating Role in the Association Between SEL Skills and Mental Health. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.801761

Jones, S. M., Barnes, S. F., Bailey, R., & Doolittle, E. J. (2017). Promoting social and emotional competencies in elementary school. *Future of Children, 27*(1), 49-72.

Jones, S. M., & Doolittle, E. J. (2017). Social and emotional learning: Introducing the issue. *Future of Children, 27*(1), 3-11.

Langford, R., Bonell, C. P., Jones, H. E., Pouliou, T., Murphy, S. M., Waters, E., ... & Campbell, R. (2014). The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement. *Cochrane database of systematic reviews*, (4).

McCann, L., Thompson, S. C., Rolf, F., & Podubinski, T. (2022). Police, permits and politics: Navigating life on Australia's state borders during the COVID-19 pandemic. *Australian Journal of Rural Health*.

Mehta, N., Croudace, T., & Davies, S. C. (2014). Public mental health: evidenced-based priorities. *Lancet (London, England)*, *385*(9976), 1472-1475.

National Institute for Health and Care Excellence (Great Britain). (2008). *Social and emotional wellbeing in primary education*. National Institute for Health and Care Excellence (NICE).

National Institute for Health and Care Excellence (Great Britain). (2009). *Social and emotional wellbeing in secondary education*. National Institute for Health and Care Excellence (NICE).

National Institute of Mental Health (2018). Prevalence of major depression, anxiety, and PTSD among adolescents. https://www.nimh.hig.gov/health/statistics/major-depression-anxiety-ptsd

Newlove-Delgado, T., McManus, S., Sadler, K., Thandi, S., Vizard, T., Cartwright, C., & Ford, T. (2021). Child mental health in England before and during the COVID-19 lockdown. *The Lancet Psychiatry*, *8*(5), 353–354. https://doi.org/10.1016/S2215-0366(20)30570-8

Pemberton, J. V., & Edeburn, E. K. (2021). Becoming a trauma-informed educational community with underserved students of color: What Educators Need to Know. *Curriculum and Teaching Dialogue*, *23*(1–2), 181

Public Health England (2021). "Promoting children and young people's mental health and wellbeing." www.gov.uk/phe Wellington House, London.

Racine, N., Eirich, R., Cooke, J., Zhu, J., Pador, P., Dunnewold, N., & Madigan, S. (2022). When the Bough Breaks: A systematic review and meta-analysis of mental health symptoms in mothers of young children during the COVID-19 pandemic. *Infant Mental Health Journal*, *43*(1), 36-54.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. School Psychology Quarterly, 26(1), 1-13.

Sharma, M., Idele, P., Manzini, A., Aladro, C. P., Ipince, A., Olsson, G., Banati, P., Anthony, D., & UNICEF Office of Research – Innocenti (Italy). (2021). Life in Lockdown: Child and Adolescent Mental Health and Well-Being in the Time of COVID-19. In *UNICEF*.

Taylor, R.D., Oberle, E., Durlak, J.A., & Weissberg, R.P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. Child Development, 88(4), 1156-1171. https://doi:10.1111/cdev.12864.

Yang, M., He, P., Xu, X., Li, D., Wang, J., Wang, Y., Wang, B., Wang, W., Zhao, M., Lin, H., Deng, M., Deng, T., Kuang, L., & Chen, D. (2021). Disrupted rhythms of life, work and entertainment and their associations with psychological impacts under the stress of the COVID-19 pandemic: A survey in 5854 Chinese people with different sociodemographic backgrounds. *PloS One*, *16*(5), e0250770. https://doi.org/10.1371/journal.pone.0250770

Yoo, Seang-Leol. (2021). Social Emotional Learning and Coaching in Sport Context. *International Journal of Coaching Science*, *15*(2), 52–76.

Zieher, A. K., Cipriano, C., Meyer, J. L., & Strambler, M. J. (2021). Educators' implementation and use of social and emotional learning early in the COVID-19 pandemic. *School Psychology*, *36*(5), 388–397. https://doi.org/10.1037/spq0000461.supp (Supplemental)

Zhu, Q., Cheong, Y., Wang, C., & Sun, C. (2022). The roles of resilience, peer relationship, teacher–student relationship on student mental health difficulties during COVID-19. *School Psychology*, *37*(1), 62–74. https://doi.org/10.1037/spq0000492.supp (Supplemental)

Localizing Literary Theory in the Context of Guåhan and Her Peoples

EDWARD F. ACFALLE, JR., University of Guam

Abstract

This study applies Byung-Chul Han's theoretical text, *The Exclusion of the Other,* to two literary texts: *The Easter Parade* by Richard Yates, and Julian Aguon's *Properties of Perpetual Light*. By selectively applying Han's theory of otherness and related concepts such as sameness and alienation, this exegesis makes inferences that productively illuminate and distinguish the meaning and significance of both an American novel and a locally authored and published literary work of Guåhan. By including Aguon's text this study widens and diversifies the applicable framework in which theoretical exegesis is conducted, with noteworthy implications for Pacific Islander theory.

Keywords: *Otherness, Hell of Sameness, Entfremdung, Verfremdung, Projection*

~

Introduction

Literary theory seems almost unlimited in its reach and application to different works of literature and thus also in its role of theorizing the real-world scenarios those works of Literature are presumably based upon. Guåhan, the southernmost island of the Mariana Islands in the region of Micronesia, is only one example of the feasible applications of literary theory to Pacific Islander realities and their literary depiction. This essay seeks to expand the reach of theory to encompass both established works in the literary canon, such as Richard Yates' *Easter Parade* (1976)*,* and recently published local literature as embodied in *Properties of Perpetual Light* by Julian Aguon (2021). More specifically, it applies the concepts of alienation, sameness, and otherness in its theoretical treatment of these literary narratives.

Yates' *Easter Parade,* a novel set in New York during and post-World War II, uses psychological realism to portray the lives of two sisters, Emily and Sarah Grimes, as they grow up under challenging societal and familial pressures, ultimately failing as individuals. They fail in different ways, to be described here. In its depiction of such pressures, now in a different cultural milieu, Julian Aguon's *Properties of Perpetual Light* serves the more specific audience of Indigenous CHamorus of Guåhan and all else who can relate to his essayistic short stories. These stories reveal the pressures that have affected Aguon in his life and so too the Indigenous CHamorus. As will be shown here, each short story in *Perpetual Light* discloses a specific topic for theoretical conjecture, as do the respective excerpts from *Easter Parade.* For the sake of examining and analyzing under a focused lens of theory, I have chosen to utilize Han's theory of Otherness from his *The Exclusion of the Other,* as well as related concepts including the existential *Entfremdung* and *Verfremdung,* and the concept of projection developed by modern critical theorists.

The Terror of the Same

In Byung-Chul Han's first chapter of *The Exclusion of the Other*, "The Terror of the Same," he provides the reader with two theoretical concepts: Otherness and the Hell of Sameness. I've come to understand these two ideas congruently. Otherness refers to a necessary process of defamiliarizing oneself into an experience of individuation, personal evolution. The defamiliarization of oneself of course calls to mind the need to understand the prior condition of familiarity. At first, this familiarity is comforting and friendly, not originally perceived as a threat. However, Han warns that familiarity is the precondition of Sameness. Sameness is our frequent overconsumption of specific experiences that don't help us in our journey to change and evolve. Sameness or the Hell of Sameness is then a perverse overproduction of the Same. "In the hell of sameness, no desire for the Other is possible." (Han, 20). Han explains that in the quest for Otherness, we all can face the Hell of Sameness where it is our Antagonist to Otherness. It prevents us from reaching new potentials where without othering ourselves we would have suffered in the same Hell of Sameness repeatedly as in a vicious circle.

In Richard Yates' *Easter Parade*, the Hell of Sameness is manifested as alcoholism. This manifestation can most concretely be recognized in Emily Grimes' passive relation to alcoholics and her own incipient alcoholism. From her mother, Pookie to her sister, Sarah, to her former lovers, Emily has observed only one escape that isn't an escape at all—habitual drinking or being absorbed by the Same. To utilize another theorist, Félix Guattari espouses a theory of the *Three Ecologies,* three interwoven worlds which phenomenology describes as follows: the *Umwelt* (environs); *Mitwelt* (social world); and *Eigenwelt* (personal world). These three different worlds of a person can alternatively be seen in terms of outlets or "lines of flight," or as traps for colonization by Sameness. As for Emily's situation, her *Mitwelt* or social milieu was congested with alcoholics, and she was passively conditioned to believe drinking was normative to toxic levels, as when her mother Pookie perishes due to liver failure. To be sure, Emily tried to establish a personal sphere or *Eigenwelt* in her personal writing; however, she gave up on it and her *Umwelt* never thrived, being only briefly mentioned in the novel in a peripheral way.

The most striking example of Emily's Hell of Sameness is fully developed in one of the last scenes of the *The Easter Parade*. This is when Emily inhabits a moldy apartment, collecting welfare and barely getting by. Emily concedes victory to her alcoholism, to its culture, and so too to the Hell of Sameness: "Hard liquor frightened her, but she drank enough beer to help her sleep in the afternoons" (Yates, 214). In this part of the novel, the reader witnesses the daily life of Emily seriously affected by drinking. For example, she consistently can't tell the time-- as if she is losing her mind. Without a doubt, Yates paints a grimly tragic picture of Emily subjected to abject conditions in which she is a passive participant, more an observer than author of her own abjection. But her complicity (passive agency) cannot be overlooked; and her Hell of Sameness showcases the abject reality of many that suffer in her position of unemployment, alienation, and family-based addiction.

Noteworthy depictions of Otherness can be seen in Emily's frequent projections throughout the novel. A concise definition of *projection* is found in Dino Felluga's *Critical Theory: The Key Concepts*: "The term refers to the act of cutting off from oneself what the super-ego perceives as 'bad' (e.g., weakness or homosexual desire) and projecting that quality or desire onto someone else 'over there' where it can be condemned, punished, etc." (241). In the sense that projection transfers negative characteristics onto other people, one could argue that each character frequently projects their negative impressions of other people into Yates' often depressingly pessimistic prose. This can be seen as follows: "He lived in an East Side penthouse where that beautiful girl pouted and preened in mirrors all day, waiting for him to come home" (Yates, 162). The narrator exposes Emily's fantasy of a young woman on the desk of a businessman she just had a meeting with. The possibility that this woman was not his wife flooded Emily's mind with chagrin. Emily was othered, felt alien, as an unmarried woman; hence her projections of infidelity reflect her subconscious negativity towards traditional marriage and so-called Housewives. After being othered as unmarried, she's decided that being married isn't what she wants anyways.

In contrast, Aguon's *Properties of Perpetual Light* is brilliantly written to expose both the Hell of Sameness and Otherness in one capacious breath. In his essay "Birthday Cakes are for Birthdays," he speaks first on the Hell of Sameness: "We need not worry, our leaders tell us. We are a resilient people. We need only summon that strength now" (Aguon, 29). For context, this quote pertains to recent missile launch threats by North Korea. Here, Aguon suggests that the Hell of Sameness reveals itself in/through the constant pleas of our politicians that we *can suffer more*. This consistently mandated idea that Indigenous people need to be strong to survive, especially at the mouth or portal of war, is ultimately a testament to how we've internalized our identity as a miracle and not a product of violent and unnecessary colonization. And what follows from such a defensively postured mindset is that our historical vulnerability is masked by a feeling we must stay resolute and strong despite the many injustices that we go through, such as land displacement, settler mistreatment of land, and military buildup. The Hell of Sameness here means the following: that our culture *once again* complies with a recurrent moral appeal to be resilient, be ready to brave through another storm, another series of injustices which are the painful price of our being a colony.

Rather than belabor the point in a mode of passive acceptance of the Same, Aguon follows up with a question: "Will someone please tell them that resilience is not a thing to be trotted out in trying times like a kind of prized pony? As the gifted Haitian American writer Edwidge Danticat puts it, just because a people are resilient doesn't mean they can suffer more than others" (Aguon, 29). Here, Aguon provides the reader how we other ourselves. How we don't need to perceive ourselves as resilient, as survivors, as strong to simply exist. He shows the reader and Indigenous CHamorus how to counteract and negate the imposed rhetoric of strength that convinces us to accept adversity and not empathy. Our resilience may require more credit than I personally give it. It's true that we Indigenous CHamorus have braved a lot, a lot more that I am unaware of; however, this speaks to how people in positions of power persuade us to normalize experiences of war, which over time become our Hell of Sameness, a hell of war, a hell of threats, a hell of constant fear.

Hell of Positivity

In Chapter 4 of Han's *The Exclusion of the Other,* we revisit the Hell of Sameness: "Today, we flee desperately from the negative instead of dwelling on it. Holding on to the positive, however, only reproduces the Same. There is not only a hell of negativity, but also a hell of positivity" (Han, 65). This 'Hell of Positivity,' as Han describes it, is a product of Neoliberalism. The way that we forcefully convince ourselves that everything is "nice" (Yates's empty euphemism) while avoiding opportunities to other ourselves is the main seduction of Sameness and the Hell of Sameness. A hell of positivity is most frequent in the pressure of our ancestors in both *Easter Parade* and in *Perpetual Light.*

In *Easter Parade,* this can be seen in the following: "That terrible old house in St. Charlies the mildewed chill, the ancestors staring from the walls, the smell of garbage of the kitchen" (Yates, 169). Here, Yates is painfully aware of ancestors as an environing presence and pressure one politely smiles upon. This is most definitely present in Pookie as she is a positive but overbearingly positive role in Sarah and Emily's lives. In the provided excerpt, Yates decides to combat the power that ancestors have over their descendants by painting the scenery of the environment as less than pretty and positive, instead depressing, moldy. By doing so, the reader can see the more accurately the negative depths of ancestral shadows in the sisters' lives. The pressure of ancestors affects the women; but soon Emily sees them for what they are, just pictures on the wall that look down on us and judge our choices if they fall even a sliver out of line.

Comparatively, in Aguon's short story, "No Country for Eight-Spot Butterflies," ancestors are painted in another light: "The ancestors who give her permission to enter the jungle and who, on occasion, favor her, allowing her to find everything she needs and more" (Aguon, 11). Here Aguon suggests that a positive role or agency for ancestral influence is possible. He sheds light on how many CHamorus view their ancestors as guardians, protectors, and guides. Ancestors in a hell of positivity in a CHamoru context are both absent but also impossible. At first this can be a powerful tool that we use to further our ancestral veneration in CHamoru culture, but this also provides a more specific Hell of Positivity. What we experience, what is impressed upon us is that our elders were perfect; and even when they did wrong, we are obligated to respect them despite their wrongdoings. This Indigenous Hell of Positivity is more taboo and less discussed in works of literature; however is a very real and ongoing issue in CHamoru and Pacific Islander thinking and historical reflection.

Alienation

Han provides a new definition of alienation in the context of this Neoliberal era: "A new form of alienation is coming into existence today. It is no longer an alienation from the world or from work, but rather a destructive self-alienation: alienation from oneself. This self-alienation takes place precisely in the course of self-optimization and self-realization" (Han, 84). Alienation takes form here as a disindividuation in which we relinquish our most intimate freedoms in the socioeconomic continuum of Capitalism. We alienate ourselves from our own bodies by becoming desiring machines coded by corporate titans with branded lifestyles and tastes. Our innermost selves become commodified and capitalized as we succumb to the misleading feeling (or false consciousness) we are freely consuming, although our desires are unfree, predetermined by advertising and algorithms. In this context, two German theoretical concepts, *Entfremdung* and *Verfremdung,* can be productively invoked. *Entfremdung* signifies alienation in terms of token group membership devoid of a feeling of genuine belonging; whereas *Verfremdung* (distantiation) signifies a seemingly irreducible distance, spatial and/or spiritual, between oneself and others.

In Yates' *Easter Parade,* which is primarily a social novel, a novel of socio-familial manners and customs, *Entfremdung* predominates. It can be glimpsed in Emily's relational alienation (a sort of obscurity) within her own family: "But if Sarah had always been her father's baby, whose baby was Emily?" (Yates, 41). Emily is in a depressing position where she is part of the group that is her family, yet she is also alienated, feels like an outsider, because she is *no one's favorite*. She is othered by this alienating situation, which strangely individuates her as someone different and perhaps unlovable, or less lovable than her sister.

In Aguon's short story, "Properties of Perpetual Light," *Entfremdung* is present in the following: "How obscene is it that communities with the smallest carbon footprint -like low-lying islands in the middle of the Pacific Ocean- are paying the steepest price for a crisis we almost had no hand in creating (Aguon, 2). In this excerpt, Aguon provides the reader the complex relationship that atolls in Micronesia and Oceania have with the global climate change crisis. Many peoples are facing the effects of climate change; however, it is tragically ironic that those who contribution less to ozone layer emissions are the ones that are facing more devastating effects. Aguon provides a voice for those peoples whose islands are flooding, a distinctive voice in the theoretical framework of alienation. Why is it that we must suffer climate change while having little to do with its origin?

Alienation of a social kind also reveals itself in *Perpetual Light* within "Birthday Cakes are for Birthdays" in two instances. Firstly, in the following observation by a politician: "If there's going to be a war, it's going to be in the region, not here in America" (Aguon, 30). Aguon quotes GOP Senator Lindsey Graham here to highlight the way distance is used *against* the Pacific region islands to reassure those who fear for their safety in the continental U.S. The danger of conflict is *elsewhere*, far away, Graham says; no need to worry for those who live in Washington, DC, New York and California. This *region* is far away from America. Guåhan stays away from the contiguous "United States." Graham does not speak to quell the minds of CHamorus but his fellow Americans. The hypocrisy of this rhetoric suggests we are a disposable territory, of indeterminate existential value, although military officials claim in the newspapers that we are the "spearhead" of military power. Which is it? Aguon succeeds in exposing the deep sense of alienation that island peoples are subjected to in this rhetorical gamesmanship. Some local people believe the rhetoric, others do not, and this tension provokes arguments from political elections to the family dinner table.
Another example of *Entfremdung* is manifested in the following comment: "There are only 90,00 people out there? Who gives a damn?" (Aguon, 31). This quote comes from a completely different but still relevant context. Secretary of State Henry Kissinger spoke on the nuclear testing of the Bikini Atoll and the people of the Marshall Islands. Aguon evokes the deeply unsettling injustice to which the people of the Marshall Islands were subjected as another disposable Pacific Island culture. In the final analysis, vast distance is used as a perverse trope to persuade Americans they are a peaceful people deploying Peace Corps volunteers, not atomic bombs. I've heard the saying '*what you don't know won't kill you'* and '*out of sight, out of mind*.' Our very distance from the U.S. mainland and our oppressive occupiers is integral to our colonization by the military.

Strong Roaring of the Same

In Han's Chapter 5, "Thresholds," the author provides the theoretical concept of a 'strong roaring of the Same', as follows: "Digital over-exposure and nakedness create a latent fear that stems not from the negativity of the Other, but rather from the excess of positivity. The transparent hell of sameness is not devoid of fear; what is frightening is precisely the increasingly strong roaring of the Same" (Han, 77). This description provides more characteristics attributable to sameness, or the Same (as a collectively disindividuated order of beings). The Same is a machine of self-overproduction, a monotonous conformist iteration under the guise of Positivity, and it's overpowering, a *strong roaring*. In *Easter Parade,* this trait is enacted by the neurotic character, Pookie. Pookie is Emily and Sarah's mother, and she is overbearing in the way she imposes her petite bourgeois, socially conformist views of how her daughters should act. She insists that "flair," or social grace and finesse, is something for her girls to attain, but Emily often fails to do so. Pookie only wants what's best for her daughters, but her pressure to conform is unrelenting and affects each daughter in different ways, almost all toxic or debilitating.

One short story in Aguon's *Properties of Perpetual Light*—and arguably the best—narrates a theme similar to Han's *strong roaring of the Same*. "Nikki and Me" is the story of Aguon's recounted experience of a bus ride with his racist school bus driver. This story tackles so much in such a brief narrative. It tackles homophobia, violence against women, sexual assault, anti-Micronesian hate, and so on. The strong roaring of the Same reveals itself in the following passage: "Mr. Q hated Chuukese People. We knew this because he made life a living hell for Xavier, or X, the one and only Chuukese boy on the bus" (Aguon, 68). The intense anti-Micronesian racism directed at X by Mr. Q is extremely prevalent. He further provokes a disturbed young man to attack X with a pencil. These heinous acts of racism force the reader to visualize the many instances of anti-Micronesian hate in our everyday lives. Mr. Q's anti-Micronesian sentiment comes off as overwhelming and can pressure others to believe the same hateful rhetoric he spews. Aguon shows the reality of CHamoru youth in Guåhan today; his Mr. Q represents only one of many instances of attacks against marginalized people throughout the island. In this regard, Aguon's narrative represents an experience of discrimination many young readers will recognize as personally relevant to their own experience, and which can no longer be accepted as it was by earlier generations. To accept such racist practices is to succumb to the Hell of Sameness sustained by their elders. Aguon gives us a new reason to look forward to our future insofar as we can critically identify and diminish (if not extinguish) accepted forms of discrimination such as anti-Micronesian hate, Queerphobia, misogyny, and so on.

Byung-Chul Han has said that "Individuals express their authenticity primarily through consumption." It might prove worthwhile to concretely contextualize such an observation in the Guam Public School System. Imagine you are approximately third or fourth grade. You are sitting down with everyone else waiting patiently for the bell to ring for Lunch. And then some kid walks in with their brown paper bag with the big golden arches. McDonald's becomes the source of everyone's envy. We were bombarded with boring school lunches served by Sodexo and at one time we were catered by King's. Compared to our sad meals of cold pizza, canned peaches, and boxed milk, McDonald's was superior. McDonald's held a cloud over everyone because it made that kid different. They did not have to receive the gruel we were used to.

Despite the appearance of their attempts to other themselves as different from the uniformed structures in the public school system where everyone has been standardized from their foods to their clothes to their lessons, McDonald's is actually a source of Sameness. This is where you and your classmates have conformed to the structures outside of the education system such as larger corporations influencing American ideals of fast food nutrition versus the nutritionally diverse nature of Indigenous CHamoru meals. From *The Exclusion of the Other*, Han dives into this theoretical explanation: "Diversity only permits differences that conform to the system; it constitutes an otherness that has been made consumable. And it perpetuates the Same more efficiently than uniformity does, for its apparent, superficial variety obscures the systemic violence of the Same. Variety and different options create the illusion of an otherness that, in reality, does not exist" (Han, 62).

Conclusion

The theory espoused in Han's *The Exclusion of the Other* has been shown to be pertinent to both post-WW II American lives as depicted in *The Easter Parade,* and contemporary CHamoru lives depicted in *Perpetual Light.* My exegesis clarifies and advances the theoretical concepts which can critique Guåhan's postcolonial reality—such as the Hell of Sameness, otherness, and modes of alienation both personal and social. What results is a complex understanding of Indigenous CHamoru analysis in the context of both American and CHamoru literary texts. While both are respectively important in their own ways, it is significant to recognize how American literary works have stolen the spotlight for the better part of a millennia.

And so, you and I, both as reader and theorist, have shown how CHamoru’s everyday lives can be analyzed theoretically. What I hoped to prove in this exegesis is that CHamoru Theory is possible; but what I hope most is to get the gears in our minds turning as to ways that CHamorus can utilize Theory texts for themselves.

~~

Works Cited

Aguon, Julian. *Properties of Perpetual Light*. University of Guam, Micronesian Area Research Center, 2021.
Felluga, Dino Franco. *Critical Theory: The Key Concepts*. Routledge, 2015.
Guattari, Félix. *The Three Ecologies*. Bloomsbury, 2014.
Han, Byung-Chul. *The Expulsion of the Other Society: Perception and Communication Today.* Polity Press, 2018.
Yates, Richard. *The Easter Parade*. Delta/Seymour Lawrence, 1976.

Preliminary Dialogue Concerning BEHEMOTH, or THE SPELL

C. S. SCHREINER, University of Guam

Had I not failed, I, too, to make good use of the freedom granted me to decide about my own life?
Hermann Broch, *Die Verzauberung* (*The Spell*)

■

Theorist: Welcome to tonight's show, coordinated by a group of theorists based at the University of Guam. We've been staging a series of dialogues on the so-called *educational crisis* since the pandemic, the latter having brought a sharp drop in enrollment here, a slew of retirements in the school system, and an overall sense of disenchantment. For the format of our proceedings, we take our inspiration from the notion that, as Heidegger said, there is a tacit *method* in conversation, which is interpretation as dis-cussion, or *Aus-einandersetzung*. Tonight, for the third and final night, we have for our invited guest, C. S. Schreiner, a philosophical critic, to participate in a fifty-minute preliminary dialogue and speculative discussion. We are not pumping out advice to the parents and schools. This is not an advisory panel, but one that flirts with metaphysics in order to take the long view. C. S. Schreiner as the "Philosopher" will address a problem that he calls "Behemoth, or The Spell"—which he has explained in his lectures to be a working metaphor for a widespread cultural development by which billions of people are compelled to choose unfreedom over freedom through a sort of misfiring of the instinctual drive for self-preservation, leading to species regression and not progress. This largely occurs due to a blind faith in technology and the fear of being excluded. But it also raises the problem of our instincts gone awry.

Professor: Don't forget that the Enlightenment was among other things a development celebrating the victory of autonomous reason over instinct, belief, and superstition. Now, not everything was safe and secure for Otherness in the unleashing of science in the world as epistemological colonialism, and the kinks are still being worked out to respect other identities and alter-nations. We are working toward a sensitive deconstructive rebirth of the Enlightenment beyond Eurocentric standards and binaries. We realize, for example, that radical autonomy is not always the gold standard of authenticity in certain cultures that privilege collaboration and family cohesion. But the viral popularity of conspiracy theories in our time evinces an appalling regression to pre-Enlightenment mentality. Another regression is evident in the crowd behavior of online communities. People seek protection and self-preservation in immense groups, but those groups disindividuate selfhood, disambiguate its poetry, so they are hardly the space for preserving selfhood. Foucault, who we have discussed in our seminar on campus, observes in his lectures on self-governance that to "enlighten" means not only *Aufklärung*, to clarify and liberate, but *Ausgang*, to get out, to escape from forms of subjugation and collective unreason (37). This makes the human enthusiasm for social media even more questionable or problematic. But it is not like there are no options to consider: Deleuze and Guattari were inspired by the notion of enlightenment-as-escape to develop their rhizomatic theory promoting nomadic *lines of flight*, none of which are relatable or commensurable with the so-called "gap" year that appears on student resumes to certify that when they exercise their freedom they have not wandered outside surveillance capitalism. Visibility is unfreedom—and people freely expose and exploit themselves on digital platforms.

Theorist: If that sounds abstract, well, it is! It helps to compartmentalize and use concrete examples. While drinking coffee with you before the show began, I was relating to the Spell in terms of a sort of economy, the attention economy. I said that as an attention economy, at least for my generation of students, social media dictates value; this might be the reason why our experience has more value if it is recorded, filmed, posted to IG or YouTube or TikTok. Experience that is not both digitally and socially mediated is less valuable or prestigious, becomes sort of *declassé* or ghetto. This is obviously a problem for teachers in the physical classroom. However, the pandemic revealed that students have only so much tolerance for online learning; in this regard, the curse of the pandemic might have been a blessing insofar as it renewed student appreciation for physically engaged learning in the Lifeworld.

Professor: Not only is offline existence deemed *declassé,* but unreal; social media bestows reality status. Life offscreen is unreal, or if real, of diminished value. So, you have people taking selfies in the Grand Canyon whose feet are not secure on solid ground, who lose their balance and plummet a thousand feet to their death. Robert Frost asked: “What to do with a diminished thing?” but I don’t think he anticipated the eclipse of the Lifeworld by digital enthrallment and collective individuation, or its evacuation by cell phone Bifurcates—people who are physically present but attentionally absent. In any case, it is reductive to associate the Spell with social media, as they are not equal; the Spell comprises the preconditions by which something like social media became so influential. In plain language, the Spell is much bigger than social media and encompasses it. What else could compel an entire generation to comply with and fully enjoy the digitization of existence?

Theorist: Let me continue with a quotation uttered by a family member of a Trump supporter and participant in the Jan. 6 insurrection attempt: “He wholeheartedly believes in this stuff... I feel like he is under a spell. Trump has got these people under a spell.” Is *that* the Spell that concerns you?

Professor: Well, I want to avoid politics as much as we can in this setting, and I prefer not to call attention to nihilistic demagogues who crave attention more than honor or truth. Trump is old news. But naturally that type of spell concerns me since roughly half the U.S. population lacks the critical capacity to detect a poorly educated charlatan and the snake oil that he sells to gullible voters whom he secretly loathes as uncouth. The Trump spell is not the same as the Spell, but one of the many subfunctions or subspells within the Spell, the latter being a sort of Operating System and precondition for the spells cast by the likes of Trump and other fascist leaders and controversial charismatics and algorithmic engineers, including Mark Zuckerberg hiding away on his private Hawaiian island after realizing the havoc he had wrought on the world with Facebook. The Spell decouples or thwarts the powers of autonomous reason and supplants them with technical and commercial heteronomies—with stupefied forms of servility, billions of citizens dependent on and entertained by their shiny gadgets without a clue how to think critically. Adorno argues that human behavior is regressive under the spell, absorbed in the “fetish character of merchandise,” such that “reified consciousness has become total” (346). Here many systems have failed us, including the family itself and our educational system, neither of which can compete with multimodal forms of attentional captivation. No one prepared parents or educators for mortal combat with Netflix and TikTok apps on a cell phone in a middle-school student’s pocket.

Theorist: Those are fighting words—Mortal Combat! Bernard Stiegler was not exaggerating when he wrote about a global battle for intelligence, for the autonomous use of reason over bots and algorithms. We cannot concede victory to this gigantic hegemonic power that casts spells to disarm or neutralize subjectivity and replace it with commercial automatisms.

■

Professor: When I was a doctoral student, I taught an essayistic little treatise by Doris Lessing, *Prisons We Choose to Live inside*, in an honors composition course. This wise book was in the back of my mind when, as a sort of informal noncoercive experiment, I suggested that a handful of my college students suspend their Facebook accounts for a few months before the 2020 election. This was just an idea I floated among them by email to reduce the influx of toxic propaganda in voter epistemology. If you are going to inhabit a prison, let it be relatively uncluttered with toxic debris. In any case, none of them could delink, or rather, *would* delink; not a single student suspended their Facebook account. The inconvenience was too formidable, and the fun of networking too hard to relinquish. I am reminded of Adorno quoting Schiller’s observation that “they freely bind themselves with ease and joy” (348). It is as if the digital generation of students does not, contrary to Freud’s expectation, rebel against their upbringing, as if they refuse to separate from their initial conditions of psychogenesis, or from the organon that gave birth to them, for they were all born into and with the worldwide web and social media. Web life has been naturalized; people inhabit the web in what phenomenologists call the *natural attitude* wherein the digital modalization of reality remains unquestioned. The problem with this developmental format is that it lacks both exteriority (connection with the outside) and dialectical force—in short, contradiction or antithesis. One develops in a supersensitive milieu where one is steeped in positivity without critique; everyone is flattering and affirmative: “You are such an awesome tennis player!” “OMG, that new mural you painted is an epic masterpiece!” “Your filmscript—like, it is totally amazing.” All superlatives without critique.

Theorist: With earlier generations, the prisons they chose to live inside, such as ideologies and political systems, had figureheads such as Lenin or Stalin, who could dominate huge populations. Today, we seem dominated by information flows. No matter what personal filters students install or invoke, they are exposed to lots of peripheral or collateral toxicity and vitriol, the so-called Pain for Profit Algorithms (PPAs) which made so many millionaires out of Facebook employees. At first, I thought Trump was an old-fashioned figurehead, but his MAGA movement is outliving him online as if he no longer matters as an actual person. The information flows and PPAs stirring up millions seems more pervasive than the reach of any one charismatic leader. Let me read from our seminar notes: *The Spell, without a single identifiable leader or mastermind, is hegemonic in its colonizing and rhetorical power, technically preforming or formatting cognition, drives, and desires into a universal consumer modality, compelling billions of citizens to adopt the same consumer lifestyle.*

Professor: Did I say that? That reductive description sounds like Lazarrato’s digital capitalism, but the Spell is more complicated as an Ontological Operating System since it subtends capitalism, socialism, communism, and other such structures. For the historical time that envelops an epoch, or generation, it is for most people inescapable. The key is in that phrase, “technically preforming or formatting cognition, etc.” Along these lines but more profoundly, Heidegger developed his ontological theory of the epochal *Ge-Stell*, or Enframing, in which the essence of human being is determined by the unfolding of technical powers that dominate the planet (21). Foucault was clearly Heideggerian in his analysis of the epistemological “archive” earlier in his career, describing a sort of paradigm shift informing and preforming or subtending the thinking patterns and content of an historical epoch; but Foucault’s later lectures are somehow closer to Doris Lessing in his focus on self-care and truth conditions in the context of governmental powers autonomous (autarchic), democratic, or totalitarian. Therefore, he kept returning to not only the Socratic dialogues, but Kant’s 1784 essay, “What is Enlightenment?”

Theorist: Capitalism is obviously a spell, a coercive power that compels consumption, but it leads almost inexorably to boredom. I’ve been reading a novel by Georges Simenon in which the protagonist, a typical businessman and husband, is bored for forty years until he becomes a murderer. This is not a normal development within capitalism, but it raises the issue of transitioning from boredom to attentional renewal, reinvigoration, a process that keeps consumers from abandoning the malls. This happens through new consumer trends and algorithms. Take the so-called normal people in a bistro described by Simenon in a spellbound condition, something like a Edward Hopper painting:

> A few people would be standing around a horseshoe-shaped counter, their lives suspended. Some dreamed as they drank their coffees. Others, with their elbows on the counter, stood empty-eyed over empty drinks. Nothing but magic, it seemed, would bring them back to life. (95)

These stiff, immobile beings need something to refresh their state of total indolence and inertia. Call it commercial magic—that is, a new snappy or sexy consumer trend, a new meme, a new jingle, whatever it takes to compel consumers to keep consuming. This is the reinventive genius of capitalism.

Professor: The problem of *ennui* is certainly prevalent in modern French literature. That novel was first published in 1938. One wonders if they are also traumatized, burned out, or tranquilized? Look at the vulnerable and gullible predisposition of the German people as Hitler mesmerized them. We are already familiar with the sociopolitical and economic problems that followed the German defeat in World War I. They were down and depressed; they wanted to hear promises of renewal, of rebirth, of cleansing from a charismatic newcomer. They even had a so-called “replacement theory” about Jews. Many of these issues were novelized by Hermann Broch in his *Die Verzauberung,* translated into English as *The Spell.* In that novel, a narcissistic, self-glorifying figure like Trump appears in a mountain village and stirs up mistrust and havoc among the local people, only in Broch's story the figure is a rustic, idealistic bohemian like the young Hitler, not a billionaire. But this dreamy bumpkin promises spiritual and cultural renewal, a Make the People Great Again movement. Today voters are impressed with wealth over democratic idealism. People desire what others desire, and wealth and fame are so treasured that voters overlook the moral corruption of rich candidates. Look, you need gullibility, ignorance, prejudice, and misinformation on a mass scale as preconditions for the efficacy of Trump's influence. You need widespread discontent and rancor. You need incivility. You need uncritical public trust ("There's a great and powerful leader who will save us!"), but equally uncritical mistrust ("Be careful of those flaky liberals who support abortion and critical race theory."). You need widespread insecurity or lack of self-confidence, blind faith in technology, and so on.

Theorist: The list is endless. The behavioral trend, of which I am a passive agent, is to oversimplify and abbreviate such grave and complicated problems. Hence Jeff Bezos described social media as a "nuance destruction machine." Rather than contemplate or debate the meaning and significance of his description, we assign it a "sad" emoji, maybe a meme, or sarcastic LOL, and move on.

Professor: You are surely aware that what seems personal to a student, enveloped in socially mediated apps, is not quite what it appears to be. Students born with/in the internet have cognitive performance and concepts of selfhood that are always already transindividuated and collectively individuated. Their self-understanding is transindividual, not private or personal in the traditional senses of those modes of being. When a student comes to my office to explain their personal reasons for requesting a grade boost on an essay, those reasons are coming from a variety of sources including flattering friends in social media who proclaim the essay deserves a higher grade. Sometimes the friends seem to understand the essay better than the author seeking the grade change. But friendship is not a criterion for grading college essays. Before social media, a student who consulted me about a grade change did not consult dozens of online sources from intimate friends to anonymous sources. For lack of better options, they were more likely to listen to and trust the voice of a respected authority with years of teaching experience, not a group chat about grades on a social media app. Where the Spell kicks in here is tacitly legitimizing the false authority of flattering amateurs over experts. This support network, which comes in waves of uncritical admiration, reduces the risk of failure, the chance that one's writing is not as good as you hope it is. It is arguably a mode of self-preservation—but illusory as such!

Theorist: You mentioned chance. Lately, it has occurred to me that a platform like YouTube reduces chance by repeatedly visualizing and *performing* specific locations and experiences before they occur. To use a gustatory trope, one's destination is reduced to pre-masticated food. I'll give you an example. For a longtime now, I have wanted to visit the Lake District of England, which I know about primarily through the writings of Thomas De Quincey. As my partner and I plan our adventure--or so I imagine it—my partner spends an inordinate amount of time not so much planning as *previewing* the iconic sights of the Lake District on YouTube. My partner found an influencer on IG that has fully exposed and celebrated the Lake District, documenting all the influencer's selfies at local restaurants, literary landmarks, hiking and swimming spots, and so on. When I questioned the logic and purpose of this previewing, this overexposure, the response was straightforward: "This way, all the possibilities are identified for us, so that we can select our own preferences." I dropped my inquiry at that point rather than press it to a point that might trigger an argument. My concern, unexpressed, was that such previewing reduces the element of chance in travel; there will be few if any surprises, pleasant or unpleasant. In other words, adventure becomes a dry itinerary. But the truth of it is that all the previewing will not eradicate chance—the flat tire which leads to an uncharted pub, a storm forces one to seek shelter on a mountain path, where there occurs a chance encounter with some fascinating personage.

Professor: Well said--I trust that your friendship survived your radical mode of inquiry in praise of chance! There is a novel by Luke Rhinehart, *The Dice Man*, which you might find worthwhile. I agree with you that in those circumstances, chance cannot be fully extirpated from experience. Perhaps chance is the "Devil's Share" beyond the Spell's empire, but sadly integral to its coding. Its rarity will itself be commodified as something special and elusive. In other words, chance is included within the Spell as a containable exteriority, a comprehensible event. The concept of the “Gap Year” is a good example of the way freedom as will-to-chance has been coded within the Spell for accountability. Also, I wonder if overexposure on YouTube makes a destination more impersonal and abstract as one is steeped in information compiled by influencers, celebrities, and friends, much as pre-chewed food is tasteless. Everything is already a narrated spectacle, an iconography, a chain of Yelped landmarks that surely diminishes the sting and exhilaration of first-person experience. On YouTube, one already sees more views of the Lake District than its current or former inhabitants, including De Quincey and Wordsworth. By the time you arrive in the Lake District, it strikes you as almost boring; you have virtually been there and done that. No matter how granular your subsequent experience of the Lake District, it lacks freshness and novelty due to its overexposure via multimedia. The digital imagery that one has downloaded and regaled oneself with previous to one’s visit anticipates and supplants the genuine imagery. Hence once you view Peter Jackson’s CGI-animated Golem in the film version of Tolkien’s work, you can’t shake it from your impression if you read the book after viewing the film. It will parasitically haunt or dominate your personal reading experience. When I first saw the film many years after reading the book, I was astonished how the Golem differed from what I had originally imagined.

■

Theorist: We are running out of time. Can we shift back to a few more observations about the Spell? Earlier, while we were chatting “off mike” during the break, you mentioned how difficult it has become to get students to use new words in their essays. You said this is not merely modal resistance to difficult vocabulary, but something more protective related to the Spell, to the urge for self-preservation. If one student starts using new words, the others, who share the same app, must follow; therefore, that individual is taunted and ridiculed, falls back in line and drops the new word.

Professor: Again, well said. I was talking about my Gen Ed “Myth and Literature” course, where I teach Jungian terms like individuation, archetype, *prima materia*, synchronicity, *pneuma*, numinous, and so on. But it is true for any course. Although I frequently encourage them, students resist using new words unless compelled or inculcated by preparation for a quiz. Even then, after they ace a quiz, the newly learned words rarely appear in their essays and sort of vanish, although writing with them, with the new words, is the richest way to learn them. To read novels and philosophical treatises, to learn the meaning and significance of new words and deploy them sensibly, requires an immersion experience that seems no longer feasible for students without undergoing extreme digital abstinence and privation. Their attention, which is a finite resource, is all tapped out.

Theorist: Spellbound!

Professor That’s it. But the Spell doesn’t just captivate you and harvest your data, it inculcates and encultures you within discourse communities that are disjunctively exclusive. Look, I am by no means loyal to Jungian theory, but I appreciate its technical and sometimes exotic sounding nomenclature, as I do Freud’s, Lacan’s, Husserl’s, Whitehead’s, etc. *Loyal to none, critically hospitable to all*. Often those words are associated with profound concepts. Think of the “phantasm” in psychoanalysis, or Gadamer’s *Horizonverschmelzung* (fusion of horizons) or Whitehead’s “concrescence.” A term of Heidegger’s, *Gelassenheit*, can be traced back to the mystical writings and sermons of Jacob Boehm and Meister Eckhart. What splendid vistas such words open for the reader!

Theorist: The term “modal resistance” signifies a sort of gut reaction; it simply means that although students can learn and use these words, they often will not because of their preference for a performative visual over verbal mode of communication with the rise of the internet and multimedia. TikTok, Netflix, and Emojis rule. The verbally conjured vistas in books are not closed to them, but they are closed to the vistas. This behavior must look like smugness to your generation. There is no need for new words; their digital world, in all its digital diversity and splendor, is sufficient!

Professor: Verbal unfreedom is not only caused by compliance with visual cultures. Students seem constrained by their discourse communities online in trending contemporaneous language; they don’t have an appetite for old words or new words that seem largely superfluous to their digital world, unless those words are associated with a new celebrity or commercial jingle; the pool of words and memes and slogans and brand names and celebrity names they draw from seems ample; to use a digestive metaphor, they already feel fulsome and satiated. Less is more. Students favor words circulated among celebrities and their friends in social media. The words used by the latter are more important to them than the words of distinguished writers, thinkers, and historically significant figures. Literature majors know more about Rhianna than Toni Morrison, Harry Styles than Walt Whitman.

Theorist: Hence the rising popularity of graphic novels with their bimodal blend. But it is not only visual preferences that constrain the acquisition of new words. We can't overlook social media as a discourse community that legislates usage, dictates diction, grammar, and phraseology in accordance with self-preservation in shame culture. People are shamed into complying with trending modes of discourse and communication. Use abbreviated expressions and emoticons, or else! Anyone who writes long, nuanced, hypotactic sentences will eventually be pressured into modulating or curtailing their style, much like Adorno's traumatic childhood experience at school, where he was bullied for speaking and writing in complex sentences. He saw the administrative tolerance for such student cruelty as instilling the fascist behaviors enacted by the Nazis, and this linguistic leveling down process (*Gleichschaltung*) as a regressive tendency which included teachers and students who enforce the imperative to speak clearly and simply, without nuance or hidden meaning.

Professor: Never mind Wittgenstein's insight that "The limits of my language are the limits of my world," nor Heidegger's observation, "Language is the House of Being." It is within the Spell where members of social media platforms enjoy a filtered discourse community that confirms their biases, their identity and sense of belonging. This disjunctive exclusion instills a false sense of *totality and closure* accompanied by *complacency and fulsomeness*. You called it smugness. The totality tightens its grip and jettisons new words as unnecessary; there is no urgent call by members to adopt new words and alternative ways of thinking and existing. New words seem like an imposition on their freedom. But their freedom is illusory within the Spell, curated and modulated by clever algorithms, memes, and platform codes. They are foreclosing the Open, enlightenment as releasing oneself into the Open. The outside. Personal freedom to determine one's own destiny.

Theorist: As my remarks have shown, I originally assumed the Spell pertains only to social media—the platforms, attention capture algorithms, infotainment, monetization, and so on.

Professor: As soon as you equate social media with the Spell, we are no longer in the Open, but shielded by the Same. Social media and the Spell are no more interchangeable than, say, a tree is with the field in which it appears. The tree can't replace the field, but represents what the field can do, one of its many capacities, say, if a maple seed takes root there and soil and weather conditions are favorable to that form of development. Of course, today the field is a *digital forcefield* and one must think of the Spell in those technically exacting and specific terms. But that is not the only way that the Spell manifests itself. Already in 1784, Kant saw something dangerous and of formidable power akin to the Spell. In his famous essay on *Aufklarung*, he argued that human beings voluntarily bind themselves to structures of unfreedom, and that the greatest challenge to our species was to exercise or practice the autonomous use of reason by individuals in society to ensure liberty and justice for all. One must forcibly break the Spell by which people, largely due to fear and indolence, freely subjugate and indenture themselves.

Theorist: But to do so, we have got to outwit or transcend the powerful drive of self-preservation, its many ruses promising safety and belonging. The Spell arouses capitalist avidity to manipulate those ruses to its advantage. We shop to accumulate goods like a defensive bulwark against the Open; the American identity is subsumed and embodied in its real estate, its property and shelter. The Open is dangerous; there lies its saving power for humanity. One is forced to think for oneself in the Open. Freedom is difficult and perilous. In this regard, the Open is the space of freedom and exposure where one can offset and frame the Spell, describe it, study it, risk contesting it, etc.

Professor: But it is difficult not to foreclose the Open when we defensively invoke predetermined forms of self-expression from a menu of digitally tailored templates that *seem* to be personal. Here again unfreedom masks itself as freedom of expression. IG is such a tailored space of self-expression with a highly specific format or pre-coded menu. Currently, access to the Open, as a real space of individuation, is foreclosed by that digital forcefield of belonging called *social media* which none of my students can quit. We should recall Schiller's remark that they "freely bind themselves with ease and joy." Even the identity politics of indigeneity is filtered by social media. Those of my students who grew up in CHamoru culture also grew up within social media, and the self-understanding that issues from this complex psychosocial divination process passes through IG, TikTok, and multimedia cultural platforms like Guampedia.com. If, under ideal conditions, self-determination follows self-understanding; that is, if one ideally should have a clear understanding of one's cultural identity and purpose before enacting concrete forms and practices of self-determination, this process is inextricably interwoven with contemporary digital forms and practices. I have listened to panel discussions about indigeneity that never mention their reliance on social media and digital platforms.

Theorist: Well, who wants to be in the Open, anyway? I never enjoyed camping with the Boy Scouts when I was twelve. In fact—this is a long-held secret--I hated it.

Professor: Look, I appreciate your sense of humor; I am not trying to sound mysterious; philosophers speak this way. The Open is a flexible metaphor for the indeterminate horizon which enables the possibility of taking an alternate position, a critical perspective in the dialectical leeway of freedom *exposing us to reality*. To exercise one's freedom, one necessarily risks exposure to otherness, to a different way of doing things. The Open is where we still have room to make comparisons, assess the way things are, or could be. The awesome spectacle of freedom which toppled the French monarchy in 1789, studied by the British writer William Godwin, nudged him into the Open, embedded as he formerly was in British political and cultural norms, and inspired him to write a harrowing account of legal injustice and oppression in England in his 1794 novel, *Caleb Williams*. He subtitled his novel, *The Ways Things Are*. His political philosophy, inspired by the revolutionary enthusiasm rocking Paris, compelled him to critique restraints on spirit, on individual freedom, in his own culture, based as it was on patriarchal and aristocratic norms.

Theorist: Speaking of the tree and its field, Godwin's soil for radical thinking was greatly enriched by the feminist milieu of his homestead, which included Mary Wollstonecraft and, later, their daughter, Mary Shelly.

Professor: That creative and hospitable milieu was indispensable to widening the Open, the space of freedom, in which issues like justice and women's rights could be openly discussed and argued.

Theorist: Final question: Is it possible to stay outside the Spell, as in "off the grid"?

Professor: Dialectically speaking, of course there is an outside, at least in the concept of exteriority; without it, we would not be able to imagine being encompassed by the Spell or imagine existing off the grid. In his novel *Chevengur,* Andrei Platonov depicts a hermit who has never engaged with the modern world and remains outside it in a primitive forest dwelling:

> Until he turned fifty, he did nothing but look around, to see how and what things were, waiting to see what would come of the general fuss in the end. Then he would be able to start acting at once, as soon as the world had calmed down and been explained. He was not at all afflicted by the world, so he had not lifted his hand, not to a wife for marriage nor to any generally useful activity. He had been startled at birth and lived so into old age, blue eyes on his youthful face. (4)

Theorist: How strange and enchanting!

Professor: The very idea of living off the grid is a rare and impractical sort of consolation. But it is real, at least for now, until Google Maps become fully omniscient. These issues tend to make me pessimistic. When my best students will not detach from Facebook, even for a temporary experiment, that is a sign we are in trouble, that the Spell is not only ubiquitous but remarkably effective. The efficacy of the Spell, its dominion or hegemony, is manifested in that cleverly coded masking of unfreedom in the guise of personal freedom. When billions of people think they are free, but their habits and thought patterns show otherwise, we have a big problem worthy of study: false consciousness on a global scale.

Theorist: What could be next? It may be a "devolution, or revolution, or evolution," as Edward Thorp, a mathematical genius and expert in prediction, recently said in a commentary on the political chaos in the U.S. His recommendation for addressing the problem frankly reverts to Kant's basic insight about enlightened thinking. Permit me to read Thorp's comment from my cell phone: "I think the best thing we can do is teach everybody to think for themselves, so they just don't take what they've told in the press, or in other forms of media, the internet, Twitter, so on, they just don't just take that and soak it up and believe it, but they question it, and ask whether in fact it might not be true, and what the motives are for the people who are putting these things out."

Sources

Adorno, Theodor. *Negative Dialectics*. Translated by E. B. Ashton. New York: Continuum, 1973. First published as *Negative Dialektik*, 1966.

Broch, Hermann. *The Spell*. Translated by H. F. Broch de Rothermann. New York: Farrar, Straus and Giroux, 1987. First published as *Die Verzauberung*, 1976.

Foucault, Michel. *The Government of Self and Others*. Translated by Graham Burchell. New York: Palgrave Macmillan, 2010. First published as *Le Gouvernement de soi et les autres: Cours au College de France*, 1982-1983.

Godwin, William. *Caleb Williams*. New York: Oxford UP, 2009.

Heidegger, Martin. *The Question Concerning Technology and Other Essays*. Translated by William Lovett. New York: Harper Colophon Books, 1977.

Lessing, Doris. *Prisons We Choose to Live inside*. New York: HarperCollins, 1987.

Platonov, Andrei. *Chevengur*. Translated by Anthony Olcott. Ann Arbor, MI: Ardis Publishers, 1978.

Rhinehart, Luke. *The Dice Man*. New York: The Overlook Press, 2020. (First published in 1971)

Simenon, Georges. *The Man Who Watched Trains Go By*. Translated by Marc Romano and D. Thin. New York: NYRB, 2005. First published as *Homme qui regardait passer les trains*, 1938.

Section II

Book Reviews

***Reader, Come Home: The Reading Brain in a Digital World*. By Maryanne Wolf. Harper, 2018. ISBN 978-0-06-238877-3. (Paperback, $17.99; $15.99 at Amazon.com; Kindle, $15.99). 268 pages.**

Reviewed by PAULETTE COULTER

~~

Reader, Come Home is a book for our digital age, especially as we attempt to recover from the online teaching and learning the COVID-19 pandemic required. This book is a sequel to Maryanne Wolf's *Proust and the Squid: The Story and the Science of the Reading Brain*, in which she examined the development of writing systems, the alphabetic principle, how these affect the reading brain, and how people (including those with dyslexia) learn to read. Having completed the writing of that book, however, she realized that reading has been significantly altered by electronic devices (*Reader* 4, 7, 97). In *Reader, Come Home*, therefore, Wolf focuses on the nature of reading on electronic devices, how these devices have changed reading habits, and, how all these changes affect readers and the reading brain.

First of all, by means of evaluation, both books are readable even when they deal with complex material, but that does not mean they are written in simple sentences or words of one syllable. Second, *Reader, Come Home*, is unusual in that Wolf has written it in the manner of the epistolary novel. Each chapter begins with an epigraph and "Dear Reader" and ends with "Sincerely, Your Author" or a similar closing. The book is written in all three points of view, with the author speaking as "I," addressing the reader as "you," and describing and discussing research in the third person. Within each chapter, Wolf provides subheadings as in any informative text.

Wolf argues that reading has changed with the developments in electronic technology and that, as a result, the human brain is changing. She states, "This is because the transition from a literacy-based culture to a digital one differs radically from previous transitions from one form of communication to another" (3). In her first letter to the reader, Wolf also indicates some basic principles underlying her work: "*human beings were never born to read*" (3, italics in original); 'human beings have to learn to read" (18); "*there is no one ideal reading circuit*" in the brain (ibid; italics in original); but all learning depends on the human brain's plasticity: its ability to learn anything at any age (ibid. and passim). How one learns to read varies partly by writing system. Learning to read in Chinese uses a different part of the brain than learning to read in an alphabetic writing system.

In Letter Two Wolf focuses on the human brain and its multiple and coordinated processes as it reads a single English word. Using illustrations by "neuroscientist and gifted artist Catherine Woodley" (20), Wolf demonstrates how the brain coordinates sound, image, and meaning of a word in 400 milliseconds (four tenths of a second!) for an early reader to identify correctly and select the most apt meaning of the word *tracks* in a sentence (33). The time decreases with experience, and experience provides the reader with more options! In this letter, Wolf also identifies another key requirement for reading and learning to read: *attention* (23). All of these factors come into play in the differences between online and in-book reading.

Deep reading is Wolf's topic in Letter Three. As the term suggests, deep reading is immersive; in both meaning and feeling it involves the reader's attention. Books read deeply become good friends and introduce their readers to others (people and readings) that become friends. Wolf develops her argument by examining imagery (40-42); empathy and theory of mind (42-53); the reader's background knowledge (54-58); deep reading's analytical processes of analogy, inference, and critical processes (58-64); and deep reading's generative processes of moving beyond the text. Deep reading makes connections; it makes people think; it requires cognitive patience (46, 92-93).

Letter Three, "What Will Become of the Readers We Have Been," contains Wolf's argument that digital reading processes negate or oppose those of deep reading. Nicholas Carr had identified a number of these issues already in 2008. After addressing attention, Wolf focuses on how much readers now read, how we read, what we read, how what we read is written in what she calls "The Digital Chain Hypothesis" (72). To begin, Wolf uses Katherine Hayles's discussion of hyperattention, which is not attention at all, but "a phenomenon caused by (and then adding to the need for) rapid task switching, high levels of stimulation, and a low-level threshold of boredom" (cited in Wolf 71). Linda Stone calls this situation "*continuous partial attention,*" and Edward Hallowell terms it "environmentally induced attention 'deficits'" (cited in Wolf 71, 72; italics in original), more nearly apt names. Although most adults supposedly read "34 gigabytes" of text per day (71), they (we) do so spasmodically and superficially, without deep thought.

Those 34 gigabytes can be roughly 50,000 to 100,000 words per day and consist of reading for information rather than knowledge, often for entertainment rather than learning (74). If one reads primarily for entertainment, perhaps only in 140-character spurts, then deep reading is unlikely. As a result, readers may never know what they do not know (56, 201), and never pursue knowledge, much less, wisdom. Not only the young err, however; adults also simplify, process information as quickly as possible, and triage, being more and more selective of what they read, often to support existing ideas rather than to learn something new (75). "As quickly as possible" often consists of skimming, reading only beginnings and endings of articles and first words of lines (F or zigzag reading) (77). In doing so, readers miss the development and sequencing of ideas in an argument (as noted by teachers of writing!) (77, 79) and remember less (81). They also prefer short stories over novels (91) and summaries over stories or articles. Reading pre-digested material decreases empathy in the reader (noted in younger readers) and increases othering and intolerance of difference (50; 85-86). These points also influence what we read. The section on "How Things Are Written" indicates that what we read simplifies vocabulary and sentence structure so we think less and less deeply what we are reading, even in current novels (89-91).

In Letter Four, several points resonated with me. The first point referred to sequencing and (lack of) recursiveness in digital materials. The first time I read a novel on a digital device (Octavia E. Butler's *Kindred*), I had to read the entire book straight through because I never knew where I was in the story, which was marked with location numbers but not page numbers. Even when pages are numbered, for readers who remember things by where they *are* on a page or in an entire document, the position shifts caused by font-size changes and scrolling text on screen disrupt location. A second point arose with Wolf's self-experiment in deep reading: she had to make a second attempt at rereading a favorite novel before she could read it comfortably; her third effort was pleasurable (98-100).

In Letters Five, Six, and Seven, Wolf outlines what she considers an optimal plan for children's use of digital screens: from 0 to 2 years, as little as possible because human contact is crucial at this age; from 2 to 5 years, still an emphasis on human contact, with limited screen use; from 5 to 10 years, in such a way that deep reading is accomplished both on screen and on the page. For ages 5 to 10, when children are in school, the screen—like all reading—should be geared to learning rather than entertainment. The age of ten years (often associated with fourth grade) is critical, often defining what Wolf calls a "Maginot Line" for reading because in fourth grade the child needs to shift from learning to read to reading to learn and to think as the basis for all future education (152, 154). This process will require three types of investment. The first investment should be in early and ongoing assessment of children's reading skills; new tests are available to identify children's level of language development (155). The second investment is to teach teachers to teach reading explicitly, using **both** phonics and whole language approaches (159). The third investment is to teach reading across all the school years, helping those students who need reinforcement and challenging those able to read well. Screen devices are useful for practice and reinforcement of phonetic, phonemic, and grammatical issues, as a student can repeat exercises as often as needed.

What Wolf sees as an optimal solution in education (Letter Eight) is to begin to teach children to develop a biliterate brain, able to read equally well on page and on screen, and to apply reading skills as appropriate to each medium. This process, too, will require investment: in research on the "cognitive impacts of print and digital mediums on all of our children, particularly those with reading challenges" (179; 179-180); training our teachers for this kind of teaching (180-182); and dealing with inequalities in digital accessibility in society (182-184). I do not think enough attention is given to the last of these topics, especially since the impact of COVID-19 on children's learning. Wolf has done and is doing research in Africa and other places, where children may have no access to books or teachers (147); In many regions in First-World countries, where education has gone online, what good is a single electronic device (such as a cell phone, which more families are likely to have), when two or more children in a household should be in class most of the day, every day, at the same time? What happens in a family with more children? If, as Wolf notes, "a full two-thirds of US children in the fourth grade do not read at a 'proficient' level" (152), should we not be concerned? If, with COVID, even more learning has been lost, should we not be concerned? Or more than concerned?

The title of Wolf's last letter is the same as this book: "Reader, Come Home." In it, the author emphasizes her argument that, in addition to "gathering information and acquiring knowledge" (189) and being entertained (189-190) online, we should be reading for contemplation (which requires cognitive patience). That is, we should be reading in such a way that we "transform information into knowledge and knowledge into wisdom" (202), that we can become better people and better citizens, able to discriminate fact from opinion, what we know from what we don't know, and be able to accept diversity and otherness (201).

Although Wolf mentions screen addiction numerous times (70, 109-112, 125-126, 179, 206), she does not specifically address it as an issue in children's learning, and I consider that omission a shortcoming in her work. Another shortcoming I find is a matter of personal preference. I prefer in-text citations over end-notes, which seem more distracting. I am grateful, though, for Wolf identifying the importance of *place* in reading and how it differs in digital versus print material.

Wolf mentions, briefly, her meeting with Bernard Stiegler, the French philosopher and writer, but not his extensive work on what digital technology has done and is doing to individuals and all society(ies). Stiegler's writing is less accessible and less readable than Wolf's, but he writes cogently about attention, advertizing, technology, and children's learning for those willing to wade at his depth. For example, in *Taking Care of Youth and the Generations*, Stiegler reported that Channel Y of French television advertized that "children deserve '*better than that*'"—***that*** being the care and teaching of their parents and grandparents (3). Can we, do we, really believe that a tool made of metal, plastic, and glass (be it a cell phone, tablet, computer, or television) is better for teaching children how to be a human being than human beings are?

I recommend Wolf's *Proust and the Squid* and *Reader, Come Home* to all teachers of reading for a better understanding of what happens when we learn to pay attention and learn to read deeply. I recommend Letters Five, Six, and Seven of *Reader, Come Home* to parents of children from birth to a minimum of ten years of age, though inclusion of adolescence is a good idea, for it may help parents understand their adolescents and their teens' screen habits better . Wolf's approach to screen devices and children's learning is humane and informed by much research. This book is thoughtful and thought-filled for readers in many disciplines.

Works Cited

Carr, Nicolas. "Is Google Making Us Stupid? What the Internet is Doing to Our Brains." *The Atlantic*, 15 Aug. 2008, https://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/. Accessed 2 Jan. 2022.

Stiegler, Bernard. *Taking Care of Youth and the Generations.* Translated by Stephen Barker, Stanford UP, 2010.

Wolf, Maryanne. *Proust and the Squid*: *The Story and the Science of the Reading Brain*. Harper Perennial, 2008.

A Chuukese Theory of Personhood: The Concepts of Body, Mind, Soul and Spirit on the islands of Chuuk (Micronesia). **By Lothar Käser. VTR Publications. Nurnberg, Germany. 2016.**

Reviewed by LISA N. DEREAS

Lothar Käser is a German educator and ethnologist who lived in Chuuk from the mid-1960s to the early 1970s. While living there, he taught at Philadelphia Junior High School (PJHS) on one of the islands of Toon (Tol), in the Faichuk region located in the western part of the lagoon. PJHS was established by Liebenzell evangelists whose forerunners brought in the Evangelical faith (among several other religious denominations) sometime in the late 19th century. Through the years it underwent a few transformations since its inception. But today, most people know it as Pacific Islands Bible College, or PIBC for short.

Käser's book is an ethnographical analysis of Chuuk Islanders' perception of "man" in juxtaposition to the Westerner's interpretation of the same subject. The latter's concept of man is a combination of his place in the universe, family, nation and society, as well as his goals and aspirations in the life he leads. Additionally to the Western notion, is the understanding by all English-speaking societies of North America, including Australia, that man is comprised of three parts: body, soul and spirit. Chuuk Islanders, however, offer more elaborate, detailed and oftentimes mind-boggling ideologies of man imbued in their cultural elements, and to some extent, indigenous version of Christianity. Rather than seeing themselves in overlapping point of views, Chuuk Islanders are accurately viewed in two (of four) model categories which Käser quoted from the work of Wolters: "2. metaphysical, theological and ideological 3. concepts of man based on the combined experiences of everyday life" (2016:22).

Käser, not surprisingly, conducted his research in the same area (Tol) where he taught while living in Chuuk. Being that he was familiar with the area and its people, and his exceptional grasp of the local language, he was able to provide rough-to-accurate definitions of an array and vast number of indigenous terminologies. And judging from the local words laid out in this book, his informants were probably *siipw non erunien fenuwer* (traditionally and culturally well-versed).

The journey to grasping the concept of "man" or "personhood" through the eyes of Chuuk Islanders begins in Chapters 4 to 9**.** In these lengthy and detail-filled chapters, the author provides mental illustrations of the human body by naming every single part in *fossun* Chuuk with English translations. As each body part is named in great detail, one gradually sees that chon-Chuuk view themselves in many different *seeng* or parts. Even though these parts make up a whole, Chuuk Islanders view most of their body parts as almost independent of each other. This is apparent in the situation of the ears. Although they are attached to the human head, the ears do not belong to it, but to the face—also not a part of the head. Chuuk Islanders consider the top of the head as the uppermost part of the body, hence it is in a category on its own. Same goes for the wrist and the fingers. These may be the outermost parts of the upper limbs, but their function is their own—it has no connection to the forearm and so forth.

In Chapters 10 through 12, Käser explains in depth the "sensations of *meefi*' or feeling—physical and psychological. Chuuk Islanders seem to ignore altogether the functions of the brain and the nervous system. Whatever the physical feeling is, be it pain from a cut or burn, or the feeling of thirst, they are felt wherever that feeling stemmed from. Whereas emotional, intellectual and psychological feelings are felt within the *neetip* located in the chest area, but not to be mistaken with the areas that hold vital organs. Käser, for the lack of a better translation, refers to this area as the **seat of emotions, intelligence and characters** (S.E.I.C.), which he tediously describes in Chapters 15 through 20. Evidently chon-Chuuk do not view the soul the way cultures of Europe and the West do. The soul, in the islanders' own understanding, exists alongside the material (living being) and serves as a caretaker. However, at any given time, it can leave the living body and live its own life in a kind of parallel universe. When the living body dies, the soul eventually leaves once it realizes this to be the case. Käser named this being the 'spirit double'. Unlike the Western notion, the soul is not *that being* which only comes into play once it leaves the body when it dies. In ancient Chuuk belief, it exists from the birth of the material being, but can live separately from it. The 'spirit double' like its material counterpart, also has two versions—*ngunuyèèch* (benevolent) and *ngunuyngaw* (malevolent). These two determine how the material being lives life: *manauwèch* (lead a decent life), or *manauwangauw* (lead an intolerable life). If the material being leads a life of *manauwangauw*, once the body dies, the spirit double becomes an *ènungaw* or evil ghost-like spirit, and will continue to do nefarious deeds in this form. However, if the material being led a life of *manauwèch*, the spirit double becomes an *ènu* (a spirit) that will remain a good spirit.

My initial thoughts of Käser's work were that the ideas, vocabularies and phrases in this ethnography seemed repetitious. And the possibility of the reader getting lost several times in their attempts to connect ideas throughout the chapters is very high. I am speaking from experience. Therefore, to be safe, I read the book more than twice (and skimmed through more than a dozen times). But here is what saved me. I finally forced myself to stop skimming and scanning but to recall the intentions (and functions) of each chapter to the entire book. Then it became clear. Käser repeated ideas, vocabularies and phrases intentionally not only for his readers, but himself. The Chuuk language is tricky, this I know. One word or phrase can have ten (maybe more) diverse meanings. Chuuk Islanders will create numerous contexts to use one single word to convey various meanings. Käser goal was to make sure readers understand this complex language and culture the way he does by repeating these words, phrases and ideas. It is kind of like telling a story. As it advances to the next act, a recap connects the previous acts to the current one. And one can only do this if they know the story by heart.

The author, to present and interpret these indigenous ideologies, terminologies, etc., in several contexts the way the Chuuk Islanders would, has validated to some higher extent, his mastery of the language and ample grasp of the culture more than the typical foreigner and the ignorant chon-Chuuk.

Käser, in the beginning of the book, suggested to foreigners who may want to study other cultures and people completely unfamiliar to them, that it is important they shed all their biases and preconceptions of that particular culture. This was because he knew that the subject he planned on pursuing was complex, serious and sensitive. The only way to allow himself to learn from the people of Toon (Tol) was to come with a mind that is free and willing. I can only imagine this challenging task, especially coming from a culture on the other side of the globe and with principles of his own. I do not claim to be an expert of language, my own in particular since I was born during the time where a Western education was becoming more of a survival tool rather than a useful skill to possess. Nevertheless, recalling the ways my parents' elders would speak and act, I cannot help but feel a profound sense of nostalgia reading into the local terms and phrases Käser gathered from his indigenous interviewees.

Ultimately, despite there being two separate views of the Chuuk Islanders and the cultures of the West and Europe on the concepts of soul, in some ways, there is a merging of ideas around this subject by the respective groups. Maybe this was Käser's intention after all—to show that even though Chuuk Islanders looked at their world so differently from other foreigners, the fundamental concepts are there i.e., there is a soul or spirit of the body, there is another world beyond the world of the living and that the elementary notion of the physical body is also shared despite Chuuk having more vocabularies for just the body alone.

The only thing I find lacking from this body of research is the input from the women of Toon (Tol). I understand that re-Chuuk are mouthpieces for their sisters or for women in their communities, and this interview was done during the time when women were not as vocal, but their place in Chuuk's society and their contributions are still worth mentioning and acknowledging. The absence of a female's point of view in his work may be due to cultural sensitivities, but it could have been remedied with the help of other female evangelist missionaries.

Käser's book adds to the myriad of literary works and studies of indigenous societies by foreigners. I do not think the author wrote specifically for Chuuk Islanders, or Micronesians, but for people who are not from the area, more or less like himself. As stated in one of the earlier chapters, the author suggested to others (who I am assuming to be foreign) that they should start a field work with a clean slate. Whatever they think they know, or their presuppositions of a culture apart from their own, ought to be buried deep in the back of their minds or else the work will fail its true intentions. That is why most of these writings we read about ourselves and are written by others contain heaps of misconceptions and misunderstandings of us. I feel like Käser is trying to steer future ethnologists from this mistake. And that is why he rose to the task to learn and understand the local language the way a Chuuk Islander would.

Speaking as both fin-Chuuk and fin-Tol, Käser's work did not disappoint. I must admit though, it was weird reading taboo words as those about the genital areas and such, but how else do we expect others to know about us if we are not forthcoming? For me, this work is valuable and Käser did remarkably well documenting the history and the kinder side of a people from the Chuuk Lagoon that still gets a bad rap even to this day.

~~

The writer of this review belongs to her mother's clan of Maasale and her father's clan of Soor. She is from the islands of Foupe and Wonei, in the Faichuuk region of Chuuk State, Federated States of Micronesia. She has a Bachelor of Arts degree in Anthropology and a Minor in History of the Pacific Islands, from the University of Hawai`i-Hilo Campus. She now resides and works in Pohnpei (FSM).

***The Love of Learning: Seven Dialogues on the Liberal Arts*, ed. Margarita Mooney.Providence, RI: CLUNY Media Edition, 2021; paperback, 211pages.**

Reviewed by C. S. SCHREINER, University of Guam

The sincerity of the title passes us by in its unfashionableness: *The Love of Learning*: *Seven Dialogues on the Liberal Arts*. Neither intellectually clever nor sarcastic, there is something medieval in the sound of it, as if the love of learning is already an archaism and not merely something untrendy or unpretentious. When is the last time you heard the phrase spoken by a student in front of his classmates, as in "I love learning!"? The likely culprit is shame culture. But why, in what broken world would saying such a phrase invite shame and recrimination? In a world wherein ignorance and sarcasm are misperceived as the compulsory price of self-preservation and social belonging. In his written response to the insurrection inquiry pertaining to events of January 6, 2021, retired Federal Judge Luttig spoke of the "willful ignorance of law and fact" evinced by the insurgents and the politicians who misled them. If you want to make friends and influence people, then act ignorant, disrespect scholars and learners, scoff at experts like Dr. Fauci, and tell people you hate to read. After all, this is the behavior that got #45 elected to the presidency.

The battle lines are drawn. Teachers and students must band together to defeat "willful ignorance of law and fact."

Teachers need to interpret these circumstances and steel themselves. Merely to follow conventional methods of preparation and pedagogy will not facilitate or produce worthy learning experiences and outcomes. The events in the U.S. Capital and elsewhere seem so remote and unworldly, but they are not: everyone is online, and the toxicity circulates worldwide, even to Guam. But how does this impact my teaching? Question: Would people who *love learning* elect a president who disdains it? Answer: Never—not on our watch! What are we to think then, what is the urgent matter for thinking, when a self-absorbed and cruel person becomes President who loathes reading, ignores history and science, and demonstrates an unsteady command of grammar and spelling in daily missives on Twitter?

The sober response to this question, and the necessary inferences to be made from it, have not been openly distributed because they would be too painful and disquieting to process, especially by educators. From the results of the 2016 election, but also from the vote count in 2020, it seems arguable that millions of Americans *do not love learning*; many of them might feel rancor towards a system in which they often felt alienated or disadvantaged. If this voting majority represents American culture, or roughly half of voting culture, then one can reasonably infer that genuine learning has become *countercultural*. Nietzsche already acknowledged this development in his early writings about education, but he did so ironically by complaining that educational institutions ("the crushing roller of pseudo-education") were *not countercultural enough*. He challenged teachers to defend classical learning even as the schools mirrored the barbarism and crass superficiality of contemporary culture in Germany. Nietzsche knew it was exhausting for teachers to lead students back to the "difficult-to-grasp world of the Hellenic, as into the authentic home of education when…the same student will in the next hour grab after a newspaper or novel" (40). As Nietzsche criticizes student interest in the journalism and popular literature of his day, we are reminded of the way social media and Netflix have infiltrated our own classrooms and captivated student attention via cell phones. The difference in seductive content between his epoch and ours is noteworthy; a teacher today would arguably be receptive to the idea of a student being distracted by a novel or newspaper instead of TikTok or YouTube!

Within the book under review, Roosevelt Montás, in dialogue with Margarita Mooney, says that "liberal education is a countercultural practice. That is, we are engaged in offering a challenge to the prevailing cultural ethos in which we live…We are operating within and against this postmodern condition. Socrates, who in some ways is the paradigmatic figure in this project…was executed by his fellow citizens, He was condemned to death by his peers for engaging in precisely an activity that challenged the culture" (162-3). Montás goes on to make the following bold statement: "We're swimming against a very strong stream, but that's just what I want to do. I want to be swimming against the stream. That's my job, why I went into this" (163). Brilliant, isn't it? Heroic and anti-heroic. Noble in its very futility. As Ivan Morris explains, the Japanese have a word for the nobility of failure: *hogenbiiki*, or "sympathy with the Lieutenant," compassion for someone whose rank and heavy workload are by no means the most prestigious in the Imperial Police (67). I wonder how many Americans have heartfelt sympathy for teachers—our *hogenbiiki*.

Mooney, Montás, and the other scholars who contributed to this timely publication, a set of dialogues about the crucial importance of the liberal arts curriculum, are, like retired Federal Judge Luttig, holding the line *regardless of political affiliation*; in this battle for intelligence, they join Bernard Stiegler, whose untimely death dealt a blow to the nonpartisan critique of the attention economy and its commercial attack on the "available brain time" of young people in school. Montás, who teaches at Columbia University and published *Rescuing Socrates: How the Great Books Changed My Life and Why They Matter for a New Generation*, says "we live in a free-market society that emphasizes productivity, efficiency, and cash value." In other words, a culture that values philistinism and personal wealth over learning and moral development. Montás goes on to quote Aristotle's *Politics*: "There is a certain kind of education that children must be given not because it is useful or necessary but because it is noble and suitable for a free person" (163). Montás is not trying to hide his countercultural position in support of learning culture and the leisure time necessary for devoted lucubration. His position is not about vanity or politics per se, but about his students: "So many students that I work with really lack a sense of belonging or vocation" (164). He does not need to say the obvious, already declared in the title of this book: his students sadly lack a love of learning, have little time for it, and the best way to address their social and vocational problems is to fall in love with learning and become as learned as possible. Does that sound countercultural? Well, it is.

Margarita Mooney, an Associate Professor at Princeton Theological Seminary, has edited this volume of dialogues, conducting separate conversations via Zoom during the pandemic with a group of distinguished advocates and practitioners of liberal arts values: Robert George, Princeton; William Damon, Stanford; Elizabeth Corey, Baylor; Timothy O'Malley, Notre Dame; Carlo Lancelotti, CUNY; George Harne, University of St. Thomas—Houston; and the aforementioned Roosevelt Montás of Columbia University. There is little sense in summarizing the content of such wise and stimulating dialogues, which range from scholarly insights to biographical anecdotes. I found myself repeatedly charmed and enlightened by these spirited and sincere exchanges between lovers of classical knowledge, the more so when they slip into personal revelations. It is evident that some of these scholars and critics maintain an objective distance from their students, while others are friendly and engaging within and outside the classroom. In the case of my own professional persona, I have never so much as exchanged a single text message or tweet with my students in thirty years of teaching. (This monastic private life does not evince my classroom ethos, consistently evaluated as highly attentive and accessible.) It is frankly endearing to read William Damon discuss the significance of his first writing experiences with his school newspaper, to which he retraces his purpose in life. "It wasn't a class or a teacher—it was that extracurricular activity that was educative for me because it motivated me to then take my schoolwork seriously" (20). Such a comment illuminates the unpredictable meaning and significance of all sorts of activities in young people's lives, from seemingly peripheral to more conventional extracurricular pursuits. One falls in love with learning on diverse and unexpected paths both obscure and widely traveled. The point here is to value them equally and, through our support, enable the conditions for the possibility of an attentional immersion experience to take place so as to cultivate the "soulcraft" associated with the experience. Focus—attentional rigor—can be learned in stamp collecting, billiards, and fly fishing. Such activities constitute a base for subsequent learning experiences both within and outside the classroom. Teachers and parents should encourage these activities without calling them by name, i.e., *attentional practices*.

Upon taking up the book under review, I was reminded of the last time I encountered contemporary scholarship in which concepts and practices associated with traditional humanism are invoked and promoted without apology. It was Ivan Illich's research at Penn State, where I did my doctoral studies, that brought such material to my attention, some of which he published in his book *In the Vineyard of the Text*, an exegetical commentary on Hugh's *Didascalion*. The persistent ethos of spiritual devotion and monastic rigor integral to practices of advanced literacy studied by Illich, and robustly represented in a modern context by Mooney and her seven interlocutors, harks back to Jean Leclercq's *L'Amour des lettres et le désir de Dieu: Initiation aux auteurs monastiques du moyen age* (*The Love of*

Learning and the Desire for God: *A Study of Monastic Culture*). In contrast to the desperate, often incoherent and unprincipled cascade of political events leading up to the U.S. insurrection on January 6, 2021, these dialogues conducted by Margarita Mooney seem otherworldly—sincere, undistracted, and articulate. They know the secret power of historical consciousness—the objective distinctions which become possible, the concrete existential and epistemological traction which results from *not* coinciding with one's current epoch. How else gain critical leverage to critique the present, but with the lucidity and wisdom of the historically aware scholar who does not coincide with it? This is also the meaning of countercultural: untimely, or *Unzeitgemässe.*

A book like this is a beacon, a lighthouse. It illuminates the way forward via the love of learning. This is not a time to shrug our shoulders and diligently return to curricular and testing mandates. We did that for years; we have data; we are selfishly obsessed with short-term data sets. Where is the love that is the precondition for robust and sustainable lifelong learning outcomes? And is love enough? Well, it is--it powerfully moves both the swift and the slow--but just how much can be squeezed from teachers, who already expend their finite resources--time, materials, attentional capacity--for inequitable compensation? It seems too harsh to inform new teachers, fresh graduates of educational programs, that when they first enter their classrooms, they cannot presume as an operational norm that students already love learning and desire to learn more, as much as they can to empower and enrich and civilize themselves and their culture. It seems too overbearing to ask of our educators that in addition to introducing the new curriculum and classroom rules and procedures, they must induce or inculcate a love of learning. Are they trained to do this; have they attended seminars that inform them how to instill a love of learning in their students; and do they themselves, the new teachers, love learning and learners both swift and slow?

It is a truly beautiful day, a miraculous day, when a teacher discovers that a student desires to learn and loves reading and writing. It can be any student. Desire is not apportioned by nature or nurture in favor of the swift; the slow can be engines of a powerful desire to learn; most of us know the story about the race between the hare and the turtle. This discovery--that a student desires to learn, loves reading, loves writing--is almost overwhelming: one wants to hug the student and praise the Lord for this blessing bestowed. (But do not hug the student and save your prayers for church.)

Where does one learn such a thing as the love of learning? Answer (duh): through wonderful role models, wherever they are. And where are they today after the pandemic, mass shootings, and the January 6th insurrection?

I've said this before: we are still in the thick of it, an epoch of loveless learning, and the teachers shoulder the responsibility to instill love because no one else cares. I speak gently to new teachers, but my message is intended to steel them for a rigorous challenge unmentioned in their seminars, i.e., that popular culture, entertainment culture, has turned many students against teachers and classroom learning. The latter are targets of ridicule, caricature, cynicism, sarcasm, spoofing, goofing, violent reprisal, and shameless, bullying laughter. One of the more earnest television shows, *My So-Called Life*, which enacted an immanent critique of heteronormativity in education, lasted only one season. For a while, cartoons like the *Simpsons* and *Family Guy* seemed almost innocent, at least compared to shows such as *Vice Principles* and *Those Who Can't*. But sarcastic cartoons viewed repeatedly throughout childhood and adolescence—eventually these shows break down all sincerity and everything becomes a joke. This would be the *attitudinal problem*. But worse than that is the *content problem*—the multimedia content which competes with daily lessons for the attention of students. TikTok vs. English; IG vs. history; Netflix vs. Social Studies; YouTube vs. science and math. Teachers and their daily lessons lose every time—okay, almost every time.

The challenge of the first day of class, and the subsequent days, and years, seems insuperable. *Should have gone to nursing school….*

No one wants to criticize the educational establishment as it suffers, crushed and despondent, in plain sight, least of all educators themselves. We need to retain them, the teachers, but we seem to be losing more than we keep. Those problems are serious and require our passionate focus and care in content-specific ways. But educational standards should not undergo a legitimation crisis every time a cultural problem absorbs our attention and dominates screen time. The value of educational standards is in their rigor and accountability, the consistency of their application and assessment. Unlike everything else driven by commercial trends, educational standards are upheld and sustained by unfading and undying love—the love of learning. Decline and obsolescence in education are not matters requiring market analysis and strategy for the design of new trends to hold the students' attention, but irrevocable death knells that can only be reversed with the noble community spirit of *Paideia*.

As personified in a noble and not ignoble presidency, the love of learning authentically endures in a spiritual continuum across the days, weeks, and months of a presidency, in the inconspicuous ways the President alludes to books he has recently enjoyed, praises the discoveries of science, awards film artists, musicians, and writers trophies of distinction, acts respectful and not cynical when an established expert holds the microphone, or reads from a charming book to a group of kindergarten students during the winter holidays. JFK, who invited Robert Frost not only to his inauguration but many White House events as a revered family friend and New Englander, not as a celebrity, claimed that his favorite novel was Stendhal's *Le Rouge and Le Noir*. Barack Obama's favorite novel was Toni Morrison's *Song of Solomon*. These literary preferences are sincere and characteristic, not staged public performances for mass consumption by gullible citizens, as when the 35th President abruptly held up a Holy Bible during the aggressive suppression of a public protest in Washington, DC.

Historical and aesthetic modes of consciousness, interwoven with spiritual devotion and attentional rigor, are rare powers among scholars in the living present, yet form the institutional backbone of advanced literacy and its communal viability, in short, a human continuum precariously sustained by the *love of learning*. Some of us keep the torch burning brightly. But when entering the secular contemporary classroom, the new teacher cannot assume her students love learning, derive pleasure and moral perspicuity from reading and writing, or demonstrate basic historical awareness. The teacher will be gravely disappointed if she expects her students to enjoy the practice of exegesis, so essential for critical thinking and textual understanding. After many years of college teaching, it is clear to me that there are no short cuts to inculcating or cultivating *spirit*, attentional focus, the love of learning, in students, and that if one is so blessed with the above-mentioned powers, the best way to "teach" them is by role modeling. How else can *spirit*--the passion for learning--consistently perform its humanistic ardor in grounded and memorable ways? However different in background and expertise, Professor Mooney's interlocutors all express historical consciousness and literary understanding in informal conversation, and they do so without fanfare. While academic trends have periodically disrupted the meaning and purpose of scholarship, inciting abrupt changes in conceptions of truth and method, these scholars who speak with Margarita Mooney have stayed the course while becoming distinguished in their individual disciplines. In other words, their tastes and methods might have changed over the years, but not their classical values and spiritual devotion to learning.

Although few contemporary thinkers and writers have come to vociferously regret the Enlightenment separation of public schools and religious institutions, those familiar with the history of this issue are nevertheless aware of what is lost in the absence of practices associated with spiritual devotion, which traditionally strengthened attentional focus and self-discipline via reading, prayer, exegesis, and undistracted listening. To be sure, there was a culture of learning sustained in the medieval monasteries and convents, including translation and scholarship, which inarguably contributed to the foundations of Western knowledge. But because this was indeed a monastic *culture* it becomes grossly reductive to instrumentalize it as a task set transferable in a secular classroom. Attending Sunday School and Sunday Mass before Monday's class will not accomplish much in the way of inculcating monastic culture; nor will reading the "holy scriptures as literature" in a seldom offered course in the English department. However, this monastic idea, eloquently addressed some years ago in Russel Berman's *Twilight of American Culture*, is a teaching opportunity not to be overlooked or slighted, that of creating a learning culture that, in its quirky secular ways, reflects some monastic practices. Such a culture would teach spiritual faith as attentional discipline, as active reading and exegesis. Would this idea motivate the formation of communities of learning disconnected from major population centers, whether physical or wired? What would monastically oriented education look like, and where would it be situated in physical space? While it would be stretching it to argue that the Enlightenment cast the baby out with its bath water, that by extirpating religious belief in the classroom we have once and for all foreclosed on the capacity of our students to demonstrate scholarly concentration and other academic skills and virtues. This would only be true if those skills and virtues were inculcated over the span of years, if our students lived monastic lives and their powers of concentration and exegesis were integral to their lifestyle, the way they conduct themselves, in short, their way of life.

References

Morris, Ivan. *The Nobility of Failure*: *Tragic Heroes in the History of Japan*. New York: Farrar, Straus and Giroux, 1988.

Nietzsche, Friedrich. *On the Future of Our Educational Institutions*. Translated by Michael W. Grenke. South Bend, Indiana: St. Augustine's Press, 2004.

Section III

Poetry

The Agat Taco Shack

DAVID GUGIN, University of Guam

1.

It took me almost 20 minutes to decide between the shrimp or beef brisket tacos. Then another 10 to choose mild, medium, or spicy salsa. And when the lady started asking about my drink order I was so overcome with hunger that I could barely mouth the words “bottled water.” Clutching my napkin and fork I staggered to my seat, thanking God for outdoor dining and inexpensive (I won’t say cheap) umbrellas on sale at the GPO Ross. It’s been that kind of year.

2.

While waiting for my order I started studying the *Pacific Daily News*. Almost immediately, I began to hallucinate: visions of terror, pandemonium, raging disease, the death of the tooth fairy, splendid annihilation, horrific encounters with Jessica Simpson, a long discussion about masks with a talking mask, getting trapped for eternity in a Zoom breakout room, a beautiful Tumon sunset, an emptiness filled. It’s been that kind of year.

3.

I put the paper down and played it casual. I have a tendency to self-obsess they tell me, but I was out of my element here. For months I’ve been self-quarantining in a tiny, tin roof hut with excellent wireless just behind K-Mart reading some bizarre 19th century British literature – I mean what’s up with this Conrad dude and that “heart of darkness” stuff. My man Kurtz, they ought to make a movie. Sorry, what was I talking about? It’s been that kind of year.

4.

They tell me I’m paranoid, too. Which is true, but only because a lot of people out there are trying to get me. With all these face coverings hard to tell the good guys from the bad guys so I just assume the worst. You know, caution before courage. On Guam a little paranoia never hurts. When Beverley Hills meets Appalachia all kinds of crazy things can happen, especially now.

Still, I’m proud of this, my island home. It’s been that kind of year.

5.

The cashier calls out my order. It takes a long, paralyzed moment to comprehend what has just occurred. I had given her my name, but she couldn’t use it because all submissions have to be anonymous in order to maintain the integrity of something called the “blind review” process. Perfectly understandable, though I still can’t figure out how the editors can make their selections with their eyes closed. Perhaps they just listen. It’s been that kind of year.

6.

By the time I get all squared away – the careful sprinkling of the lime, the meticulous application of the salsa, the indescribably delicate folding of the taco shell, the waves tumbling on the beach, the laughter of children building castles out of sand, the dolphins swimming and splashing, the cool breeze blowing, the memory of a face – I have almost forgotten why I am in Agat in December, having a nice lunch on a blessed day. It’s been that kind of year 7.

As I eat my beef brisket, I think about the past, I think about the present, I think about the future.

I think about how a journey's destination is not nearly as important as the journey itself. I think about horizons, about mistakes I have made. I think about victories won, opportunities lost, about what led me here and what caused me to stay. I think about the only truth I truly know.

That joy is the rarest gem of all. It's been that kind of year.

THREE POEMS

Good Friday

I am on a ship. The ship is on the water. The water is on the world
And the world is flat. I watch the waves strike the bow of the ship
With the force of millions of years and I am glad I am here

In the crow's nest and not there, down below,
Where the waves strike and seem to enjoy striking.

Piazza di Spagna 26

At this hour the house grows quiet. The lights dim,

The curtains are drawn, the toys and tools of the trade

Are put away to be saved for the morning.

All things have their time, their place,

To the day belongs a portion of our existence

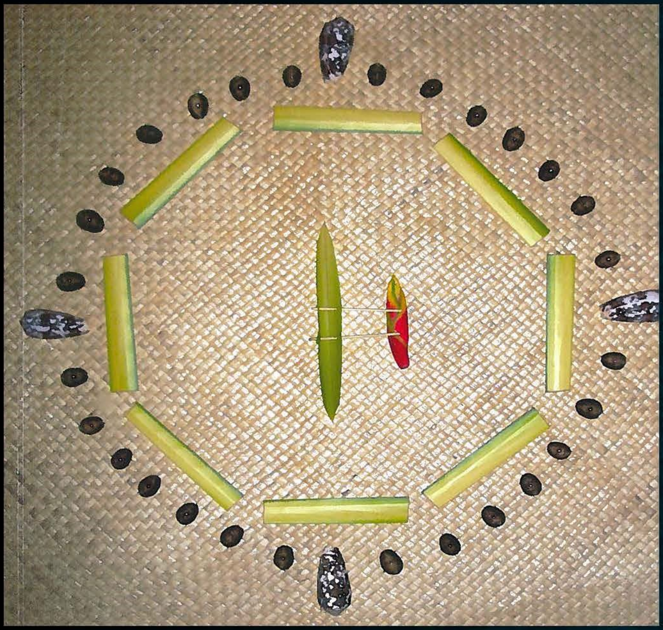
And to the night another. The ceremony begins.

Magic Man

Step outside

Enter a land of plenty
Watch the sun play shadows on the ground
The foliage alive color everywhere
A sliver of hope dancing on the breeze
Reach for it
With a song in your heart
Smile my little ones
Smile

~~



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 faunan 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

UNIVERSITY OF GUAM
UNIBETSEDÅT GUÅHAN