

GSJ: Volume 8, Issue 10, October 2020, Online: ISSN 2320-9186 www.globalscientificjournal.com

Single-sex and mixed-sex schools' holistic formation impact on the 21st century schooling

Teodora M. Salubayba

Abstract

Purpose

This qualitative study described and compared the private sectarian single-sex and mixed-sex schooling as stakeholders' lived experiences illuminate the commonalities and differences of these two types of schooling and their impacts on the 21st century holistic formation.

Design/methodology/approach

A single question, "what can you say about your elementary and secondary schools' formation, and training?" guided the interviews and personal journals. Stakeholders of comparable elementary and secondary private schools (n = 266) having prior experience in both single-sex and mixed-sex schools consented to participate in the study. Manual coding, R-studio software-generated wordcloud, member checking, and peer review were utilized in data processing and analysis.

Findings

Single-sex and mixed-sex private sectarian schooling nurture holistic formation for academic discipline and excellence, social awareness and responsibility, character building, spiritual-religious, and moral values. Stakeholders' lived experiences showed the different impact of these two types of schooling on advocacies, and on the 21st century schooling. Findings suggest that religious sectarian schools whether single-sex or mixed-sex posed with the challenge of revisiting tradition, and vision-mission for their alignment to the sustainable development goals for quality education and life-long learning, while remain firm and steadfast in adherence to morals and religious formation.

Originality/value

Deeper understanding of the schooling experiences illuminates the emerging phenomena of single-sex and mixed-sex schooling, unique and similar holistic formation indicators, and the challenges of tradition alongside the 21st century schooling.

Keywords

qualitative research, holistic formation, 21st century, single-sex, mixed-sex

Introduction

Better schooling holistic formation and more nurturing for the 21st century learners who are predominantly onliners are growing concerns among education stakeholders. The 21st century learners are considered critical thinkers, problem solvers, creative innovators, collaborators, technologically shrewd, and globally connected (Characteristics of 21st century learners, 2019, https://blog.kamiapp.com; https://learner21stcentury.wordpress.com). Holistic school visions locally-rooted, globally competent, and life-long learners (Nurturing 21st century students holistically, 2017, https://digitallearning.eletsonline.com). Holistic education is associated with concepts and themes like wholeness, integrated, balanced and all-round development, harmony, nurturance and cultivation of body, mind and spirit, connectedness, interconnectedness, interrelationship, and interdependence. (Yang, 2004; Grossenbacher and Parkin, 2006; Hare, 2006; Mahmoudi et al. 2012; Miller and Four Arrows, 2013; Flores, Walters and Kiekel. 2018; Shih, Hsu and Ye, 2018; Widodo, 2019; Miller, n.d.) Holistic education is an approach to pedagogy that can meet the needs of all types of learners and prepares future citizens who will contribute to their communities and for the planet (Mahmoudi et al., 2012, p. 185). Even within a virtual school model, holistic practices are evident where teaching must also be a social activity providing space for learners' personal, professional, and academic development (Flores, Walters and Kiekel, 2018).

Preponderance of studies on single-sex and mixed-sex schooling implicate implicitly or explicitly holistic education focusing on their benefits (Miliband, 2004; Flowers, 2005; Loyola, 2012; Eisenkopf et al, 2015), advantages, and disadvantages (Tyre, 2005; Hare, 2006; Guest, 2014; Pahlke, Hyde and Allison, 2014; Advantages of coeducation, https://cathedralschool.co.uk/co-education; Coed classrooms versus single-sex classrooms, https://www.ourkids.net/school/together-or-apart). Despite extensive comparative research into the experiences of single-sex and coeducational school structures and studies of schools that make the transition from single-sex to coeducation, it is not reasonable to claim that either structure is superior on education grounds alone, no matter how broadly those grounds may be defined (Guest, 2014, p. 37). "For some girls and some boys the single-sex environment is absolutely right, for some it's absolutely wrong" (Coed Classrooms versus Single-sex classrooms, https://www.ourkids.net/school/together-or-apart). As there are excellent single sex schools and excellent coeducational schools (Guest, 2014), and while single-sex and coeducational raises plenty of issues, that it's very much an individual differences phenomenon (Coed Classrooms versus Single-sex classrooms, https://www.ourkids.net/school/together-orapart), both single-sex and mixed-sex schooling envision holistic education but may be expressed and implemented differently.

This study focused on the uniqueness and similarities of private sectarian single-sex and mixed-sex schooling holistic formation drawn from the stakeholders' lived experiences that impact schooling preferences and advocacies; for instance, the parents' school choice for their children, and the teachers in their practice of profession. How the stakeholders described single-sex and mixed-sex schooling experiences led to comparisons of holistic formation in these two school types, their responsiveness in today's 21st century learning and teaching, and UN sustainable development goals along the areas of quality education and lifelong learning. The arguments whether boys and girls apart or together in schooling suggest revisiting school's tradition, the moral, spiritual, religious formation alignment to the needs of the 21st century learners.

Benefits, advantages and disadvantages of single-sex and mixed-sex education

Single-sex environment meets the needs of boys and girls, allows them to mature at their own pace, makes greater provision for gender role modelling, and address the unique learning

styles and interests (Single-sex education, en.wikipedia.org/wiki/single-sex_education). As boys and girls are biologically different, they learn differently, need significantly different teaching methods, and therefore they need single-sex classes if they are to learn effectively (Sax, no date, cited in Murphy, 2008). Competition between girls and boys is more evident in the mixed-gender classrooms and there is the tendency to prove the advantage and supremacy of gender identity (Jackson and Bisset, 2005).

Separate classrooms are the best way to teach children (Tyre, 2005), with decreased and fewer distractions to learning (Flowers, 2005; Nidoy, 2011). Moral and character education is more effective in a single-sex-environment (Murphy, 2008). Girls felt more confident, exercise leadership (Single-sex education, en.wikipedia.org/wiki/single-sex_education), experienced freedom from the caustic screening of the other sex (Miliband, 2004), benefiting academically (Spielhofer, Benton and Schagen, 2004), explore wide range of interest in reading, sports, mathematics, and science (Nidoy (2011), and improve self-confidence and mathematics performance particularly with high ex-ante ability (Eisenkopf et al, 2015).

Meta-analysis of controlled studies does not support the view that single-sex schooling provides benefits compared with coeducational schooling. (Pahlke, Hyde and Allison, 2014, p. 1042). Single-sex schooling fails to address the 'whole' child, and segregating children based on sex does not address school-problems (Blair, 2013, p. 139). There are no guarantees that separating the sexes creates an equitable learning environment or be considered "better" in terms of interrupting stereotypical gender relations (Datnow et al, 2001, cited in Herr and Arms, 2004).

Coeducational classroom is considered a healthy environment, the reality of the world, more enriching educational experience where students learn and work together productively (Coed classrooms versus single-sex classrooms, https://www.ourkids.net/school/together-or-apart). Coeducational schooling prepares students for the future, provides countless activities to satisfy diverse interests, enjoys the friendly atmosphere, makes the classes more academically competitive, creating global citizens who know how to collaborate in solving problems. Boys learn to listen and respect the intellect of girls who feel comfortable speaking up in front of boys. In academic terms, neither gender is disadvantaged by the other, both are enhanced by the presence of the other. (Advantages of coeducation, https://cathedral-school.co.uk/coeducation.html)

There are excellent single sex schools and excellent coeducational schools (Guest, 2014). Single-sex schools are popularly viewed as advantaging girls and coeducational schools as advantaging boys (Daly and Deffy, 2004). While the single-sex/coed question raises plenty of issues for parents and students, no one answer is right or wrong. It is very much an individual differences phenomenon. (Coed Classrooms versus Single-sex classrooms, https://www.ourkids.net/school/together-or-apart) Evidence regarding benefits and advantages of single-sex and mixed-education suggest that both schooling provide holistic formation though implicitly reflected in some schools' vision, mission, and thrusts.

Holistic education, environment, and formation

Education must contribute to the all-round development of individual – mind and body, intelligence, sensitivity, aesthetic sense, personal responsibility, and spiritual values. (UNESCO, 1996: 94, cited in Hare, 2006, p. 302). This is tantamount to holistic education that aims to build balanced strong childhood personality (Widodo, 2019, p. 275), development of the learner's physical, intellectual, aesthetic, emotional and spiritual (Singh, 1996: 227, cited in Hare, 2006, p. 302), educating the whole person's mind, body, and spirit (Miller, no date), and the person's cognitive and affective levels (Mahmoudi et al, 2012; Hare, 2006), to become active, participative critical learner in a changing world (Forbes, 2003, cited in Hare, 2006). Holistic learning theory suggests that human knowledge consists of explicit pertaining to cognitive

component, implicit and the behavioral component, and emancipatory referring to the affective component of knowledge reflected in affective reactions to the outside world (Yang, 2004, p. 242). Transformative learning, the training of mental skills involving mindfulness and awareness provokes learners to know themselves, engage in contemplation, meditation, action, and real contact with community through community-based action that is akin to service learning (Grossenbacher and Parkin, 2006).

Holistic education prepares future citizens who are concerned and mindful of others and the community, and participative in creating a harmonious society and restoring the vision of sustainable education (Mahmoudi et al, 2012; Hare, 2006). Holistic education is a journey towards self-realization and self-actualization in which student demonstrates self-awareness, interpersonal, cultural, and intercultural awareness, social and academic maturity, integrity, flexibility, creativity to problem solving, collaborative skills, and attitude of continuous improvement. (Hare, 2006, pp. 312-313, 315) Even in the virtual environment, holistic teaching approach must also be a social activity where personal, professional, and academic needs are met. Teachers teach the basics and ensure that students develop 21st-century skills (Flores, Walters and Kiekel, 2018), providing students with relevant learning activities that are academically rigorous, allowing them to explore and apply the learning in a variety of contexts which fits their own learning styles (Costa, 2013, cited in Flores, Walters and Kiekel, 2018).

Holistic educators bring to awareness the deep interconnectedness of life and view the earth and its inhabitants as sacred and with wonder (Miller, n.d.; Miller and Four Arrows, 2013). They embrace the importance of wholeness, connectedness, interdependence, and interrelationships (Mahmoudi et al, 2012). The Adlerian perspective on the tasks of life address intimate love relationships with friends, fellow beings in society, with God or the universe, and with self (Manaster & Corsini, 1982; Mosak, 1979, cited in Watts, no date, https://books.google.com.ph). A holistic person focuses on both character and knowledge to accomplish personal "spiritual awakening (Shih, Hsu and Ye, 2018, p. 290).

A holistic environment both physical and social enhance learning, encourage children to become better communicators, nurtures potentials including spiritual (Study International, hen;">https://www.studyinternational.com>hen; www.schoolaroundus.org>holisticeducation), help teachers to become role models for students, encourage parents/guardians active participation in school routine activities, foster comfortable, safe, and orderly atmosphere conducive to active learning, and treated personnel with dignity and respect (Widodo, 2019, p. 275, 281). Creative school provides holistic environment with space for active engagement, supporting inquiries of children through play-based activities, encourage child participation and freedom of speech, and open-ended experiences (Ucus and Acar, 2019).

Holistic formation provides opportunities to develop one's full potential through active participation in the learning process, community immersion, values formation (Loyola, 2012), and allow students to gain a different point of view, enable them to understand their own life and the social environment, and to contemplate their responses to public affairs issues (Shih, Hsu and Ye, 2018, p. 288). Hare (2006, p. 305) states that the development of personal values is an outcome of the interactions between the student, parent, and the school; the formative influence of the school where students spend much time among influential friends and role models. Hare mentions relationships, integrity, desire to understand and learn, high achiever, belief in own self-worth, compassion, and loyalty are some of the values and behaviors associated with a holistic approach to education. Overall, the ultimate goal of holistic education and formation is to form fully-alive learners, responsible global citizens, and productive individuals whose talents and gifts are properly utilized not only for self-gratification but becoming persons for others thereby making a difference in society, embrace cultural diversity, and imbued with the passion for lifelong learning.

Methodology

This qualitative study described and compared themes and behavior indicators of holistic formation in single-sex and mixed-sex schooling drawn from the participants' lived experiences that were assumed to impact advocacies and the 21st century schooling. School stakeholders (n = 266) of comparable elementary and secondary private schools, with experience in both single-sex and mixed-sex schools consented to participate in the study in 2018 and 2019. They were college students (n = 13), graduate students and active in teaching profession (n = 240), parents (n = 8), and school administrators (n = 5). The study considered the on-site observations in comparable mixed-sex and single-sex private schools in terms of facilities and amenities, class size, and curriculum. There were more public schools than private schools in the Philippines approximately 91.8% public elementary vs 7.2% private, 82.3% public secondary vs 17.7% private (PSA, 2018, http://openstat.psa.gov.ph).

A single question: "what can you say about your elementary and secondary schools' formation, and training?" guided the interviews and voluntary personal journals. Stories about schooling experiences, interview and on-site observation notes were data sources. Theoretical sampling with more data collected to further refined themes was applied. (Corbin and Strauss, 2008; Birks and Mills, 2015).

Interviews were audiotaped and school visitations and observations were videotaped upon permission with the assurance that all the documents and records will be discarded after data analysis and presentation. Ethical concerns such as respect for individual opinions, identities concealed and anonymity secured, and data privacy and confidentiality were strictly observed.

Coded responses identified recurring keywords and phrases and provided categories, concepts, and themes about holistic formation in two school types. R-studio software-generated wordclouds were analyzed and presented to the participants to verify frequently occurring words that need to be emphasized relating to themes. Member-checking was done for clarificatory information, analytic interpretations, conclusions, and overall adequacy of information with the participants from whom the data were collected. Peer review helped in the finalization of themes about holistic formation in single-sex and mixed-sex. When all the themes were generated and finalized after iterative process of data analysis, literature review followed to determine similar findings and uniquely stakeholders.

Findings and Discussion

The main question that guided the voluntary sharing of personal journals and interviews, spawned categories of responses complemented with school visitations and observations formed themes of holistic formation and redound to student's wholesome, well-rounded, and total development. Stakeholders' lived experiences are concomitant to their being the implacable advocates of either single-sex or mixed-sex schooling and the passing on of school's tradition and formation that were revisited for their aptness, and responsiveness to the 21st century schooling.

Private single-sex and mixed-sex school environments

The school environments sustain holistic formation that provide the students from basic facilities, advanced technologies to overall atmosphere fostering optimum development of the cognitive, affective, and the entire person. Parents mentioned that they send their children in the same private-sectarian schools where they finished elementary and secondary schooling with the conviction that their children would benefit from the same educational training they experienced.

- ... school really develop my children emotionally, not only a fighter in their academic environment but also a warrior in their emotional daily struggles.
- ... in exclusive environment, everything is laid, education is specialized, girls learn to behave properly in social gatherings, my kids thrive better in that sort of stable environment.

Considered important was the control of class size of 35 to 40 students for holistic formation given convenient and comfortable physical facilities.

- ... we have many qualified student-applicants, but we cannot accommodate them all because we do not have enough classrooms. We maintain the number of students per class, in this manner, we choose the best students, example the top 300 in the entrance admissions test (Administrator, School Directress)
- ... I believe that putting my children in a private school helps them academically, the best facilities, safe, clean, limited number of students that can enroll per batch, section, easier for them to learn, a controlled environment in terms of population (Parent)
- ... the school facilities, classroom, sports, big gym, swimming pool, everything here is ok help me showcase my talents, skills, I've been here since prep, it's clean, nice, motivating classrooms atmosphere (Students)

At the start of the school year, the private schools encourage active participation and collaboration among students, teachers, and school personnel. Among the activities include the open forum where students share their expectations, and school personnel response and sharing of expectations as well.

Stakeholders mentioned a family atmosphere that exude in private schools where everybody reaching out, collaborating, and working for the good of everyone. Students are encouraged to share talents and skills while recognizing each other's strengths and weaknesses. School administrators and teachers stated:

- ... we live up to our commitment to form students in a climate of joy, simplicity, order, and love
- ... a pleasant, cheerful atmosphere, family kind of setup "calling each other by name" "students compete, grow, learn reality of how the world works.

The schools maintain nurturing and supportive environment such as providing generous remunerations, reasonable benefits, trainings and seminars for professional development of teaching and non-teaching personnel, financial assistance and scholarship grants for the gifted and talented students, and other projects and programs addressing varied needs of school's constituents.

Students mentioned the school as responsive environment upholding their optimum development and growth as a person.

- ... I was a very shy and quiet person, but not so much anymore in the company of all girls. Being shy and introvert, I was happier studying in all-girls school, it suits my personality
- ... my education has equipped me in a holistic manner, really a total development of the entire person, I realized we all have "equal opportunities" from academics to sports to co-curricular centered on our being male individuals Through the years, it was carried on in a systematic, consistent, progressive, and adaptive fashion.
- ... experience helped me find a balance between the like for studying and the like for doing other things, balancing academics, social life, socializing, spiritual life, school

has helped me build the needed discipline to achieve in whatever I choose to do after high school.

Students in single sex mentioned a sheltered, comfortable environment in the company of close-knit classmates, the feeling of being on one's own skin without fear of embarrassment. "It is okay to cry", talk something weird, no worry about how I look". Students in mixed-sex shared the experience of spontaneity relating with the opposite sex as brothers and sisters.

Private religious sectarian schools that participated in the study are at par with the holistic schools that aim for balance and total development of the whole person's cognitive, behavioral, affective, and being supportive and collaborative, providing activities in response to the needs of the learners (Yang, 2004; Hare, 2006; Mahmoudi et al, 2012; Flores, Walters and Kiekel, 2018; Ucus and Acar, 2019; Widodo, 2019; Miller, no date).

Holistic environment is crucial to the realization of the desired holistic formation. Participants' sharing of their elementary and secondary schooling experience produced a wide spectrum of related ideas that formed categories of concepts and themes deemed as mechanisms of holistic formation. The personal journals and interview notes were subjected to r-studio software that generated wordcloud depicting the conglomeration of words that were expressed frequently related to the themes of holistic formation in single-sex and mixed-sex. Figures 1 and 2 displaying the wordclouds consist of frequently occurring words describing formation.



Figure 1. Words describing Mixed-sex Schooling

Figure 1 shows the words relating to mixed-sex formation. These are social, community, sense, opportunities, development, greater, and explore. Participants explained that students learned the real sense of community life, normal social formation reflective of real-world learning life relationship, and respect sex differences to become better members in society. Teachers and students described classroom activities as exciting community experience and leverage education.



Figure 2. Words describing Single-sex Schooling

Figure 2 indicates the words describing single-sex formation besides exclusive environment are focus, academics, activities, exposure, and easy. These words were reiterated during follow-up interviews describing single-sex as focused environment on academics with tailor-fit curriculum. All-girl schools emphasized formation of women leaders with deep faith in God, deep appreciation in forming "truly girls", introspective yet steadfast to make a difference in society. Teachers mentioned easier discipline in all-boys schools and forming "real gentlemen" with fervor for service. Presentation of the wordcloud provides the participants the chance to reiterate what they mentioned in the journals and interviews thereby contributed to the finalization of themes of holistic formation.

Holistic formation mechanisms

Mixed-sex and single-sex schools' environments make possible holistic formation with the different mechanisms from academics to social, including behavior, morals, spiritual, and religious. These mechanisms aim to form holistic students who are prepared to plunge, soar, succeed, and embrace the challenging culture and demands of the 21st century schooling. Table 1 shows the themes referring to mechanisms alongside similar and different behavior indicators under single-sex and mixed-sex schools.

Participants' experiences unearthed themes along the areas of academic excellence, behavior, and discipline; social awareness, responsibility, and socialization experiences; strength of character, proper decorum, living out moral values; spiritual, and religious formation, and coping with school-related problems considered as detrimental to holistic formation. There are more similarities in areas like academic excellence, moral values, spiritual, and religious formation. This is expected of the private religious sectarian schools. Noteworthy are the discipline concerns that influence focus and depth of the intended outcomes. The participants highlighted the advantages and benefits of being in single-sex or mixed-sex that outweigh the disadvantages.

Table 1. Mechanisms of Holistic Formation

	BEHAVIOR INDICATORS	
THEME	Single-Sex School	Mixed-Sex School
Academic excellence	Inter-schools' competition champion/quiz bee/science group project Recognition for very satisfactory to excellent performance, assistance to financially-challenged gifted/talented students Competent graduates, academic success in Universities School Tutorial Programs	
	 Accumulation of medals/plaques/certificates/recognition (good feeling, self-fulfilling, intrinsic motivation) Aspiring for the top-ten students Enrichment programs for the talented and gifted Remedial programs for underachievers 	 Competition/challenge to showcase talents, (won recognition/admiration of peers/opposite sex, extrinsic motivation) Aspiring to be the best Prove oneself academically Special programs for the talented/gifted/underachievers
Academic behavior and discipline	 Diligence/study habits/focused/collaborative Punctuality passing/submitting assignments/projects advanced/tailor-fit/rigid studies/ teachers easier class discipline, well-implemented rules/regulations 	Learning well when paired with opposite sex, boys-girls inspiration, enjoying collaborative works Challenging discipline, boy-girl teasing, disorderly classrooms, chit-chat flirting/non-verbal attracting attention
Social awareness/ responsibility	Social issues integration in lessons/discussions Learning leadership, shared responsibilities in school organizations/clubs/student council Outreach programs to marginalized/disadvantaged communities Joining peoples' initiatives/cause-oriented/civic activities	

- Interaction with "Aetas"/tribal Filipinos
- Lay apostolate to orphanages, centers for elderly, special children
- Catechism, faith-sharing with people of same religious affiliation
- Women leaders/significant role in society, "Munting barangay" forming young leaders

Boys and girls' collaboration, community outreach activities, learning gender limitations/rights/ responsibilities

Socialization experience

Grade Level Family Day, School Intramurals

- School Dance/Parent-child bonding, "barkada" friendship bonding sharing similar interests
- LGBT+ interactions for beneficial social

Strength of character, proper decorum, living out moral values

Living out Christian values/golden rule, humble acceptance of mistakes/wrongdoings, steadfast in speech and action, upholding school's integrity, respect people regardless of social class/status, care for mother earth/clean-green projects, recycling materials, prohibiting use of plastics materials, patronizing Filipino/local products/brands

- Responsible social behavior, social grace, prim/proper in public/social gatherings
- women of character, real gentlemen
- Honest question, honest response
- Learning self-discipline, self-control, respect for gender rights/differences, act on one's own moral belief/opinion, proper behavior/conduct inside/outside school premises

Spiritual, religious formation

Community prayers/monthly masses/recollections/retreats, prayer meetings, reflections/expressions of faith in God, Christian living classes

- Examination of conscience, reflection, talking to God, growing in faith, lives of saints, nurturing religious vocations
- Faith in God guiding actions/behaviors
- Discipline problems during spiritual/religious activities

Dealing/coping with school-related problems

School wellness center providing individual/group counseling, therapy sessions, parent-student encounter/conference, homeroom guidance programs, student-teacher consultations, problems on physical, social bullying, social media attack, physical, sexual harassment

- "barkada" conflicts, rejection, isolation, homosexual/same-sex relationship
- boys' bravado competition/attracting attention, boy-girl sexual-relationship

Academic excellence, behavior, and discipline

The schools encourage academic excellence and good academic behavior and discipline among their students. Common to single-sex and mixed-sex are indicators like champion in inter-schools' contests and competition, the science group research and projects competition, recognition for very satisfactory to excellent performance, support for financially-challenged gifted/talented students, competent graduates who are academically successful in the universities, and tutorial programs initiatives for underachievers. Besides boys-girls interaction in mixed-sex, and exclusively girls or boys in single-sex, differences are evident in terms of motivation. Students in single-sex enjoy accumulating medals and recognition certificates as they felt good and self-fulfilled. Their parents and teachers mentioned the students have the intrinsic motivation to succeed academically. Academic excellent students in mixed-sex enjoy the admiration and recognition of classmates, peers, especially the opposite sex.

Regarding behavior and discipline, students in single-sex exhibit study habits and diligence, punctuality in submitting class requirements and projects, and tend to be grade-conscious but work collaboratively with classmates. Teachers could easily adjust to students' learning pace and speed, and providing activities attuned to interest like open discussion about gender-sensitive topics. Parents mentioned a tailor-fit curriculum addressing gender-specific needs, "boys taught as boys prefer, girls taught in light of strategies that work better for females, provide individual mentoring."

In mixed-sex classrooms, learning happened well when students collaborate with the opposite sex, as students mentioned they draw inspiration from the admiration and acceptance of peers, the opposite sex, "the opposite sex impact." Teachers shared that the students enjoy healthy competition, but discipline was a bit challenging with boys-girls attracting attention and teasing among students that disrupted lessons and discussions. "boys-girls chit-chat flirting, non-

verbal attracting attentions, winking, pouting, lousy sitting boys." Classroom sitting arrangement alleviate the problems of too much physical closeness that disrupts learning. Parents support disciplinary measures in mixed-sex.

Focus on academics, less distraction to learning are evident in single-sex classrooms (Miliband, 2004; Spielhofer, Benton and Schagen, 2004; Flowers, 2005; Nidoy, 2011; Eisenkopf et al, 2015) and girls-boys competition in mixed-sex but enhancing presence of each other (Jackson and Bisset, 2005; advantages of coeducation, https://cathedral-school.co.uk/coeducation.html). The conservative culture of private schooling in the Philippines is evident in single-sex and mixed-sex where students in exclusive schools especially the all-girls uphold the Filipina lady-like identity, while finesse of girl-boy attention-seeking in mixed-sex. This is also reflected in the socialization experiences and the formation for social awareness and responsibility.

Social awareness, responsibility, and socialization experience

Single-sex and mixed-sex private schools are strong in instilling social awareness and responsibility, supporting classroom discussions on environment, social and political issues while maintaining conservative stand regarding the Philippines reproductive health bill that encourage the use of artificial birth control measures. Joining peoples' initiatives and cause-oriented civic activities, learning responsible leadership in school organizations like the student council, and outreach programs to marginalized/disadvantaged communities are other activities that aim to raise awareness and promote responsible citizenship. Students mentioned organizing fund-raising activities for the informal settlers, academic assistance like tutorials for children and adults, and sharing material blessings to poor people. Creative school provides holistic environment with space for active engagement and encourage child participation (Ucus and Acar, 2019), opportunities for community immersion to gain a different point of view, to understand their own life, the social environment, and to contemplate on public affairs issues (Loyola, 2012; Shih, Hsu and Ye, 2018).

Single-sex schools for girls promote women empowerment, forming women leaders even among young graders' "munting barangay" a student council for elementary students. Instilling interconnectedness is evident as the school community welcome the "Aetas", the tribal Filipinos not only for gift-giving but sharing of songs and dances during school programs. Students in higher grade levels are involved in lay apostolate programs to local communities, the orphanages, community mission centers, and catechism and faith-sharing experience with people of the same religious affiliation upon parents' consent. Students in mixed-sex reported fulfilling experience of interacting and providing material and educational assistance to marginalized communities and increase awareness of sex differences, rights, and limitations. Teachers and administrators mentioned that boys and girls, interaction with the local communities is reflective of life realities.

Participants shared rewarding socialization experiences in single-sex and mixed-sex schools' yearly activities such as the family day according to grade level where parents and children bond together with fun, games and programs, and annual intramurals that showcase talents in sports, cheer dancing, and singing. Single-sex exclusive for girls introduced the parents-children bonding where father and daughter in dance duo. Parents mentioned that girls' socialization with the opposite sex happen on weekends with relatives and friends and occasional parties. Students shared stronger bonds and friendship in single-sex as "quite easy finding similar interests that could talk over, not intimidated and awkward sharing weirdness and naivete". On the other hand, participants mentioned that students in mixed-sex learned to interact and handle emotions in the presence of the opposite sex, including the LGBT+ as

considered particularly important for student's future adjustment in college and their chosen profession.

Holistic education focuses on the development of the learner's whole person's body, mind, spirit, the cognitive and affective levels, promoting social activity, and fostering interrelationship and interdependence (Yang, 2004; Hare, 2006; Mahmoudi et al, 2012; Miller and Four Arrows, 2013; Flores, Walters and Kiekel, 2018; Widodo, 2019; Miller, no date). These are reflective of the private sectarian schools in the study that aim for the formation of the total person including the strength of character and values formation.

Strength of character, proper decorum, living out values/morals

Strength of character and proper decorum includes living out the Christian values, the "golden rule", upholding the school's integrity, steadfast in speech and action, and exhibiting self-respect that trickles down to respecting others regardless of social class and status. Hallmark of values includes simple living, humble/joyful service, honesty, compassion, sensitivity, gratefulness, stewardship, and care for mother earth such as the "clean-green projects, recycling materials, prohibiting the use of plastics within the school premises. Single-sex schools emphasized responsible public social behavior, prim and proper, learning social grace, in all-girl schools forming "truly girls in values", "women of character", and in all-boy schools training "real gentlemen" in public/social gatherings. Parents added, "environment exudes proper behavior, manner of speaking, ways of acting, and close-monitoring students' behavior, and the learning of social grace. Murphy (2008) mentioned that moral character education is more effective in a single-sec environment. However, teachers and administrators in mixed-sex schools mentioned that close physical interaction between boys and girls helped them learn selfcontrol, self-discipline, and awareness of gender rights and differences. Students tend to act on what they believe is morally upright and observe right conduct inside and outside school premises.

Spiritual, and religious formation

Students learn and live out moral values as integrated in all subjects besides the Christian living education subjects. Spiritual and religious formation includes community prayers, monthly and occasional eucharistic celebrations to honor saints, retreats and recollections, and prayer meetings as expressions of faith in God. Single-sex schools contributed to nurturing religious vocations with their focus on the examination of conscience and reflecting on the question, "what have I done to God and to my neighbors", growing in faith, learning from the lives of saints, and appreciating events in the light of God's grace and presence. Parents added, "it is important that our children know in their hearts that there is a God. there will always be a God, how important prayer is in daily lives to guide actions and decisions. Similarly, students in mixed-sex expressed appreciation of prayers, and faith in God guiding actions and behaviors. However, teachers mentioned that discipline was a problem in mixed-sex during religious activities thus it was deemed necessary separating girls and boys to encourage focus, silence, and concentration during the activities. Spiritual formation is considered important in holistic formation (Singh, 1996: 227, cited in Hare, 2006). The Adlerian perspective on the tasks of life address intimate love relationships not only with fellow beings in society but with God or the universe (Manaster & Corsini, 1982; Mosak, 1979, cited in Watts, no date, https://books.google.com.ph).

Coping with school-related problems

School-related problems were considered detrimental to holistic formation. These include physical and social bullying that affect physical, mental health, academic and extra-curricular

performance. Social bullying in single-sex schools were reported as close-knit peer "barkada" and peer group alienation, conflicts, and rejection. In mixed-sex schools, physical and social bullying resulted from the bravado competition among boys to attract girls' attention, and girls' conflicts and competition for boys' attention. Other problems were homosexual/same-sex relationship in single-sex and teenage sexual relationship and early pregnancy in mixed-sex that contributed to school dropouts. Both single-sex and mixed-sex schools' wellness centers provide interventions that include individual and group counseling, therapy sessions, parent-student encounter and conferences, student-teacher consultations, and homeroom guidance program to help students express their concerns and problems. The concerted effort and support of school administrators, teachers, and parents to various interventions alleviated if not totally solved the problems.

Stakeholders mentioned that with the ardent desire of the schools to promote and strengthen holistic formation for the 21st century learners, included among the important quality assurance agenda is revisiting the vision-mission and thrust of the schools for their relevance and responsiveness to UN sustainable goals for quality education and lifelong learning.

Holistic formation impact on 21st century schooling

Single-sex and mixed-sex schools that participated in the study envision an agency of change providing formation that address the unique needs of the 21st century learners. The learners are considered critical thinkers, problem solvers, creative innovators, collaborators, technologically shrewd, and globally connected (Characteristics of 21st century learners, 2019, https://blog.kamiapp.com; https://learner21stcentury.wordpress.com). Interviews with the school administrators and teachers during the on-site school visitations mentioned the schools' activities from formal academic skills 'enhancement to non-formal and informal learning through interaction with the local communities, cultural and intercultural awareness in response to the UN sustainable development goals (https://www.un.org/envision2030.html) along the areas of quality education and life-long learning. The clean-green campaign, prohibiting the use of plastic containers and eating utensils within the school premises, and waste segregation, joining peoples' initiatives addressing environmental and political issues aim to raise awareness among students on the issue of climate change. Teachers and students are given the opportunities to join local and international competitions from academics to various forms of arts for values formation not only the joy of winning. Students' collaborative science projects such as experimenting on reusable materials, medicinal plants, and other related researches are not only intended for interschools' competition but to help local communities, sharing information and resources with the marginalized and disadvantaged communities including the tribal people. Providing high internet connectivity and promoting participatory and engaging classroom cater to the needs of the 21st century learners, the onliners, and facilitate 21st century skills development.

Holistic school visions locally-rooted, globally competent, and life-long learners (Nurturing 21st century students holistically, 2017, https://digitallearning.eletsonline.com). Students' exposure to diverse cultural information and experiences, cultural exchange and interactions, developing individual learners' cross-cultural competencies are among the strategies to facilitate lifelong learning that should appeal to the totality of a person--heart, body, and brain--and more importantly, to existential values and emotions, and aim to promote the art of human maturity, which is a prerequisite for becoming a good citizen who is actively involved in local, national, and international issues and problems (Medel-Anonuevo, Ohsako and Mauch, 2001).

School stakeholders mentioned that despite decreasing enrollment, five percent on the average in the past 10 years, the schools survive with the continuing assistance of benefactors and graduate alumni to augment and sustain the scholarship programs to keep the talented and gifted students but financially-challenged. The continuing technology advances and the multiple influences of social media on learning and instruction posed challenge to the schools' moral and spiritual formation as students were trying to make sense of their school experiences in conjunction with the vast array of information just tick away on mobile phones and internet access. This also impact parents', teachers' and administrators schooling advocacies and priorities. Graduates alumni supportive of the tradition, and vision-mission of their alma mater also expressed concerns regarding the skills development of the 21st century learners. These concerns raise issue whether to adhere to same-sex or mixed-sex classroom. The study suggests that regardless of school type, moral and spiritual values are important to thrive and progress in today's goal of education for sustainability.

Conclusion

Findings highlight themes of holistic formation associated to unique stakeholders' experiences in single-sex and mixed-sex private schools. Overall adequacy of information was confirmed through member-checking with the participants from whom the data were collected for clarificatory information, analytic interpretations, and conclusions. Presentation of software-generated wordclouds to the participants facilitated in-depth explanation and meaning of frequently occurring words that were reiterated, given emphasis relating to experiences, and contributed to the finalization of themes.

- (1) Holistic formation and training in single-sex and mixed-sex are reflected in the school's vision-mission incorporating hallmark of values guiding formation of well-rounded persons in character, morals, and spiritual. Promoting academic excellence and behavior, instilling social awareness and responsibility, inculcating Christian values and responsible character, moral and spiritual formation are themes of holistic formation mechanisms.
- (2) Pursuit for academic excellence in single-sex and mixed-sex is evident in winning inter school competitions and school's recognition. Academic behavior and classroom discipline were considered important in achieving academic excellence. Students in single-sex schools exhibit diligence and good study habits, and teachers could discuss freely gender-sensitive topics that interest students. Classroom discipline in mixed-sex schools pose challenge to teachers but tempered through disciplinary measures with the concerted effort of administrators, teachers, and parents.
- (3) Activities in single-sex and mixed-sex schools are anchored on the vision-mission and thrust of the schools focusing on social awareness, responsibility, local and global environment issues, and concerns. Values integration and social issues in classroom discussions raise student's awareness and ignite passion for service and action. School programs and activities, actual community experience inside and outside school, community involvement, immersion, and outreach programs to marginalized sectors in the community instill among students their significant role in society. Remarkable difference between single-sex and mixed-sex lies on self-fulfillment and social maturation. Participants claim better social maturation among students in mixed-sex when boys and girls together in community involvement and activities. Single-sex schooling stress particularly all-girl schools on forming women leaders from elementary

- to high school with the desire to make a difference in society through lay apostolate program in the orphanages and other mission shelters.
- (4) Socialization experiences promote stronger bonds and friendship in single-sex as students find it easier expressing thoughts and emotions, sharing similar interests, and learning social grace and responsible behavior. In mixed-sex, students learn gender equality, rights, privileges, and to handle emotions with the opposite sex including the LGBT+.
- (5) Strength of character, good manners and proper decorum, and living out hallmark of Christian values like simplicity, humility, honesty, respect, compassion, joyful service, gratefulness, and care for mother earth are vital attributes of holistically formed individual and are considered important to thrive in the 21st century learning environment. Students in mixed-sex learn self-discipline, self-control, and sex awareness when dealing with the opposite sex. Single-sex emphasizes among students the responsible social behavior, social grace, prim and proper behavior in public social gatherings.
- (6) Single-sex and mixed-sex schools emphasized the importance of morals guiding behaviors through reflections and faith in God, and the integration of moral values in school's curriculum, in Christian living education subjects, and spiritual activities such as community prayers, monthly and occasional eucharistic celebrations, retreats and recollections. Single-sex schools inspired religious vocations among students with the practice of deep constant prayers, examination of conscience, and reflective thinking to guide thoughts and actions. Discipline during religious activities and community prayers posed great challenge in mixed-sex schools.
- (7) School-related problems are considered impediments to holistic formation. Single-sex and mixed-sex schools designed and implemented intervention programs to address problems like physical and social bullying, homosexual relationship in single-sex, and teenage sexual relationship, and early pregnancy in mixed-sex. The concerted effort of school administrators, teachers, and parents, alleviate if not totally solve the problems.

Findings suggest that holistic formation in single-sex and mixed-sex private schools aim to address the demands of the 21st century schooling and design and implement programs in response to the UN sustainable development goals of providing quality education and promoting life-long learning. Burgeoning technologies, social media, and 21st century schooling needs and concerns influence and impact the chain of tradition regarding adherence to single-sex and mixed-sex education. Preserving and upholding the teaching of morals and spiritual formation amidst the fast-paced technological advances and multiple influences surrounding 21st century learners are considered imminent challenge to private sectarian single-sex and mixed-sex schooling.

Findings have important implications on the dynamic and evolving holistic formation in the 21st century private sectarian-religious schooling. This study provides evidence for future endeavors along the area of schooling that would address the need for wholeness in the next centuries with fascinating challenges, what is needed, what should be prioritized, and what should be set aside or perhaps sacrificed while preserving school culture moral and spiritual tradition.

Note:

The author experienced coeducational elementary schooling and exclusive for girls secondary schooling. Her ongoing research interest in 21st century schooling focus on the experiences of online learners and teachers in single-sex and mixed-sex considering blended and entirely online classrooms in the Philippines.

References

Advantages of coeducation. [Online]. Available at: https://cathedral-school.co.uk/coeducation.html (Accessed: 11 December 2019).

Birks, M. and Mills, J. (2015) *Grounded Theory: A Practical Guide*. 2nd edn. Thousand Oaks, California: SAGE Publications, Inc.

Blair, E. (2013) Single-sex schooling in Trinidad and Tobago: *A Holistic Exploration, Pastoral Care In Education* [Online]. Available at:

https://www.researchgate.net/publication/236417486_Single-

Sex_Schooling_In_Trinidad_And_Tobago_A_Holistic_Exploration (Accessed: 12 June 2020)

Characteristics of 21st century learners, (2019) [Online]. Available at: https://blog.kamiapp.com (Accessed: 21 June 2020)

Characteristics of 21st century learners, (no date) [Online]. Available at: https://learner21stcentury.wordpress.com (Accessed: 21 June 2020)

Coed Classrooms Versus Single-Sex Classrooms, (no date) *The Great Debate Over Whether Boys and Girls Thrive Together or Separately* [Online]. Available at: https://www.ourkids.net/school/together-or-apart (Accessed: 14 June 2019)

Corbin, J. and Strauss, A. (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Los Angeles: Sage Publications, Inc.

Daly, P. and Deffy, N. (2004) Extension of Single-Sex Public School Provision: Evidential Concerns, *Evaluation and Research in Education*, Vol. 18, No. 162 [Online]. Available at: https://files.eric.ed.gov/fulltext/ED558549.Pdf (Accessed: 3 March 2019)

Eisenkopf, G., Hessami, Z., Fischbacher, U., and Ursprung, H. (2015) Academic Performance and Single-Sex Schooling: Evidence From A Natural Experiment In Switzerland, *Journal of Economic Behavior and Organization*, Vol 115, pp 123-143 [Online]. Available at: https://doi.org/10.1016/J.Jebo.2014.08.004 (Accessed: 7 July 2019)

Flores, S., Walters, N., Kiekel, J. (2018) Academic Instruction at a Distance: An Examination of Holistic Teacher Perceptions in a Virtual High School, *Online Journal of Distance Learning Administration*, Vol 21 No. 1 Spr 2018 [Online]. Available at: https://eric.ed.gov/?id=EJ1173431 (Accessed: 1 June 2020)

Flowers, C. (2005) "With no boys to ogle, we had time to learn". *Newsweek*, Vol. 146, Issue 17, pp. 26 [Online]. Available at: EBSCO Host Research Databases (Accessed: 12 September 2006)

Grossenbacher, P. G. and Parkin, S. S. (2006) 'Joining Hearts and Minds: A Contemplative Approach to Holistic Education in Psychology', *Journal of College and Character*, Vol. VII, No. 6 [Online]. Available at: https://www.tandfonline.com/doi/pdf/10.2202/1940-1639.1203 (Accessed: 1 June 2020)

Guest, M. (2014) 'The Single-Sex Versus Coeducation Debate and the Experience of Schools That Change Status', 2014 Research Project, *The Amidale School* [Online]. Available at: https://www.as.edu.au/content/uploads/2015/02/Final-Coeducation_Research_Paper_Feb_2015.Pdf (Accessed: 16 March 2020)

Hare, J, (2006) 'Towards an understanding of holistic education in the middle years of education', *Journal of Research in International Education*, Vol. 5(3), No. 2 [Online]. Available at: www.sagepublications.com, doi:10.1177/ 1475240906069453 (Accessed: 1 May 2020)

Herr, K. and Arms, E. (2004), "Accountability and Single-Sex Schooling: A Collision of Reform Agendas", *American Educational Research Journal*, Vol. 41, No. 3, pp. 527-555 [Online]. Available at: https://www.Jstor.Org/Stable/3699438?Item_View=Read_Online (Accessed: 1 June 2020)

Jackson, C. and Bisset, M. (2005) 'Gender and School Choice: Factors Influencing Parents When Choosing Single-Sex or Co-Educational Independent Schools for Their Children', *Cambridge Journal Education*, Vol 35, No. 2, pp. 195 – 211 [Online]. Available at: https://www.researchgate.net/ (Accessed 1 June 2020)

Loyola, C. (2012) 'Learning Through A Holistic Formation' [Online]. Available at: https://Chenloyola.Wordpress.Com (Accessed: May 2020)

Mahmoudi, S, Jafari, E, Nasrabadi, H. A., Liaghatdar, M. J. (2012) 'Holistic Education: An Approach for 21 Century', *International Education Studies*, Vol.5, No.2 April 2012 [Online]. Available at: URL: http://dx.doi.org/10.5539/ies.V5n3p178 (Accessed: 1 June 2020)

Medel-Anonuevo, C., Ohsako, T., Mauch, W. (2001) Revisiting lifelong learning for the 21st century: *United Nations Educational, Scientific, and Cultural Organization, Hamburg (Germany). Inst. for Education* [Online]. http://www.unesco.org/education/uie/pdf/revisitingLLL.pdf. [Online]. Available at: https://eric.ed.gov/?id=ED469790 (Accessed: 1 June 2020)

Miliband, D. (2004) 'Lock Up Your Daughters', *EBSCOHOST Research Database* [Online]. Available at: http://search.epnet.com. (Accessed: August 2006)

Miller, J. (no date) 'Holistic Education: Learning for an Interconnected World', *Education for Sustainability*, University of Toronto, Canada [Online]. Available at: https://www.eolss.net/sample-chapters/C11/E6-61-04-01.Pdf (Accessed: 26 June 2020)

Miller, J. And Four Arrows (2013) 'Dialogue on Holistic Education', *Encounter: Education for Meaning and Social Justice*, Vol. 25, No. 3 (Spring 2012) [Online]. Available at: https://www.researchgate.net/publication/288183547 (Accessed: 1 June 2020)

Murphy, M. (2008) 'Moral Development in Single-sex Schools: A Review of the Research', *Paper presented at the Association for Moral Education*, 34th Annual Conference, November 14, 2008, University of Notre Dame [Online]. Available at: https://files.eric.ed.gov/fulltext/ED558549.pdf (Accessed: 29 June 2020)

Nidoy, R. (2011) 'Advantages of Single-Sex Schooling: Explanation of Teachers Who Taught in Both Coed and Single-Sex Schools', Parents for Education Foundation, Third International Congress on Single-Sex Schools, European Association for Single-Sex Education (EASSE), (Shared via email, 2011)

Nurturing 21st century students holistically, (2017) [Online]. Available at: https://digitallearning.eletsonline.com (Accessed: 1 June 2020)

Pahlke, E., Hyde, J. S., and Allison, C. M. (2014) 'The Effects of Single-Sex compared with Coeducational Schooling on Students' Performance and Attitudes: A Meta-Analysis, *Psychological Bulletin c 2014 American Psychological Association*, Vol. 140, No. 4, 1042 – 1072, 0033-2909/14/\$12.00 DOI: 10.1037/a0035740

Philippine Statistics Authority Reports, (2018) [Online]. Available at: http://openstat.psa.gov.ph (Accessed: January 2018)

Shih, Y-H, Hsu, J-P, and Ye, Y-H, (2018) 'The Intention Of General Education In Taiwan's Universities: To Cultivate The Holistic Person', *Journal of Education and Learning*, Vol. 7, No. 2 [Online]. Available at: http://www.ccsenet.org/journal/index.php/jel/article/view/73502 (Accessed: 1 June 2020)

Single-sex Education [Online]. Available at: www.en.wikipedia.org/wiki/single-sex_education (Accessed: 6 May 2020)

Spielhofer, T., Benton, T., and Schagen, S. (2004) 'A Study of the Effects of School Size and Single-Sex Education in English Schools', *Research Papers in Education*, Vol 19, No. 2. 133 – 159 [Online]. DOI: 10.1080/02671520410001695407 Available at: https://www.researchgate.net/publication/248995111 A Study of the Effects of School Size and Single-Sex Education in English Schools (Accessed: 1 June 2020)

Study International [Online]. Available at: https://www.studyinternational.com>hen, <a href="https://www.studyinternational.com>hen, https://www.studyinternational.com>hen, <a href="htt

Tyre, P. (2005) 'Boy Brains, Girl Brains', *Newsweek*, Vol. 146, Issue 12, P. 59 [Online]. Available at: EBSCO Host Research Databases. Conference Proceedings: NASSPE's Sixth International Conference Las Vegas, Nevada, 2010, http://hww.singlesexschools.org/evidence.html, (Accessed: 12 September 2006)

Ucus, S., Acar, I. H. (2019) 'Exploring the Perceptions of Student Teachers about 'Creative School' in Early Childhood Education', *Early Child Development and Care*, V189 N2 P191-206 2019 [Online]. Available at: https://www.researchgate.net/publication/315742960 (Accessed: 1 June 2020)

United Nations Sustainable Development Goals, [Online]. Available at: https://www.un.org/envision2030.html (Accessed: June 2020)

Watts, R. E. (no date) 'The Vision of Adler: An Introduction', [Online]. Available at: https://Books.Google.Com.Ph (Accessed: 1 June 2020)

Widodo, H, (2019) 'The Role of School Culture in Holistic Education Development in Muhammadiyah Elementary School Sleman Yogyakarta', *DINAMIKA ILMU*, Vol. 19, No. 2 [Online]. Doi: http://Doi.Org/10.21093/Di.V19il.1742, (Accessed: 1 June 2020)

Yang, B, (2004) 'Holistic Learning Theory and HRD', Advances in Developing Human Resources, Vol.6, No.2 [Online]. May 2004 241-262 DOI:10.1177/1523422304263431 Copyright 2004 Sage Publications. Available at:

https://Journals.Sagepub.Com/Doi/Pdf/10.1177/1523422304263431?Casa_Token=Z0zjtbk6vfua aaaa:Yucwbbhhec9o0ai1z5rnxlegee7uukfpbc4p1biugvxsrfupurmoycrwkcvxtaxrbec4obdg14apaq (Accessed: 1 June 2020)

