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STUDENT-CENTERED LEARNING IN GENERAL EDUCATION IN A PRIVATE UNIVERSITY IN MANILA: AN ANALYSIS

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Abstract

Transitioning from the traditional pedagogical norm to student-centered learning (SCL) is crucial to achieve the desired outcome. This is to produce graduates equipped with soft skills ready to face the life and global challenges of the 21st century. This study provided the first tranche of evidence how the desired outcomes have been realized by the general education students through SCL. Opportunely, SCL was deemed to be harbinger of fundamental skills like collaboration, critical thinking, creativity, cognitive and self-directed learning, communication and digital literacy. In the light of positive results, SCL implementation has not reached its fullest efficiency more particularly in the environmental component to reap the best outcomes. Positive relationship findings between environmental, cognitive and behavioral component will provide avenue to hoist standard of SCL implementation. Hence, continuous exploration of other partakers, monitoring and quality improvement is recommended.

Keywords: Student-centered Learning, General Education, Private University, Manila, Behavioral, Intellectual, Environmental.

Introduction

Academic institutions have been introducing reforms to enable education to promote student learning. A shift in paradigm from teaching to learning has apparently taken place where the learner is supposedly central in the educational process. This is based on the principle that learning or cognition emanates from "mental construction" [1]. The learner fits what has gained in classroom engagements with what they know. It is suggested that students build knowledge and meaning from the opportunities given to apply and practice what they learn.

This paradigm shift is prescribed by the Commission of Higher Education (CHED) and the university in Manila implemented an initiative in response to it. This is the program on Digital Literacy, Effective Communication, and Critical Thinking (DLECCT). The DLECCT program is a student-centered approach of teaching and learning. The learning environment of students is envisioned to be with education technology- enabled digital resources and partnered with educational strategies that will promote the development of skills in communication and critical thinking skills among the students [2].

However, these aspirations may not be realized if the shift to learning paradigm is not completely understood and implemented. Student-centered learning (SCL) apparently means many different things to different persons. Academician may believe they are using the learner-centered approach but, most are not doing SCL [3]. The process of moving to SCL has been described to be difficult by many institutions. Adult learners may even resist because of the unfamiliarity and adjustment needed [4]. This approach was found to be frightening and difficult [5],[6]. Teachers may even fall back to old practices [7]. Other study also emphasized the need to identify and discuss issues relative to SCL [8].

The thoughts and feelings of students towards SCL need to be determined. This is the reason for this research undertaking. This study aims to assess the SCL implementation among general education students in a private university in Manila.

Method

Research Design

A correlational descriptive quantitative study was utilized by the researchers collecting assessment data on the implementation of SCL in general education courses. First, the study described the assessment of student-centered learning

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implementation in general education specifically on three components of SCL namely (a) behavioral which includes self-directed learning, communication skills and collaboration; (b) intellectual which covers critical thinking skills, digital literacy, cognitive skills and creativity; and (c) environmental component which includes classroom climate and physical environment. Second, assessment of SCL implementation as described per discipline. Lastly, relationship among components of SCL was determined.

Population and Sampling

For this study, the eligibility criteria of the respondents were as follows (a) full-time first-year college students, (b) undergone student centered-learning pedagogy, (c) currently enrolled, (d) willing to participate. The student population per discipline was provided by the Registrar's Office to determine a total number of respondents per discipline. The researchers made use of sampling size table to determine the representativeness of the population with a 95% confidence level and a 3.5 margin of error. Out of 6679 student population, 710 was the computed sample size, however, an additional 10% summing up to 768 to ensure more credibility.

Research Instrument and Validation

A two-part instrument was used in the conduct of this study. The first part focused on the demographic profile which includes the age, sex, strand, teaching pedagogy, religion and discipline. The second part is a 50-item 4-point Likert scale self-administered researcher made questionnaire focusing on the context of: (a) behavioral, (b) intellectual and (c) environmental component. The instrument was validated by three academic experts, yielding to a Cronbach alpha 0.94. Informed consent was solicited, and strict compliance data privacy was observed during data gathering.

Results

Findings from the data gathered shows that majority of the respondents were Arts and Science courses, 19 years of age, female, of Catholic background, belonging to Academic Strand of K-12 curriculum and product of teacher-centered learning as the method of pedagogy during high school.

The study finding shows that general education students in a private university in Manila agree that the implementation of SCL approaches deemed as catalyst of their creativity ($\bar{x}$=3.21); cognitive skill ($\bar{x}$=2.82); and self-directed learning skills ($\bar{x}$=3.13). Additionally, they agree that SCL classroom climate ($\bar{x}$ =2.86) and the physical environment ($\bar{x}$=2.70) supports implementation of SCL. Moreover, general education students strongly agree that the SCL implementation is promotive of developing collaboration ($\bar{x}$=3.25); critical thinking skills ($\bar{x}$=3.25); communication skills ($\bar{x}$=3.29); and digital literacy ($\bar{x}$=3.41). They also agree that the behavioral component ($\bar{x}$=3.23) and intellectual component ($\bar{x}$=3.17) of classroom management are consistent with the principles of student-centered learning. Likewise, they view the environmental component ($\bar{x}$=2.78) as conforming to effectively implement multiple teaching techniques in SCL.

Table 1: Assessment of SCL by General Education Students per Discipline

Component	IABF	IARFA	IAS	IE	IN	ITHM*	Overall	Interpretation
A. Behavioral	3.23	3.22	3.17	3.13	3.33	3.27	3.23**	A
Collaboration	3.26	3.25	3.22	3.23	3.31	3.24	3.25	SA
Communication	3.27	3.31	3.22	3.09	3.45	3.37	3.29	SA
Self-Directed								A
Learning	3.10	3.08	3.08	3.06	3.23	3.20	3.13	
b. Intellectual	3.12	3.18	3.12	3.16	3.25	3.20	3.17**	A
Critical Thinking	3.19	3.26	3.22	3.18	3.37	3.29	3.25	SA
Creativity	3.16	3.25	3.13	3.16	3.32	3.24	3.21	A
Cognitive	2.80	2.69	2.71	2.92	2.90	2.89	2.82	A
Digital Literacy	3.33	3.52	3.41	3.38	3.41	3.38	3.41	SA
c. Environmental	2.73	2.81	2.70	2.87	2.78	2.80	2.78**	A
Physical	2.64	2.81	2.60	2.68	2.72	2.74	2.70	A
Classroom								A
Climate	2.81	2.82	2.80	3.06	2.84	2.85	2.86	
Overall	3.06	3.11	3.04	3.08	3.17	3.13	3.07	A*

*1.00-1.74 strongly disagree (SD); 1.75-2.49 disagree (D); 2.50-3.24 agree (A); 3.25-4.00 strongly agree (SA)
*Institute of Accountancy, Business and Finance, Institute of Architecture and Fine Arts, Institute of Arts and Sciences, Institute of Education, Institute of Nursing, Institute of Tourism, Hotel Management.
** subtotal mean score of SCL component

Furthermore, based on table 1, almost all general education students agree that the behavioral component in classroom management is conforming with principles of student-centered learning except for ITHM ($\bar{x}$=3.27) and nursing students ($\bar{x}$=3.33) who gave higher conformance. Similarly, nursing students gave higher conformance rating to intellectual component of SCL. While the rest of general education students just agree that the intellectual component in classroom management is conforming with principles of student-centered. In unison, general education student assessed that environmental component conforms to effectively implement multiple teaching techniques in SCL. In totality, general education students across all courses agree ($\bar{x}$=3.07) that the implementation of SCL in a private university in Manila, conforms with principles and strategies of SCL.

Table 2: Correlation Matrix of Behavior, Cognitive, Environment Component of SCL

Variables	Correlation	Interpretation	p-value	Decision
Behavioral vs. Intellectual	0.68	Moderate relationship	0.01	Reject Ho
Behavioral vs. Environmental	0.37	Weak relationship	0.01	Reject Ho
Intellectual vs. Environmental	0.40	Weak relationship	0.01	Reject Ho

Table 2 shows the Spearman Rank correlation matrix among the three variables specifically behavioral, intellectual and environmental. Data reveals a significant moderate correlation between behavioral and intellectual (p=0.01), behavioral and environmental (p=0.01), and lastly intellectual and environmental with likewise a p-value score of 0.01.

Discussion

Collaboration Skills in SCL

Collaborative learning highlights students' self-governance of their interactions, allowing them to make decisions about with whom they work, and how. The findings show that general education students in a private university in Manila agree that the implementation of SCL approaches deemed as catalyst of collaboration ($\bar{x}$=3.24) amongst them. Based on the implementation of Student-Centered Learning, general education students were encouraged to work hand in hand with their teachers and peers as part of the instructional method. Giving up absolute control and developing healthy relationships with learners is one way to move a classroom into a student-centered environment [9]. Teachers participate as facilitators/mentors by guiding the students through critical thinking questions and scenarios.

Moreover, the facilitators ensure that all students demonstrate cooperating and supporting attitude within group activity [10]. Also, through SCL, students are encouraged to collaborate with other students from another institution will greatly expands the walls of modern classrooms in exciting new ways [11]. As students exchange relationships with each other, they must articulate their ideas, and engage in a disciplined social process of inquiry; these activities are in keeping with constructivist principles and the goals of student-centered learning.

Critical Thinking Skills in SCL

Critical thinking skills is a very important soft skill that school must develop among their students to enable them to thrive and triumph life and global challenges. Several studies acknowledge improvement of students' critical thinking skills through the application of student-centered learning model [12]. Congruently, general education students agree that the implementation of SCL in a private university in Manila enhances their critical thinking skills ($\bar{x}$=3.24). Through SCL, they are thought how to be reflective in terms of how they think and enhances their curiosity. Moreover, they find SCL to be helpful for them to grow as a deep-thinking person through series of problem-solving activities, case analyses, researches, debates, film reviews and more. Overall, the activities undertaken confirmed student's expectations that the implementation of student-centered learning in general education clearly helped increase their critical thinking.

Creative Skills in SCL

Studies alleged that creative thinking is maximized through student-centered learning [13]. Similarly, based on study findings, agreement ($\bar{x}$=3.18) with all the statements on how creativity is fostered among general education student centered learning was found. They claimed that they became more

inventive/imaginative through SCL strategies like short film projects, art appreciation, various science projects, role playing, etc. Development of creativity among students may also be attributable they are enrolled in an institution recognized as one of the most innovative universities worldwide, joining Harvard University, Stanford University and the Massachusetts Institute of Technology in the list [14]. The school's flexible and innovative Learning Journey framework, which provides a more holistic environment creates new ways to engage students and to incorporate highly contemporary technological resources, with trained faculty capable to manipulate new applications of educational technologies.

Cognitive Skills in SCL

In student-centered learning approach, the students are expected to take responsibility for goal attainment and resource selection, thereby increasing the cognitive skills associated with learning [15]. Correspondingly, the general education students agree ($\bar{x}$=2.78) that SCL implementation has been supportive of enhancing their cognitive skill. They claim that they better understood their lesson and academically performed through SCL approach. They use of web-based multimedia (e-learning), reading and analyzing various article materials, problem-solving scenarios and debates which have notable reviews of literature deeming advantageous at activating the higher-order cognitive processes.

Self-directed Learning Skills in SCL

The 21st century world needs citizens who can act and think independently [16]. Several research studies recognize student-centered approach gives students opportunities to improve their self-directed learning skills. Self-directed learning skills allows free selecting of sources, topics, time, space and time management. Almost half of Saudi medical students find self-directed as a helpful too and subsequently suggested the inclusion of Self-Directed Learning per module [17].

Congruently, the general education students in a private university in Manila agree ($\bar{x}$=3.12) that SCL implementation has been supportive of scaffolding their self-directed learning skills. While the faculty do not ultimately hand full control of student's learning, they ensure students are responsible for making the choices that help create our own paths. The more practice of self-evaluation, peer evaluation, engaged group discussions like Round-Robin activities, etc., allow students to make some decisions in what they learn, and how they learn it, may well be one of the most effective ways of getting the most from higher education.

Communication Skills in SCL

Communication is an important component to make to facilitate classroom learning. Student-Centered Learning it is characterized by innovative methods of teaching which aim to promote learning in communication among students [18]. Likewise, the general education students strongly agree that the SCL implementation in a private university in Manila is promotive of developing communication skills ($\bar{x}$=3.28). Students claimed that SCL improved their communication skills and deepen their understanding of content when they are asked to collaborate and share with a group of their peers. Their faculty require each student to contribute to their group and receive information from each other. Through sharing of experiences and questioning, general students explore and validate information. They are also encouraged to impromptu speech, do the oral presentation of their group output in class and write reflexive essays out of the provided reading materials.

Furthermore, drawing from each other's expertise during group discussion and collaboration can cultivate effective communication skills. These types of activities are commonly observable in SCL and expected to prepare students for the ever more complex life and work environments in the 21st century [19].

Digital Literacy in SCL

Back in the late 90's, digital literacy was simply the ability to comprehend and utilize this information in wide range of technological formats like words, texts, visual displays, motion graphics, audio, video, and multimodal forms when it is presented via computers. While, twentieth century definition of digital literacy involves immersing students to navigate robust digital contents, create new ideas and communicate contents utilizing various digital media forms [20].

Although some study suggests that the relationship of digital literacy and student-centered learning is non-conclusive [21], this study revealed that the respondents strongly agree that all items pertaining to the use of CANVAS Learning Management System, computer, internet, computer software programs and the use of technology as being practiced in an SCL classroom. Hence, general education students strongly agree that the SCL implementation is promotive of developing digital literacy ($\bar{x}$=3.28) that is vital skill to student learning and their future participation within the twenty-first-century world.

Classroom Climate in SCL

In SCL classroom climate, the instructor should design ways to uncover the knowledge, skills,

interests, attitudes, and beliefs of every learner. Students in an SCL classroom must be able communicate freely among them, present argument and engage co-learners in the deepening of knowledge [12]. Although study finding revealed that general education students agree that the classroom climate is befitting for an SCL approach, weighted mean of 2.82 suggests more effort to converge the classroom climate of SCL. Training and re-training of SCL facilitators may be undertaken foster more opportunity for students to lead in the classroom, nurture engagement, growth and empowerment to take ownership of the learning experience.

Physical Environment in SCL

Seating arrangement in SCL is no longer "theatre type" or teacher in front and desks in neat rows. Free and creative classroom seating style maximizes collaboration and self-directed work which are appreciated by the students [9].

With the intention to be a student-centered university, the research locale invested in an 'Interactive Classroom'. It is a new learning space for students and faculty that provides equipment and gadget for the interaction and lectures discussion of students and faculty. It aims to make the students collaborated to everyone. With this kind of facility, students will be more engaged because you don't need to sit and listen to the teacher instead, they will start to interact with each other. This "state-of- the-art" kind of classroom is composed of different round tables equipped with both Wi-Fi and LAN connections for internet, LCD monitor, power socket, and various connectors for several kinds of gadgets, as part of their strategies to move towards student-centered learning university.

Even though, the physical environment seemed to be appreciated by the students as it is designed as conforming to effectively implement multiple teaching techniques in SCL, the weighted mean of 2.66 is suggestive to further improve the SCL facility. This may be attributed that only few rooms in the said university has been transformed into interactive classroom.

Relationship of SCL Components

Results show the dynamism of three interrelated factors on how each play an important role in honing the students learning process. The figures suggest that when one enhances the environmental component, an expected increase will likewise happen to both the behavioral and the intellectual component. The result supports the theory of Bandura proposing that the learning process of student are interwoven by three variables namely: environment, behavior and cognitive entity [23].

It is hope for future research, more schools with various achievements could be investigated in order to explore teachers' methods and approaches in teaching students critical thinking skills.

Conclusion

As the university veered away pedagogical norm, the first strains of emergence of SCL received positive notes from the general education students. SCL was deemed as catalyst of the 21st century soft skills like collaboration, critical thinking, creativity, cognitive and self-directed learning, communication and digital literacy. Although, they viewed the environmental component as conforming to SCL standards, general weighted mean 2.74 is suggestive of further improving the SCL facility by converting all teaching spaces into interactive classrooms and continuous training of SCL facilitators.

In the light of positive proceedings of SCL, the implementation has not reached its maximum efficiency to reap the full benefit of what student centeredness as a method do offer among its learner. Hence, continuous exploration of other partakers of SCL, monitoring and quality improvement is recommended.

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Competing Interest

The authors that they have no competing interests.

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