## Original Article

# Virtual Outcomes-Based Education (OBE) Fair in a Selected Local University: A Mixed Method Study

**Esmeraldo C. De Las Armas IV, Ed.D, RN**
**Institute of Nursing, University of Makati, Taguig City, Philippines, School of Nursing, Centro Escolar University, Manila, Philippines**

**Correspondence:** Esmeraldo C. De Las Armas IV, Institute of Nursing, University of Makati, Philippines, e-mail: esmeraldoiv.delasarmas@umak.edu.ph

**Abstract**
**Background:** Outcomes-Based Education begins with the end in mind, it aims to achieve stated planned objectives and outcomes of an educational program before students/learners leave the educational institution (Spady, 1994).
**Objective:** The study aims to assess the participants' overall experience of the OBE fair through prebriefing, simulation experience, debriefing, and program evaluation.
**Methodology:** This study utilized a concurrent mixed-method approach of qualitative and quantitative methods in gathering data. This study took place during the 17th week of 1st Semester and 2nd Semester, Academic Year 2020-2021. The survey tool was an adapted and modified simulation evaluation tool modified (SET-M) from CAE healthcare. Data was gathered through an online data gathering tool during the OBE fair of the College.
**Findings:** The result of the study suggests an improvement on all of the domains assessed, from 1st semester of OBE Fair implementation to the 2nd semester OBE Fair implementation. The qualitative data reveals three themes such as: looking at the critical conditions, embodying real-life situations, and connecting virtually; And one interlacing theme: Augmenting Clinical Competencies with Technology.
**Conclusions:** Simulation is viewed as an effective way of providing relevant education, regardless of the participants' OBE grades, issues in their connectivity, and preparation during the two OBE fairs. The utilization of simulation during the Outcomes-Based Education Fair had been improved based on the gathered data. It is recommended to further investigate the effects of simulation activity and its effect on the learning outcomes, to help efficiently achieve the planned goal.

**Key Words:** *Nursing Education, Outcomes-Based Education, Simulation Study*

## Introduction

Outcomes-Based Education begins with the end in mind, it aims to achieve stated planned objectives and outcomes of an educational program before students/learners leave the educational institution (Spady, 1994). The Outcomes-Based Education (OBE) fair or OBE Fair, beforehand termed as Skills Fair. An event started in 2014 organized and facilitated by the Center of Nursing, wherein nursing students from levels 1 to 3 are grouped to work together as a team. The objectives of the OBE Fair are to assess the participants' skills aligned to their year-level competencies, and encourages a fun approach to learning. After years of implementation, the said culminating activity was implemented collegiate-wide with different disciplines participating, to foster competence and promote interprofessional collaboration among participants.

During this healthcare crisis, and most of the educational delivery was done virtually. The College is determined to produce graduates with skills such as creative and critical thinking, problem-solving, effective written and oral communication, teamwork, life-long learnings, moral, professional, and technological skills. The OBE Fair transitioned from face-to-face

delivery to a virtual OBE Fair. Even in a flexible learning modality, the development of the participants' cognitive, affective, and psychomotor is highly regarded. After the activity, participants are presumed to become confident in analyzing and responding to real-life situations. This approach aims to produce fully competent nursing graduates, able to deliver safe, standard, and quality healthcare; students who are equipped with theories, practices, and values that the College firmly believes in.

The design of the Virtual OBE Fair was based on Simulated-Based Learning (SBL). SBL is flexible and cyclical, also it is purposeful and systematic. This means SBL makes it possible to achieve the expected outcomes mandated by the curriculum. The design and development of simulation should consider the criteria that facilitate the effectiveness of the simulation-based experience (INACSL, 2016). Simulation has its advantages, the ability to provide feedback, adaptable scenario levels, repetitious practice learning, and opportunities to individualized learnings based on the need/s of the participant/s.

**Methodology**

***Study Design:*** This study used a concurrent mixed-method approach of qualitative and quantitative methods in gathering data. It involves a descriptive survey to answer the following research questions: the demographic profile of the nursing students, prebriefing, simulation experience, debriefing, and program evaluation.

***Site of the Study:*** This research took place during the last weeks of the semester, specifically during the 17th week of the 1st and 2nd Semester, Academic Year 2020-2021; this is the usual schedule of the OBE Fair plotted per semester. The research locale was a locally funded city-flagship University located inside NCR.

***Participants of the Study:*** The participants of the OBE Fair came from the different discipline, such as Radiologic Technology, Pharmacy and Nursing. However, for this study, the data utilized are from the Student Nurses only. For 1st Semester, participants who are enrolled for level 3 and level 4 of the BSN program joined the said virtual simulation with participation from other discipline. While during the 2nd Semester, Level 2 and the same level 3 BSN students participated in the OBE Fair.

***Research Instrument:*** The survey tool used was an adapted and modified simulation evaluation tool modified (SET-M) from CAE healthcare. Scenarios from both OBE Fair are different with each other, and but the step-by-step process from the prebriefing, where participants are oriented on the process that will take place and the possible environment they will have; to simulation experience and debriefing which is facilitated by clinical instructors. Even, the allotted time for each simulation were almost identical for both OBE Fair.

***Data Gathering and Analysis:*** Data was gathered through an online data gathering tool during the OBE fair of the College. Informed consent was obtained and ensured the protection of the privacy of the participants. The use of frequency, percentage, mean, and standard deviation were the statistical instruments used in the study. For the qualitative data, it was analyzed using the thematic analysis approach. The study size for this research was based on the nursing students who participated in each OBE Fair, the narratives from the participants were coded and analyzed. Narratives are presented as R then the semester, followed by the participants' number.

***Ethical Consideration:*** Prior to data collection, the researcher obtained approval from the College officials and administrator. This involved submitting a written proposal outlining the study's objectives and methodology. The researcher then sought informed consent from all participating students of the said event. The informed consent process included a thorough explanation of the study's purpose, procedures, potential risks and benefits, and participants' rights, including the right to withdraw from the study at any time. The researcher adhered to ethical principles, including beneficence, ensuring that the study was conducted professionally and with the utmost respect for participant well-being.

## Results

### *Quantitative Result*

Table 1 shows seventy-one (71) participated during the 1st semester Virtual OBE Fair and one hundred sixty-four (164) participated during the 2nd semester. During the 1st semester, the majority (%=25.4) of participants got a grade within the range of 82-84 (F=18) and 79-81 (F=18). During the 2nd semester of the same academic year, the majority (%=25) got an 85-87 (%=17.1). Most of the participants for the 1st semester Virtual OBE Fair are level 3 (F=52 %=73.2) while for the 2nd semester, the majority are level 2 (F=105 %=64). Prior to the start of OBE Fair, assigned areas were based on the clinical concept and the applicability of the cases per year level participants. The different areas for 1st semester are emergency room (F=23 %=32.4), intensive care unit (F=25 %=35.2), and medical ward (F=23 %=32.4). For 2nd semester areas are delivery room (F=52 %=32.3), emergency room (F=60 %=36.6) and operating room (F=51 %=31.1).

Table 2 shows the result suggests improvement in the prebriefing from the 1st semester to the 2nd semester. Respondents during the 1st semester OBE Fair agree that prebriefing increased their confidence (m=3.06) and was beneficial to their learning (m=3.13). While 2nd semester OBE Fair respondents strongly agree that prebriefing increased their confidence (m=3.62) and was beneficial to their learning (m=3.78).

Table 3 shows the result for the Simulation Experience for the OBE Fair improved, from 7 strongly agree interpretations to twelve (12) or all of the indicators yield a strongly agree. Respondents strongly agree that simulation gave the opportunity to practice clinical decision-making skills (m=3.28; m=3.67), simulation improved their confidence in using evidence-based practice to provide care (m=3.25; m=3.59), and develop a better understanding of medications (m=3.28; m=3.58).

Furthermore, table 3 shows that the respondents during the 1st semester had a different experience regarding the following: being better prepared to respond to changes in my patient's condition (m=3.16), developed a better understanding of the pathophysiology (m=3.04), being empowered to make a clinical decision (m=3.17), and ability to communicate and teach patients about their illness and interventions (m=3.23), compared to 2nd semester, respond to change (m=3.45), understanding of the pathophysiology (m=3.46), make clinical decisions (m=3.50), and ability to communicate and teach patient (m=3.56).

Table 4 shows that the respondents strongly agree with the statements and an increase in the mean from 1st semester to 2nd semester. Respondents strongly agree that debriefing was a constructive evaluation of the simulation (m=3.39; m=3.76), it provided opportunities to self-reflect on performance during the simulation (m=3.47; m=3.74), contributed to learning (m=3.32; m=3.71), improve clinical judgement (m=3.35; m=3.70) and allowed verbalization of feelings (m=3.27; m=3.61).

The result of table 5 reveals an improvement from all eight (8) indicators for program evaluation. Respondents from agree to strongly agree that the program was well organized (1st m=2.58; 2nd m=3.77), activity was clearly presented (1st m=2.86; 2nd m=3.77), the format was enjoyable (1st m=2.85 ; 2nd m=3.68) and expectation was met (1st m=2.79 ; 2nd m=3.68).

Table 6 shows the overall result of the OBE Fair from 1st Semester to 2nd Semester shows us an improvement from the initial virtual OBE Fair implementation to the 2nd implementation. Prebriefing (m=3.09 to m=3.70), Simulation Experience (m=3.24 to m=3.54), Debriefing (m=3.36 to m=3.70) and Program Evaluation (m=2.95 to m=3.77).

Table 7 shows the summary of the Qualitative data of participants in the OBE fair from 1st Semester and 2nd Semester, the results revealed the themes (Looking at Critical Conditions, Embodying Real Life Situation, and Connecting Virtually) and the Interlacing Theme (Augmenting Clinical Competencies with Technology) of the study.

***Qualitative Result***

Data analysis of each qualitative data resulted in three themes, as well as one interlacing theme. Respondents/Participants are coded based on the semester then their participation.

***Theme 1. Looking at Critical Conditions***

This theme described the experience of the participants in the program flow and the environment created by the program. Participants in the Outcomes-Based Education Fair were *looking at critical conditions,* which usually entail preparation, briefing, entertainment, and challenging parts of the program.

> *"Briefing was supposed to help us before the activity. We were all confused concerning the whole simulation. There was no explanation, no clear instructions. Things were all over the place which consumes more time. We asked for the Doctor's Order since the nurse can't function without it. It takes so much time before they showed us the MD's order. I hope the event next time will be organized" - R1-3*
>
> *"I just noticed that even some of the prof is not aware of the flow" - R1-12*
>
> *"The OBE activity has accomplished what it needs to accomplish. Good job to all organizers of this project." - R2-8*
>
> *"It's a great experience for me as a level 2 student this our first time in OBE fair, we learn and get a lot of important knowledge to the case that I encounter." - R2-26*
>
> *"It's a new experience since I get to experience a glimpse of reality in the hospital. Although, we encountered some technical difficulties that delayed things it's normal since we rely on the internet. Things will be better if we are all in the simulated hospital." - R2-29*
>
> *"It was a great learning experience even though I need to exert more effort in learning and applying what I've learned in the clinical setting. I need to review all the past lessons and have a presence in mind and teamwork is the key." - R2-47*
>
> *"I am pleased to experience today's simulation. It was challenging but fun." - R2-74*

***Theme 2. Embodying Real Life Situation***

This theme described what do the participants gain from the program. What they realized during and after the program. Participants engage themself in the program with the sense of *embodying real-life situations.* The OBE Fair aimed to promote real-life clinical scenarios that participants learn in a safe environment.

> *"I felt so nervous and anxious because I may encounter some technical difficulties, but participating in this event gave me a big help to experience these kinds of scenarios." - R1-9*
>
> *"I have a lot of learnings today. I can see myself where I am lacking of. My strengths and weaknesses in terms of communicating with the patient. I hope it continues this kind of event to master my skills" - R1-10*
>
> *"I was overwhelmed by fear while interacting with my patient and I noticed that I having a lack of communication skills and I'm not confident enough. I also have a lack of knowledge in dispensing medications. I'm grateful that this OBE fair gives me experience on pharmacy setting and what it looks like." - R1-14*
>
> *"Since it's a first form me, it was an eye-opener. It gave me a glimpse of my future as a nurse." - R2-16*
>
> *"I was shocked that the simulation was that fast that I wasn't able to keep up at some parts. But through this I was able to learn more and was inspired to study more for future simulations and real-life conditions." - R2-63*
>
> *"I really like the thrill and the close-real life clinical setting; it really tests my skills and critical thinking." - R2-65*

*"There was pressure, a lot. The OBE Fair gave me this kind of feeling like I wanted to answer, but I felt like it'd turn out wrong. I was so the pressured, to the point that my hands were shaking." - R2-75*

*"It served as an eye-opener for me regarding different things that I need to focus on, and I evaluated myself through this activity. I've also learned so much and I can say that that knowledge and experience will be very helpful and useful in the future." - R2-77*

***Theme 3. Connecting Virtually***

This theme described what can hinder or negatively affect the whole experience of the participants. Issues and challenges in *connecting virtually* are common especially those with unstable internet connections.

*"Everything settled is fine and organized but there are some instances about the connectivity on the internet." - R1-7*

*"It was a new experience to us and still hard though because of internet connection." - R1-23*

*"Today's clinical simulation experience is hard and confusing since is virtual. A slow internet connection is evident when you start to speak. While the meeting link, you still need to encode it manually, which consume time before you can enter the meeting link." - R1-36*

*"Although internet connectivity can hamper the flow. Nonetheless, the flow of the simulation was well organized and well-executed." - R1-78*

***Interlacing Theme. Augmenting Clinical Competencies with Technology***

This theme described the experience of the participant's reality of the real-life scenario that is even the process is flawed and very challenging, there is still room for improvement, learning, and realization. Participants had issues and challenges prior, and during the program, but this didn't hinder *augmenting clinical competencies with technology* especially amidst this health crisis.

*"Although there are misunderstandings, it was fun and I learned a lot." - R1-2*

*"It was a great experience although we made some mistakes of course this is our first time and there will always be room for improvement." - R1-26*

*"I was shocked that the simulation was that fast that I wasn't able to keep up at some parts. But through this, I was able to learn more and was inspired to study more for future simulations and real-life conditions." - R2-63*

*"I really like the thrill and the close-real life clinical setting; it really tested my skills and critical thinking." - R2-65*

*"Honestly, I really have no idea about the flow of OBE Fair. When the simulation started, I just felt like I was blind and I have to find my way out of the dark. I felt bad for our senior because he was the one who kept answering the questions. There was pressure, a lot. The OBE Fair gave me this kind of feeling like I wanted to answer, but I felt like it'd turn out wrong. I was so pressured, to the point that my hands were shaking, and I wasn't able to write the necessary information about the patient. And when it was my time to endorsed, I was lost of words. Yet, this OBE Fair gave me an idea of how to do this, because this is my first time. Although our preparation was limited so we have to scan all the notes we have, but I am truly grateful that we've experienced this. And I am quite grateful for our senior who became our helping hand." - R2-75*

*"I am HAPPY, as a level 2 student, with no experience in OBE fair. The program became an eye-opener for me regarding things I need to focus and I was able to evaluate myself in this*

*activity. I've learned so much, and I can say that that knowledge and experience will be very helpful and useful in the future." - R2-77*

**Table 1. Result of Frequency and Percentage distribution of Profile Demographics**

| | 1ST SEMESTER | | 2ND SEMESTER | |
|---|---|---|---|---|
| SEMESTER | Frequency | Percentage | Frequency | Percentage |
| Participants | 71 | 30.2 | 164 | 69.8 |
| | | | | |
| GRADE | Frequency | Percentage | Frequency | Percentage |
| 91-93 | 10 | 14.1 | 14 | 8.5 |
| 88-90 | - | - | 13 | 7.9 |
| 85-87 | 17 | 23.9 | 41 | 25 |
| 82-84 | 18 | 25.4 | 28 | 17.1 |
| 79-81 | 18 | 25.4 | - | - |
| 76-78 | - | - | 12 | 7.3 |
| 75-Below | 8 | 11.3 | 56 | 34.1 |
| TOTAL | 71 | 100 | 164 | 100 |
| | | | | |
| YEAR LEVEL | | | | |
| LEVEL 2 | - | - | 105 | 64 |
| LEVEL 3 | 52 | 73.2 | 59 | 36 |
| LEVEL 4 | 19 | 26.8 | - | - |
| TOTAL | 71 | 100 | 164 | 100 |
| | | | | |
| ASSIGNED AREA | | | | |
| Delivery Room | - | - | 53 | 32.3 |
| Emergency Room | 23 | 32.4 | 60 | 36.6 |
| Operating Room | - | - | 51 | 31.1 |
| Intensive Care Unit | 25 | 35.2 | - | - |
| Medical Ward | 23 | 32.4 | - | - |
| TOTAL | 71 | 100 | 164 | 100 |

**Table 2. Result of Mean and Standard Deviation distribution on Prebriefing**

| PRE-BRIEFING | 1ST SEMESTER | | | 2ND SEMESTER | | |
|---|---|---|---|---|---|---|
| | Mean | SD | Interpretation | Mean | SD | Interpretation |
| Prebriefing increased my confidence | 3.06 | 0.88 | Agree | 3.62 | 0.65 | Strongly Agree |
| Prebriefing was beneficial to my learning. | 3.13 | 0.88 | Agree | 3.78 | 0.50 | Strongly Agree |

**Table 3.** Result of Mean and Standard Deviation distribution on Simulation Experience

| SIMULATION EXPERIENCE | 1ST SEMESTER | | | 2ND SEMESTER | | |
|---|---|---|---|---|---|---|
| | Mean | SD | Interpretation | Mean | SD | Interpretation |
| I am better prepared to respond to changes in my patient's condition. | 3.16 | 0.73 | Agree | 3.45 | 0.64 | Strongly Agree |
| I developed a better understanding of the pathophysiology | 3.04 | 0.82 | Agree | 3.46 | 0.67 | Strongly Agree |
| I am more confident of my assessment skills | 3.30 | 0.68 | Strongly Agree | 3.49 | 0.67 | Strongly Agree |
| I felt empowered to make clinical decisions | 3.17 | 0.76 | Agree | 3.50 | 0.58 | Strongly Agree |
| I developed a better understanding of medications. | 3.28 | 0.66 | Strongly Agree | 3.58 | 0.61 | Strongly Agree |
| I had the opportunity to practice my clinical decision-making skills | 3.28 | 0.70 | Strongly Agree | 3.67 | 0.53 | Strongly Agree |
| I am more confident in my ability to prioritize care and interventions | 3.35 | 0.66 | Strongly Agree | 3.50 | 0.62 | Strongly Agree |
| I am more confident in communicating with my patient | 3.23 | 0.81 | Agree | 3.56 | 0.64 | Strongly Agree |
| I am more confident in my ability to teach patients about their illness and interventions. | 3.23 | 0.80 | Agree | 3.56 | 0.56 | Strongly Agree |
| I am more confident in my ability to report information to health care team | 3.32 | 0.73 | Strongly Agree | 3.56 | 0.60 | Strongly Agree |
| I am more confident in providing interventions that foster patient safety | 3.25 | 0.71 | Strongly Agree | 3.54 | 0.59 | Strongly Agree |
| I am more confident in using evidence-based practice to provide care | 3.25 | 0.81 | Strongly Agree | 3.59 | 0.55 | Strongly Agree |

**Table 4.** Result of Mean and Standard Deviation distribution on Debriefing

| DEBRIEFING | 1ST SEMESTER | | | 2ND SEMESTER | | |
|---|---|---|---|---|---|---|
| | Mean | SD | Interpretation | Mean | SD | Interpretation |
| Debriefing contributed to my learning. | 3.32 | 0.82 | Strongly Agree | 3.71 | 0.53 | Strongly Agree |
| Debriefing allowed me to verbalize my feelings before focusing on the scenario | 3.27 | 0.88 | Strongly Agree | 3.61 | 0.63 | Strongly Agree |
| Debriefing was valuable in helping me improve my clinical judgment. | 3.35 | 0.85 | Strongly Agree | 3.70 | 0.52 | Strongly Agree |
| Debriefing provided opportunities to self-reflect on my performance during simulation. | 3.47 | 0.69 | Strongly Agree | 3.74 | 0.48 | Strongly Agree |
| Debriefing was a constructive evaluation of the simulation. | 3.39 | 0.82 | Strongly Agree | 3.76 | 0.48 | Strongly Agree |

**Table 5. Result of Mean and Standard Deviation distribution on Program Evaluation**

| PROGRAM EVALUATION | 1ST SEMESTER | | | 2ND SEMESTER | | |
|---|---|---|---|---|---|---|
| | Mean | SD | Interpretation | Mean | SD | Interpretation |
| The objectives of the activity are clearly stated | 3.16 | 0.84 | Agree | 3.79 | 0.45 | Strongly Agree |
| The activity was well organized | 2.58 | 0.87 | Agree | 3.77 | 0.46 | Strongly Agree |
| The objectives align with the overall course goals | 3.14 | 0.78 | Agree | 3.83 | 0.41 | Strongly Agree |
| Content of the activity was clearly presented | 2.86 | 0.91 | Agree | 3.77 | 0.51 | Strongly Agree |
| The activities are interesting and stimulating | 3.06 | 0.91 | Agree | 3.79 | 0.50 | Strongly Agree |
| The length of the activity was appropriate | 3.18 | 0.88 | Agree | 3.78 | 0.48 | Strongly Agree |
| The format was enjoyable | 2.85 | 1.01 | Agree | 3.74 | 0.55 | Strongly Agree |
| It met my expectation | 2.79 | 1.00 | Agree | 3.68 | 0.61 | Strongly Agree |

**Table 6.** Summary Result of Mean and Standard Deviation distribution on the Outcomes-Based Education Fair

| | 1ST SEMESTER | | | 2ND SEMESTER | | |
|---|---|---|---|---|---|---|
| | Mean | SD | Interpretation | Mean | SD | Interpretation |
| Prebriefing | 3.09 | 0.85 | Agree | 3.70 | 0.54 | Strongly Agree |
| Simulation Experience | 3.24 | 0.06 | Agree | 3.54 | 0.52 | Strongly Agree |
| Debriefing | 3.36 | 0.75 | Strongly Agree | 3.70 | 0.47 | Strongly Agree |
| Program Evaluation | 2.95 | 0.76 | Agree | 3.77 | 0.42 | Strongly Agree |

**Table 7. Summary of the Themes and Interlacing Theme**

| No. | Theme | Interlacing Theme |
|---|---|---|
| 1 | Looking at Critical Conditions | Augmenting Clinical Competencies with Technology |
| 2 | Embodying Real Life Situation | |
| 3 | Connecting Virtually | |

## Discussion

Nurses form the cornerstone of the healthcare workforce; they comprise the majority of healthcare professionals in medical centers and hospitals. They are the clinical backbone of the medical team, playing pivotal roles across diverse settings (including medical wards, emergency rooms, delivery rooms, and intensive care units) in the healthcare industry. The effectiveness of the entire healthcare team hinges on the competence of individual nurses.

Inadequately trained nurses may hinder the team's effectiveness and ultimately compromise the quality of patient care (Wa-Mbaleka, 2015; De Las Armas, 2021). To ensure the highest quality of patient care, higher education institutions offering healthcare programs, particularly Bachelor of Science in Nursing (BSN) programs, must prioritize the development of competent and well-rounded nursing graduates. And to prepare competent healthcare leaders for practice across multiple health care settings (ASAHP, 2018).

Nursing education has evolved to incorporate innovative teaching strategies to meet the increasing demands for patient safety and quality care. Simulation emerged as a valuable pedagogical tool in nursing education that offers a safe and controlled environment for students to develop and refine essential clinical skills (De Las Armas, 2021). Virtual simulations, in particular, provide flexibility and accessibility, allowing for realistic and engaging learning experiences. By replicating real-world clinical scenarios, virtual simulations enable students to gain clinical experience, apply theoretical knowledge, and develop critical thinking and decision-making skills (Chmil, 2016). Virtual simulation offers a dynamic and flexible platform for assessing student capabilities in a safe and controlled environment. While traditional methods may still have value, virtual simulations provide opportunities for students to develop and refine essential clinical skills, such as history taking, physical examination, diagnosis, and the provision of nursing care (Okuda, 2009).

The success of simulation experiences hinges on various factors such as effective prebriefing, debriefing, and the development of realistic scenarios. It was observed that simulation and team-based learning were applicable strategies in the delivery of instruction in nursing education (Roh et al, 2020). Moreover, prebriefing assumes critical importance in the context of Outcomes-Based Education (OBE), where the focus is on achieving defined learning outcomes. It serves as an orientation session prior to the simulation activity, where they are provided with essential information and instructions to successfully achieve the objectives of the scenario. Prebriefing, aligns with OBE principles by clearly outlining the expected learning outcomes for the simulation experience and preparing learners to achieve them. By clearly explaining the value, phases, and purpose of the simulation, facilitators can enhance learner engagement and motivation. Participants' active participation and respect for the learning process are evident when they transfer the debriefing insights into their clinical practice. This demonstrates that simulation not only imparts professional briefing skills but also fosters a deeper understanding of the quality improvement process, ultimately leading to improved communication and collaboration in clinical practice (Hemming, 2019).

While debriefing conducted by skilled facilitators, is also an integral component of the simulation process (Ryoo et al., 2015). It fosters self-reflection, allowing participants to analyze their performance, identify areas for improvement, and connect their learning to real-world clinical situations. This reflective process, as outlined by INACSL (2016), aims to facilitate learning transfer and enable students to apply their knowledge and skills in future clinical settings.

By integrating virtual simulations into the curriculum and utilizing data from simulation assessments, nursing educators can ensure that student nurses develop the necessary competencies to provide safe and effective patient care. This data can also be used to inform program improvement and ensure that educational programs are aligned with the evolving needs of the healthcare system. Virtual simulations offer a unique opportunity for assessing student capabilities within an outcomes-based education framework. By observing student performance in simulated scenarios, educators can directly assess whether students have achieved the desired learning outcomes. This includes evaluating clinical skills, decision-making abilities, critical thinking, communication, and teamwork. The effectiveness of virtual simulations can be enhanced through the use of prebriefing sessions, which provide learners with clear

instructions and expectations, and debriefing sessions, which facilitate reflection and analysis of student performance. Learning engagement and orientation activities also contribute significantly to the overall effectiveness of the simulation experience (Chamberlain, 2017).

In the implementation and delivery of flexible learning, including virtual simulation, reliable internet access is paramount for both faculty and students. The study by Abisado et al. (2020) revealed that a significant portion of students and faculty lack adequate internet access at home. While mobile devices can enhance the online learning experience, as suggested by Nikolopoulou (2020), consistent and reliable internet access remains a crucial factor for successful online learning and the effective utilization of virtual simulation tools.

Virtual Simulation has different advantages and disadvantages, whereas, the pros far outweigh the cons in kind of instructional delivery (De Las Armas, 2021). Facilitators of this kind of event should use their professional judgment based on the objectives and design of the simulation (Humming, 2019). Simulation can be a decent counterpart for the conventional clinical experience. Through scenarios, participants can be either the nurse or the student nurse. And through this scenario, participants can meet the learning objectives and develop them, regardless of the roles they had played. Such activities provide an approach for the development of clinical competencies and are beneficial for their learnings (Thompson, 2021).

**Conclusion:** The overall findings of the study revealed that simulation is viewed as an effective way in providing relevant education, regardless of the participants' OBE grades, issues in their connectivity, and preparation during the two OBE fairs. The simulation utilized during the Outcomes-Based Education Fair had been improved based on the gathered data. Simulation is used to immerse learners in a realistic yet safe setting that will allow them to gain clinical experience. It is equally important to evaluate the program to make a necessary judgment on the implementation of the program, further improve the effectiveness, and help reach the goal efficiently. Simulation-Based Learning can replicate actual clinical settings and yet should be organized well to achieve consistency with reality. The pros of simulation, far outweigh the cons. As outcome-based education, begin with the end in mind, it should provide a way for learners/participants to demonstrate what they have learned and connect it to how it is in reality. Also, it is recommended to further investigate the effects of simulation activity and its effect on the learning outcomes, to help efficiently achieve the planned goal.

## References


Abisado, M., Unico, M., Umoso, D., Manuel, F., Barroso, S. (2020). A Flexible Learning Framework Implementing Asynchronous Course Delivery for Philippine Local Colleges and Universities. International Journal of Advanced Trends in Computer Science and Engineering. 9,1-3, http://www.warse.org/IJATCSE/static/pdf/file/ijatcse6591.32020.pdf

Association of Schools of Allied Health Professions, (2018). Definition of Allied Health. Retrieved from http://www.asahp.org/what-is

Chamberlain, J. (2017). The impact of Simulation Prebriefing on Perceptions of Overall Effectiveness, Learning, and Self-confidence in Nursing Students. Nursing Education Perspectives: 38 ( 3), 19-125. doi: 10.1097/01.NEP.0000000000000135. https://journals.lww.com/neponline/Abstract/2017/05000/The_Impact_of_Simulation_Prebriefing_on.4.aspx

Chmil, J.V. (2016). Prebriefing in Simulation-Based Learning Experiences. Nurse Educator,41(2), 64-65. doi: 10.1097/NNE.0000000000000217. https://journals.lww.com/nurseeducatoronline/Citation/2016/03000/Prebriefing_in_Simulation_Based_Learning.4.aspx

De Las Armas, E. (2021). Interprofessional Healthcare Education in the New Normal. 24th East Asian Forum of Nursing Scholars. April 2021.

Hemming, T., Lioce, L., Breymier, T. (2019). Guidelines and Essential Elements for Prebriefing. Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare: December, 14(6) 409-414. doi: 10.1097/SIH.0000000000000403. https://journals.lww.com/simulationinhealthcare

/fulltext/2019/12000/guidelines_and_essential_elements_for_prebriefing.10.aspx

INACSL (2016). INACSL Standards of Best Practice: Simulation[SM] Simulation Design. Clinical Simulation in Nursing (2016). Retrieved from https://www.inacsl.org/INACSL/document-server/?cfp=INACSL/assets/File/public/standards/SOBPEnglishCombo.pdf

Nikolopoulou, K. (2020). Secondary education teachers' perceptions of mobile phone and tablet use in classrooms: benefits, constraints and concerns. Journal of Computers in Education, 7(2), 257-275. Retrieved on May 10, 2020 from https:// bit.ly/3jmuZ6k

Okuda, Y., Bryson, E., DeMaria, S., Jacobson, L., Quinones, J., Shen, B., Levine, A. (2009). The Utility of Simulation in Medical Education: What is the Evidence? Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine. 76,(4), 330-343. https://onlinelibrary.wiley.com/doi/abs/10.1002/msj.20127

Ryoo, E. N., & Ha, E. (2015). The Importance of Debriefing in Simulation-Based Learning. *CIN Computers Informatics Nursing*, *33*(12), 538–545. https://doi.org/10.1097/cin.0000000000000194

Spady, W. D. (1994). *Outcomes Based Education: Critical Issues and Answers*. Arlington, VA: American Association of School Administration. https://www.eduhk.hk/flanobl/view.php?secid=784

Song, E., Issenberg, S. B., & Roh, Y. S. (2023). Effects of Prebriefing Using Online Team-Based Learning in Advanced Life Support Education for Nurses. *CIN Computers Informatics Nursing*. https://doi.org/10.1097/cin.0000000000001056

Thompson, C., Moscola, S., Buckland, S.T. (2021). Nursing Students Perceptions of Home Visit Simulation Scenarios. Nursing Education Perspectives, 42(2),113-114. doi: 10.1097/01.NEP.0000000000000625. https://journals.lww.com/neponline/Abstract/2021/03000/Nursing_Student_Perceptions_of_Home_Visit.13.aspx

Wa-Mbaleka, S. (2015). Preparedness of Nursing International Students for their Clinical Learning in the Philippines. International Journal of Academic Research in Business and Social Sciences. 5(3) ISSN:2222-6990. DOI:10.6007/IJARBSS/v5-i3/1501