



## Blending Coursera in CEU Courses: A Study on the Quality and Educational Impact

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### Abstract

Enrolling in Massive Open Online Courses (MOOCs) has become a global phenomenon, with millions of students from around the world signing up for courses offered by prestigious universities such as Harvard, MIT, and the University of London. Among the many platforms like edX, Udacity, and FutureLearn, Coursera was chosen to provide courses to blend in with Centro Escolar University (CEU) for its trial run. An evaluation was conducted across CEU's three campuses using data from 198 students among the 459 enrollees in courses where Coursera was blended. This inferential study determined the quality and educational impact of blending Coursera into their CEU courses. The findings include the results on the effectiveness of course materials in meeting the learning needs of students, their engagement and involvement, the course structure, and the quality and educational impact on students. The results of this study can help educators better understand how to design effective learning experiences that promote student engagement, improve learning outcomes, and optimize the use of technology and resources in an online and offline setting.

*Keywords:* MOOCs, courses, educational impact, Coursera, course materials



## **Introduction**

In early 2000 educators started disseminating educational materials to massive participants via a platform to create a rich learning environment through online tools that allowed interaction between various participants. In 2008, Stephen Downes and George Siemens coined this Massive Open Online Course (MOOC) to describe a course they developed called Connectivism and Connectivity Knowledge (MAUT, 2023). The University of Manitoba in 2008 was the first to use the term MOOC. The initial course had 25 students on campus and 2300 participants online. In 2011, Stanford University offered three courses for free online, with Peter Norvig and Sebastien Thrun's Introduction to Artificial Intelligence attracting over 160,000 students from around the world. These MOOCs focused less on student interaction and more on reaching a massive audience. Then, the platform began to sprout. Thrun founded Udacity in 2012, and Andrew Ng and Daphne Koller started Coursera, which partnered with universities to offer MOOCs with a vision of providing life-transforming learning experiences to learners around the world (Rollins, 2018). Udacity partnered with San Jose State to offer for-credit courses that blended MOOC material with support from on-campus professors and teaching assistants. However, the San Jose State experiment was less successful than expected, with lower pass rates in some courses and a high dropout rate in most MOOCs. Thrun later refocused Udacity on vocational education, while Coursera primarily focused on technology courses like Computer Science and Engineering. In 2013 Coursera announced that it has over 4 million students enrolled and has partnered with over 100 universities to offer MOOCs. Then in 2016, Coursera announced that it will start offering online degree programs from top universities, such as the University of Illinois at Urbana-Champaign and the University of London (Education



World, 2023). Having witnessed the success of Coursera, other universities and institutions began to launch their MOOCs in edX and Udacity. The content also expanded on different fields and disciplines covering business and health sciences. By 2021, Coursera became a publicly traded company on the New York Stock Exchange (Coursera, 2023).

Coursera's worldwide presence is published via its website. There are 113 million+ learners from 190+ countries and 7500+ organizations. Most learners are from North America, with 24 million enrollees, and Europe and Latin America, with 20 million. India and Asia Pacific have 18 million enrollees, while the Middle East has 7 Million, and the least is Africa, with 5 million enrollees (Coursera, 2023).

In the Philippines, Coursera has expanded its reach by offering partnerships with government and private organizations to provide training and professional development opportunities to Filipinos. It gained popularity as a platform for online learning and upskilling. Many Filipinos have used Coursera to gain new skills or advance their careers, and they are planning to pursue more partnerships with businesses, schools, and the government in order to continue pushing growth in the country. The report shows that over 1.3 million learners in the country registered on their platform over the past year, with 61% accessing the platform using mobile devices (Business World, 2021). To address the country's skills and digital divide, they plan to deliver a growing selection of job-relevant content and credentials on a mobile-friendly platform. It has partnered with 60 Philippine academic institutions and 10 businesses, including Lyceum of the Philippines University, Mapua University, Ayala Corp., Globe Telecom, and Bank of the Philippine Islands. The only government customer in the country is the Department of Science and Technology (DOST), which pioneered a Workforce Recovery program in Region



XIII – Caraga (Tribdino, 2022). Coursera's Guided Projects program has seen strong adoption in the Philippines, with Filipino learners accounting for more than half of the enrollments in the region. The program allows learners to build job-relevant skills in under two hours. and the top three most popular entry-level certificates in the Philippines are IT support, social media marketing, and data analytics.

On the other hand, Centro Escolar University has blended Coursera into its existing courses as a complementary tool to improve the classroom experience, enhance the subject matter, and offer students a more comprehensive understanding of specific courses. CEU has instituted three modes of delivery onsite+, hybrid, and full online. In the onsite+ modality, all classes are held onsite. These are supplemented and enhanced with asynchronous online activities. Students' coursework is completed at their pace and in a chosen location. The Hybrid is designed with some parts conducted through online classes and other parts onsite. Students attend on-site classes at designated times and virtual classes also at designated times. In addition, they engage in asynchronous online activities and coursework at their own pace in a given time frame. The full online modality is conducted fully online using intentionally designed strategies implemented through synchronous virtual classes and asynchronous activities. Students are given the flexibility to do and complete their tasks within a given time frame. Coursera is combined in their coursework, students can earn credits upon completion, and some obtain a certificate that showcases their skills and knowledge regardless of delivery modes. Integrating open educational resources poses a great potential for improving course delivery for pre-service teachers (Mijares, 2017).





However, despite the growing popularity of online courses, there is insufficient research on the effectiveness of Coursera courses in terms of quality and educational impact. In this context, this study is pursued to evaluate the quality and educational impact of a Coursera course, as perceived by the students who have taken courses in CEU where Coursera was blended.

The results in determining the quality and educational impact of blending Coursera into CEU courses can help educators identify areas of improvement and optimize the students' learning experiences. The valuable data can be a basis for informed decisions about allocating classroom resources, rethinking teaching methods, and designing future integration to tailor fit to meet the student's needs to ensure quality education. Moreover, this will help them identify students' challenges and barriers. The administrator can also use it to decide on better infrastructure, support, and services needed to help students overcome these challenges.

### **Statement of the Problem**

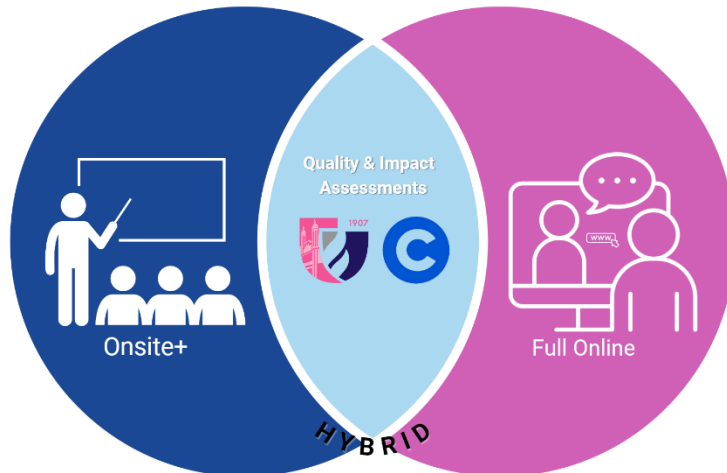
The study examined the quality and educational impact of blending Coursera with CEU Courses. Specifically, this study aimed to answer the following questions:

1. How do students assess the effectiveness of their CEU course materials with blended Coursera in meeting their learning needs?
2. How do students assess their engagement and involvement in their CEU Courses with blended Coursera?
3. How do students assess the course structure of their CEU Courses with blended Coursera?
4. How do students assess the quality and educational impact of their CEU course with blended Coursera?



5. Is there a significant difference in the assessment made by respondents when they are grouped according to their campuses and respective programs?

## Conceptual Framework



In this study, blending Coursera and CEU courses is described as a learning approach that combines teacher-led training and teacher-defined Coursera courses to be blended in CEU Courses, whether in the onsite+, online, or hybrid mode of delivery to enrich and enhance CEU courses. The different modes confirm that providing continuous services to online students like a regular student enrolled in a university is possible. (Ayo, 2017). While taking Coursera, students can work at their own pace and access course materials and assignments at any time and any place while still receiving the guidance and support of a teacher or instructor. In blending Coursera, the teacher selects suitable Coursera courses that can enhance the student's learning experience and enrich the content of their enrolled courses in CEU. The teacher can choose to fully integrate or partially integrate a Coursera course. In a full integration, the teacher selects a Coursera course that the students should complete along with their CEU courses. The Coursera

course should complement and be related to the CEU courses. After finishing the Coursera course, the students will receive a certificate. In partial integration, the teacher selects appropriate topics from a full course to supplement the CEU courses. Since only a portion of the course is completed, no certificate will be awarded. Sometimes, the teacher prefers guided Coursera projects that last 1 to 3 hours. In this course, students learn new skills relevant to their CEU course, and Coursera issues a certificate of achievement.

### **Research Methodology**

This research design used inferential statistics to evaluate Coursera's quality and educational impact when blended with CEU Courses. Data were derived from a survey questionnaire, processed, and treated using Statistical Package for Social Science (SPSS). The main objective is to determine whether blending Coursera in CEU courses effectively and efficiently meets the learning needs, engagement and involvement, course structure, and the quality and educational impact of CEU Courses with blended Coursera. Out of 459 enrolled in the course where faculty blends Coursera into their courses, 198 students answered the survey questionnaire. (University of Wisconsin–Madison, 2020)

### **Participants of the Study**

This study's respondents are Centro Escolar University students across campuses in Makati, Manila, and Malolos during the first semester of SY 2022-2023. Of the total population (n=198) 83 are from Manila (41.9%), 79 are from Makati (39.9%), and 36 are from Malolos (18.2%). Among these 198 respondents, 150 were female (76%) and 48 were male (24%) in terms of programs, the majority is from Hospitality and Management 71 or (35.5%), 50 were from Dentistry (25%), 9 were from Education (4.5%) 71 were from Hospitality and Management



(35.5%), 33 were from Business Administration (17.5%) 15 were from Pharmacy (7.5%) and 20 from Science and Technology (10%).

### Statistical Treatment

This quantitative research study used data from students who completed a CEU Course with Coursera. It employed descriptive statistics such as frequency, percentage, mean, and standard deviation to describe the assessment made by the respondents, while inferential statistics, specifically the analysis of variance (ANOVA), to analyze the assessment made by the students regarding their campus and programs.

### Results and Discussion

The results are hereby presented to answer the research questions posed in the statement of the problem. Table 1 presents the assessment made by the students on the effectiveness of the course materials in CEU courses with blended Coursera in meeting their learning needs. The course materials include assignments, readings, assigned problems, laboratory experiments, and videos. Based on the results, the course complements the topics found in the syllabus ( $x=4.64$ ) including the lectures, readings, and assignments ( $x=4.65$ ). The instructional materials used were effective in increasing their knowledge and skills ( $x=4.69$ ). The text and assigned readings were valuable, ( $x=4.67$ ) workload and requirements are manageable ( $x=4.67$ ) they were appropriate for the course level( $x=4.67$ ) effective in helping the respondents understand the underlying concepts ( $x=4.67$ ) and it provides a welcoming environment to express their ideas( $x=4.67$ ). Moreover, the graded assignments ( $x=4.68$ ), and assigned readings( $x=4.65$ ) helped the students understand the course materials, and it facilitated their learning ( $x=4.65$ ). The tests/assessments







accurately assess what they have learned in the course ( $x=4.70$ ) and they were reflective of its content ( $x=4.65$ ). *The course* was well organized ( $x=4.67$ ).

The respondents strongly agreed with each item, as reflected by the overall results of 4.67 and a very low standard deviation of .505. This confirms that blending Coursera in CEU courses effectively and efficiently met the learning needs of students. The lectures, readings, and assignments all worked seamlessly to provide a comprehensive learning experience. The well-organized instructional materials significantly improved their knowledge and skills in the subject matter. The assigned readings were particularly valuable, giving them a deeper understanding of the course material. The course workload is manageable, and the requirements were appropriate for the course level. It challenged them to learn and grow. The course was organized clearly and concisely which helped them to easily understand underlying concepts. The assignments, including readings, assigned problems, laboratory experiments, videos, and more, all contributed to their learning experience. The graded assignments were particularly helpful in reinforcing their understanding of the course material. The tests and assessments were accurate reflections of what they had learned throughout the course, and they were reflective of the content. Most importantly, the course was exceptionally well-organized and complemented the topics outlined in the syllabus. The environment was welcoming and inclusive, allowing them to express their ideas without hesitation. Based on the results, it can be concluded that blending Coursera into CEU Courses met the learning needs of the students.





*Table 1*

*Effectiveness of Course Materials in Meeting the Learner’s Need*

<i>Course Materials</i>	<i>Mean</i>	<i>S.D</i>	<i>Descriptor</i>
1. The lectures, readings, and assignments complemented each other.	4.65	0.546	Strongly Agree
2. The instructional materials increased my knowledge and skills in the subject matter.	4.67	0.542	Strongly Agree
3. The text and assigned readings were valuable.	4.66	0.515	Strongly Agree
4. The workload in Coursera is manageable	4.67	0.542	Strongly Agree
5. The course workload and requirements were appropriate for the course level.	4.67	0.542	Strongly Agree
6. The course was organized in a manner that helped me understand underlying concepts.	4.67	0.551	Strongly Agree
7. The course assignments (readings, assigned problems, laboratory experiments, videos, etc.) facilitated my learning.	4.65	0.565	Strongly Agree
8. The assigned readings helped me understand the course material.	4.65	0.556	Strongly Agree
9. Graded assignments helped me understand the course material.	4.68	0.54	Strongly Agree
10. The tests/assessments accurately assess what I have learned in this course.	4.7	0.502	Strongly Agree
11. Exams and assignments were reflective of the course content.	4.65	0.556	Strongly Agree
12. The course was well organized.	4.67	0.542	Strongly Agree
13. The course complements the topics found in the syllabus.	4.64	0.576	Strongly Agree
14. The course environment felt like a welcoming place to express my ideas.	4.67	0.542	Strongly Agree
Total	<b>4.67</b>	<b>0.505</b>	<b>Strongly Agree</b>



The student's assessment of their engagement and involvement in a CEU course with Coursera yielded positive results, as seen in Table 2. The respondents were highly engaged and involved; they recognized the importance of their efforts in advancing their learning ( $x=4.58$ ), and it challenged them to learn beyond their expectations ( $x=4.56$ ). Studies showed that challenging tasks involved setting high expectations for students and providing opportunities for them to engage in deep and meaningful learning. (Hattie, 2009). Students with a growth mindset are more likely to embrace challenges and persist in the face of obstacles, leading to better learning outcomes (Dweck, 2007)

The findings that the course was well-organized ( $x=4.67$ ) and manageable ( $X=4.67$ ) in Table 1 are confirmed by the results when students' assessment yielded that they were able to complete the course within the time frame ( $x=4.64$ ). Completing a course within the given time frame can contribute to a positive and effective learning experience, where students can balance their learning with other commitments and responsibilities. This can also contribute to a sense of accomplishment and satisfaction. Consistently preparing for a class is also essential for effective learning, as it helps students stay engaged and focused, develop a deeper understanding of the course material, and perform well on assessments. Preparation is a significant predictor of performance (Halford, 2017). It contributes to developing good study habits, time management skills, and attitude, which positively correlates with academic success. important for success in both academic and professional contexts (Tus, 2020). The respondents consistently prepared for their class ( $X=4.53$ ).

Overall, the survey results, with a mean score of 4.58 and a very low standard deviation of .551 indicated that the students in the course were highly engaged and involved. Most





respondents rated their effort level as very positive, demonstrating that they recognized the importance of their hard work and dedication in achieving their learning goals. Students felt challenged to learn more than expected, contributing to an intellectually stimulating and rewarding learning experience. The course was well-organized and manageable within the given time frame, allowing students to complete tasks without undue stress or difficulty. Finally, students' consistent preparation for the course indicates that they were motivated and committed to their learning. This connotes that the course was effective in engaging and involving students to take ownership of their learning, to develop good study habits and time management skills, and achieve their learning goals within the prescribed time frame.

**Table 2**

***Students Engagement and Involvement in CEU Course with Coursera***

<i>Engagement and Involvement</i>	<i>Mean</i>	<i>S.D</i>	<i>Descriptor</i>
1. I have put great effort into advancing my learning in this course.	4.58	.597	Strongly Agree
2. I have been challenged to learn more than I expected in this course.	4.56	.617	Strongly Agree
3. I completed the course within the time frame.	4.64	.568	Strongly Agree
4. I consistently prepared for my Coursera class.	4.53	.651	Strongly Agree
Total	4.58	.551	Strongly Agree



Table 3 shows the results of student's assessment of the Course Structure. Based on the assessment, the respondents believed that expectations for student learning were clearly defined ( $X=4.63$ ). Clearly defined expectations for student learning are essential for effective teaching and learning. When expectations are clear, students can better focus their efforts and energy on achieving their learning goals (Baber, 2020).

Respondents claimed that the course has increased their interest in their field of study ( $X= 4.52$ ) and they believed that it is important for them to learn the course ( $X=4.61$ ). Increasing interest in a field of study connotes that they are motivated. Motivation to further pursue learning and career contributes to the development of a deeper understanding of the subject matter, and passion for learning, which can lead to greater engagement and performance in academic and professional contexts (Judge, 2019). They also believed that the course gave them the confidence to do more advanced work in the subject. ( $X=4.56$ ) Gaining the confidence to take on new challenges adds up to the development of a growth mindset and a willingness to learn and take risks, these are important qualities for success in both academic and professional contexts. Stankov, L. (2013).

In terms of grading practices ( $X=4.63$ ) and measurements, the respondents believed that they were fairly assessed ( $X=4.64$ ) through quizzes, exams, projects, and other graded work that measured their knowledge of the course material ( $X=4.62$ ). A fair assessment is critical for ensuring students are evaluated based on their true learning and understanding of the course material (Heritage, 2018). When an assessment is unfair or unreliable, students may feel discouraged or unfairly treated, which can negatively impact their motivation and engagement in the course (William,2018). Meaningful assessments promote deeper learning, such as





performance-based assessments and self-assessments, which were associated with higher levels of student achievement and engagement (Birenbaum, 2019).

Moreover, the readings were appropriate ( $X=4.62$ ) and the written assignments contributed to their knowledge and understanding of the subject ( $X=4.60$ ). For them, the CEU course with blended Coursera was challenging ( $X=4.57$ ), it made them think ( $X=4.66$ ). Having appropriate readings can help students understand the concepts and theories presented in the course and can provide them with additional context and information to help them engage more deeply with the material (Capin,2022).

The overall results of a mean of 4.62 and a very low standard deviation of .526 is a positive indication that the course structure was well-designed with assessment methods that are fair, and it effectively measures student learning, student progress, and understanding. It connotes that the instructor successfully structured the course and used various materials and assessment methods that accurately helped achieve learning outcomes and overall course satisfaction. Instructor expertise is associated with student satisfaction and academic achievement in online courses (Hung et al., 2020).

**Table 3**

***Students' Assessment on Course Structure in CEU Courses with Blended Coursera***

<i>Course Structure</i>	<i>Mean</i>	<i>S.D</i>	<i>Descriptor</i>
1. This class has increased my interest in this field of study.	4.52	.659	Strongly Agree
2. This course gave me the confidence to do more advanced work in the subject.	4.56	.600	Strongly Agree





3. I believe that what I am being asked to learn in this course is important.	4.61	.557	Strongly Agree
4. The readings were appropriate to the goals of the course.	4.62	.555	Strongly Agree
5. The written assignments contributed to my knowledge of the course material and understanding of the subject.	4.60	.585	Strongly Agree
6. Expectations for student learning were clearly defined.	4.58	.598	Strongly Agree
7. Student learning was fairly assessed (e.g., through quizzes, exams, projects, and other graded work).	4.63	.544	Strongly Agree
8. Exams/assignments were a fair assessment of my knowledge of the course material.	4.62	.564	Strongly Agree
9. The grading practices were clearly defined.	4.63	.553	Strongly Agree
10. The grading practices were fair.	4.61	.566	Strongly Agree
11. The examinations/projects measured my knowledge of the course material.	4.64	.540	Strongly Agree
12. This course was challenging.	4.57	.632	Strongly Agree
13. This course made me think.	4.66	.536	Strongly Agree
Total	4.60	.526	Strongly Agree

Based on Table 4, students would highly recommend the course with blended Coursera to other students ( $x=4.57$ ) it met their expectations for what they believed a high-quality course should entail ( $X=4.55$ ); it had a high educational impact ( $x=4.56$ ) and helped progress toward their degree ( $X=4.53$ ).





Combining the results of the items, having an overall mean of 4.55 and a standard deviation of .602, means that the course had a significant and positive effect on the educational or learning experience of the student. The participant's willingness to recommend the course to other students is an indication that it could benefit other students, which supports the results of meeting or exceeding their expectations. Moreover, the course significantly impacted their education and helped progress toward their degree. The impact can be in acquiring new knowledge, gaining new skills, developing critical thinking abilities, or other educational outcomes. This suggests that the course provided relevant and beneficial knowledge and skills that can be applied to the student's field of study. It is safe to say they were satisfied with their overall experience and the quality of learning the course offered.

**Table 4**

***Students' Assessment On the Quality and Impact of Their CEU Course with Coursera***

<b><i>Overall Rating</i></b>	<b><i>Mean</i></b>	<b><i>S.D</i></b>	<b><i>Descriptor</i></b>
1.I highly recommend this course with blended Coursera to other students.	4.57	.615	Strongly Agree
2.Overall, this course met my expectations for the quality course.	4.55	.626	Strongly Agree
3.This course had a high educational impact.	4.56	.641	Strongly Agree
4.This course was useful in my progress toward my degree.	4.53	.643	Strongly Agree
Total	4.55	.602	Strongly Agree

Tabular values in Table 5 show no significant difference in the assessment of the respondents blending the Coursera course when they are grouped according to their campus as







suggested by the p-values which are all greater than 0.05 level of significance. Although the mean ratings obtained for each domain of the assessment of blending Coursera are different from each campus, their differences are not statistically significant. Thus, the evaluation of the students coming from the three (3) campuses of CEU is statistically the same. This means that regardless of the Campus on which the students took the CEU Course with blended Coursera, the assessment will remain the same.

**Table 5**

***Comparison of the Assessment of the Coursera Courses when Respondents Are Grouped According to their Campus***

		Mean	S.D.	F-value	p-value	Sig
Course Materials	Manila	4.68	0.502	.374	P = 0.688 > 0.05	NS
	Makati	4.63	0.483			
	Malolos	4.72	0.564			
	Total	4.67	0.505			
Engagement and Involvement	Manila	4.59	0.556	1.243	P = 0.291 > 0.05	NS
	Makati	4.52	0.532			
	Malolos	4.69	0.574			
	Total	4.58	0.551			
Course Structure	Manila	4.64	0.524	.762	P = 0.468 > 0.05	NS
	Makati	4.55	0.504			
	Malolos	4.66	0.577			
	Total	4.60	0.526			
	Manila	4.59	0.573			





Quality and Educational Impact	Makati	4.47	0.605	1.449	P = 0.237 > 0.05	NS
	Malolos	4.65	0.653			
	Total	4.55	0.602			

It can be gleaned from the table that there is a significant difference in the assessment of the students blending Coursera courses with their course when grouped according to their schools/programs, as shown by the p-values, which are less than 0.05 level of significance. Considering the results of the Post Hoc and the obtained mean, it can be noted that the evaluation of the Dentistry students is found to be statistically lower than the other program/schools in terms of each domain in the evaluation of the Coursera Course: Course Materials, Engagement and Involvement, Course Structure and the Overall Quality and Educational Impact. The dentistry students gave a lower assessment compared to other students.

**Table 6**

***Comparison of the Assessment of the Coursera Courses when Respondents Are Grouped***

***According to their Programs/Schools***

		Mean	S.D.	F-value	p-value	Sig	Remarks
Course Materials	Dentistry	4.48	0.546	2.668	P = 0.023 < 0.05	S	Dent. VS Education Dent. VS Hospitality Mgt. Dent. VS Business Admin.
	Education	5.00	0.000				
	Hospitality Mgt.	4.70	0.505				
	Business Admin.	4.77	0.495				
	Pharmacy	4.61	0.456				





	Sci. Tech.	4.74	0.427				
	Total	4.67	0.505				
Engagement and Involvement	Dentistry	4.40	0.591	2.258	P = .050 = 0.05	S	Dent. VS Education Dent. VS Hospitality Mgt. Dent. VS Business Admin. Educ. VS Pharmacy
	Education	4.89	0.220				
	Hospitality Mgt.	4.61	0.535				
	Business Admin.	4.70	0.582				
	Pharmacy	4.47	0.499				
	Sci. Tech.	4.65	0.486				
	Total	4.58	0.551				
Course Structure	Dentistry	4.44	0.576	2.646	P = 0.024 < 0.05	S	Dent. VS Education Dent. VS Business Admin. Educ. VS Pharmacy
	Education	4.97	0.078				
	Hospitality Mgt.	4.62	0.560				
	Business Admin.	4.75	0.423				
	Pharmacy	4.49	0.447				
	Sci. Tech.	4.66	0.442				
	Total	4.60	0.526				
Quality and Educational Impact	Dentistry	4.37	0.607	2.507	P = 0.032 < 0.05	S	Dent. VS Education Dent. VS Hospitality Mgt. Dent. VS Business Admin. Educ. VS Pharmacy
	Education	5.00	0.000				
	Hospitality Mgt.	4.59	0.613				
	Business Admin.	4.65	0.654				
	Pharmacy	4.42	0.532				





	Sci. Tech.	4.63	0.509				
	Total	4.55	0.602				

### Conclusions

Blending Coursera in CEU Courses has a significant effect on the quality of the course and has a positive educational impact on students' learning. The course materials effectively meet students' learning needs, which include assignments, readings, problems, laboratory experiments, videos, graded assignments, tests, and assessments in a well-organized manner. It seamlessly works together to provide a comprehensive learning experience and helps reinforce and understand underlying concepts to improve students' knowledge and skills. Additionally, these materials effectively engage and involve students, as seen in their efforts to advance their learning, their consistency in preparing for their classes and completing the course within the required time frame.

The CEU courses with Coursera have a clear structure and expectations, which pique student interest in their field of study and increase their confidence in their ability to do advanced work. Students recognize the importance of learning the course material and are satisfied with the assessment, which measures their knowledge. The CEU Course with blended Coursera is considered challenging and enhanced thinking skills among students.

The course significantly and positively affects the educational or learning experience of the student. The willingness to recommend it indicates that it could benefit other students and help them progress toward their degree. The course provides relevant and valuable knowledge and skills, and students are satisfied with their overall experience and the quality of learning it



offers. These findings hold that there were no significant differences in students' assessment for each criterion being tested regardless of the campus. However, it is noteworthy that dentistry students' assessments were comparatively lower than those in other programs.

### **Recommendations**

The results of this study have highlighted several findings. the following actions are hereby recommended to improve these undertakings further:

1. Based on the positive impact on students' learning experiences, continuous integration and expansion of Coursera into CEU Courses.
2. Develop a training program for faculty to equip them with the necessary skills to effectively implement the blending of Coursera into their courses
3. Regular evaluation of the courses must be done to identify areas for improvement and ensure that student's learning needs are being met.
4. Encourage faculty to share best practices with other faculties to help them effectively blend Coursera into their courses which ultimately leads to a widespread adoption
5. Address the lower assessment from dentistry students to take appropriate measures to ensure all students benefit from this endeavor.



## References

- Al Mamun, M.A., Lawrie, G. Student-content interactions: Exploring behavioral engagement with self-regulated inquiry-based online learning modules. *Smart Learn. Environ.* 10, 1 (2023). <https://doi.org/10.1186/s40561-022-00221-x>
- Amanda Rollins. (2018, September 3). eLearning Industry. Retrieved from eLearning Industry: <https://elearningindustry.com/whats-a-mooc-history-principles-characteristics>
- Ayo, E.B.. (2017). A portfolio towards the Development of Cloud University. 12. 78-86. 10.3923/jeasci.2017.78.86.
- Birenbaum, M., & Feldman, A. (2019). Assessment and student learning: A holistic approach. *Journal of Education and Learning*, 8(4), 162-174.
- Business World. (2021, November 17). Business World. Retrieved from Business World: <https://www.bworldonline.com/labor-and-management/2021/11/17/411435/coursera-initiates-more-projects-in-phl-its-3rd-fastest-growing-market/>
- Capin, Philip & Hall, Colby & Stevens, Elizabeth A. & Steinle, Paul & Sanderson Murray, Christy. (2022). Evidence-Based Reading Instruction for Secondary Students With Reading Difficulties Within Multi-Tiered Systems of Support. *TEACHING Exceptional Children*. 004005992210796. 10.1177/00400599221079643.
- Coursera. (2023). Serve the World Through Learning. Retrieved from Coursera: <https://partnerships.coursera.org/university/global-reach>
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Vasquez Heilig, J. (2005). Does Teacher Preparation Matter? Evidence about Teacher Certification, Teach for America, and



- Teacher Effectiveness. Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas, 13( ), 1-48.
- Dweck, C. S. (2008). Brainology: Transforming students' motivation to learn. Independent school, 67(2), 110-119.
- Dylan, W. (2018). "The Role of Assessment in Advancing Teaching and Learning" by in the journal "Educational Assessment, Evaluation and Accountability"
- Hasnan B. (2020). Determinants of Students' Perceived Learning Outcome and Satisfaction in Online Learning during the Pandemic of COVID-19. Journal of Education and eLearning Research, 7(3): 285-292.
- Hattie, J. (2009). Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement. 10.4324/9780203887332.
- Heritage, M. published in 2018 "The Relationship between Assessment and Learning" . Educational Measurement: Issues and Practice.
- Judge, T. A. (2019) "Achievement Motivation and Academic Achievement: A Meta-Analytic Review". Journal of Personality and Social Psychology.
- MAUT. (2023, April 28). McGill Association of University Teachers. Retrieved from McGill Association of University Teachers: <https://www.mcgill.ca/maut/news-current-affairs/moocs/history>
- Mijares, T. S., et al. "The role of open educational resources (OERs) and web 2.0 in transforming pedagogy in higher education—implications to practice." Asian Journal of Educational Research 5.1 (2017): 14.



Reeve, J. (2018). The Role of Motivation in Learning and Performance" Journal of "Educational Psychologist".

Stankov, L. (2013). Noncognitive predictors of intelligence and academic achievement: An important role of confidence. *Personality and Individual Differences*, 55, 727-732.

Noncognitive predictors of intelligence and academic achievement: An important role of confidence.

Tus, J. (2020). The influence of study attitudes and study habits on the academic performance of the students. 10.6084/m9.figshare.13093391.v1.

University of Wisconsin–Madison. (2020, April 17). University of Wisconsin–Madison.

retrieved from <https://assessment.wisc.edu/best-practices-and-sample-questions-for-course-evaluation-surveys>.





## Academic Profile

Dr. Eliza B. Ayo is an esteemed educator with a strong background in Computer Education. She holds a Ph.D. in Education, specializing in Curriculum and Supervision, and a double master's in information technology and education. As a faculty member at Centro Escolar University since 1998, she has been dedicated to imparting knowledge and expertise to her students. Dr. Ayo's research contributions have been significant, with publications in renowned journals and presentations at international conferences. Her work primarily concerns mobile learning, educational technology, and pedagogy transformation. Dr. Ayo's research contributions have been widely recognized, earning her prestigious awards and accolades, including the "Best in Research" award by Centro Escolar University in 2015 and the "Best Paper Presentation" at the ECBA 19th Conference in Singapore in 2016.

