Effectiveness of Learning Methods Featured in Warrington College of Business Online Courses, According to Students

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Abstract

This study examines student experiences with online learning methods in business courses at the Warrington College of Business, University of Florida. Building on previous research, it identifies the most and least effective instructional methods in online education. A survey of 44 undergraduate students collected data on demographic trends, preferences, and engagement with various learning methods, including recorded lectures, live virtual sessions, and interactive tools. Findings underscore the importance of flexibility and resource accessibility in online education while highlighting the need to address participation challenges in synchronous methods. This research provides actionable insights for improving online learning strategies in higher education.

1. Introduction

Higher education institutions have adopted online and blended course formats on a large scale, especially after the COVID-19 pandemic. These changes have made education more flexible and accessible, yet questions remain about student satisfaction and the effectiveness of teaching methods in these new learning environments. Addressing these issues is critical to improving online education, especially as it becomes a permanent offering in many universities.

Salamat et al. (2018) investigated the effects of e-learning on university students' academic performance. Using a mixed-method approach, the study surveyed 300 students across multiple universities and conducted interviews to gather qualitative insights. Findings highlighted that e-learning enhances engagement, provides greater access to learning resources, and offers flexibility, which were key factors contributing to academic success. The study found that e-learning has a significant positive impact on academic performance among university students. E-learning platforms allowed students to study at their own pace, manage their time effectively, and access materials according to their schedules. Students also had enhanced access to a variety of learning materials, along with the inclusion of multimedia elements, quizzes, and forums increased student participation and motivation. Challenges were also significant, such as technical issues and self-discipline, which could affect the overall effectiveness of e-learning for some students.

Similarly, Kuo et al. (2014) explored predictors of student satisfaction in online education. Analyzing 180 responses from students enrolled in 26 online courses, the study identified Internet self-efficacy and self-regulated learning as significant contributors to satisfaction. These were measured using reliable scales, such as Eastin and LaRose’s Internet self-efficacy scale and the Metacognitive Self-Regulation subscale from the MSLQ, emphasizing

the role of confidence in technology and self-management strategies in online learning. The study identified learner–content interaction as the strongest predictor of student satisfaction in online learning, highlighting the importance of well-organized, accessible, and interactive content. The study also noted that program type, rather than course level (undergraduate or graduate), significantly influenced the impact of learner–content interaction on satisfaction.

This study focuses on the online courses offered by Warrington College of Business at the University of Florida, a top institution in Florida offering fully online programs in business administration, marketing, information systems, finance, real estate, accounting, and management. It seeks to identify which learning methods are most helpful or unhelpful according to students' own experiences and opinions.

2. Methods

2.1. *Participants and procedures*

Participants were undergraduate students at the University of Florida who had either completed or were currently enrolled in online courses through the Warrington College of Business. Attempts to reach course TAs, professors, and academic advisors within Warrington for assistance in distributing the survey were unsuccessful. Therefore, recruitment was conducted by directly emailing peers currently enrolled in online business courses. Data were collected using Qualtrics, an online survey platform integrated with the University of Florida. The survey was opened and distributed via the University's Canvas platform, unofficial Reddit page (r/ufl), and student group chats in GroupMe created for business undergraduates or students taking business courses from October to November 2024. Participant consent was obtained through the first question of the survey.

2.2. *Measures*

2.2.1. *Demographics*

The survey included five demographic questions to gather general information about the respondents: age range, grade year, major, racial identity, and sexual identity. Age range options were divided into five categories—18-20, 21-23, 24-26, 27-29, and 30+—to capture the typical undergraduate age group of 18-24 at the University of Florida. Respondents indicated their grade year as freshman, sophomore, junior, senior, or "other," with a free-response option for clarification. Seven majors within the Warrington College of Business (accounting, business administration, combination degrees, finance, information systems, management, and marketing) were provided as choices, while majors outside this college were categorized as “other,” with a free-response field. Racial identity was grouped into six categories—White/Caucasian, Black/African American, Hispanic/Latino, Asian, Native American, and Pacific Islander—with an “other” option with a free-response field. Sexual identity included male and female categories, along with an “other” option with a free-response field.

2.2.2. *Thoughts about methods featured in Warrington’s online courses*

Respondents were asked four questions to explore their experiences and perspectives on the instructional methods used in Warrington College of Business online courses. The survey provided a comprehensive list of learning methods, including recorded lecture videos, live virtual lectures, virtual office hours, proctored online exams, quizzes, writing assignments, e-books, lecture materials, past exams, traditional practice questions, adaptive "SmartBook" assignments, interactive simulations, and case studies. Some methods were supplemented with brief explanations to help students differentiate between them. Additionally, each question included an “other” option with a free-response field, allowing respondents to mention any methods not

listed or provide additional comments. The first question asked respondents which learning methods they had encountered in their Warrington online courses, allowing them to select all applicable methods. The second required respondents to choose up to three methods they found most beneficial in their learning experience. An option to select "none of the above" was included in this question. The third question explored the methods that students found unhelpful. Respondents were again instructed to select up to three choices, with an option to select "none of the above". The fourth question addressed engagement levels by asking which methods students had either skipped or completed without fully participating, allowing students to select all choices applicable and again an option of "none of the above."

2.2.3. *Free response about Warrington's online courses*

The final section of the survey provided two open-ended questions, allowing respondents to share their general thoughts and insights on Warrington's online courses. The first question invited students to describe any additional factors that positively impacted their learning experience. The second question asked students to discuss any factors that negatively impacted their learning experience.

2.3. *Data analysis*

For the demographics and multiple-choice questions, data was collected and analyzed using Excel. Tables were created to visualize the data, and percentages for each selection variable were calculated for quantitative insights. For the open-ended responses, Microsoft Copilot was utilized to extract key themes and keywords from the answers.

3. Results

3.1 *Demographics*

3.1.1 *Survey Respondent Demographics*

Table 1

Age	18-20	31	70%
	21-23	11	25%
	24-26	1	2%
	30+	1	2%
Grade Year	Freshman	3	7%
	Sophomore	26	59%
	Junior	11	25%
	Senior	4	9%
Major	Accounting	2	5%
	Business Administration	15	34%
	Combination Degrees	1	2%
	Finance	12	27%
	Information Systems	3	7%
	Management	1	2%
	Marketing	2	5%
	Other	8	18%
Race	White/Caucasian	23	52%
	Black/African American	1	2%
	Hispanic/Latino	10	23%
	Asian	9	20%
	Other	1	2%
Gender	Male	22	50%
	Female	22	50%

The survey received a total of 56 responses. However, 2 responses were excluded due to a lack of answers, and an additional 10 responses were excluded as they contained only demographic information. As a result, 44 responses with substantive data were utilized for the analysis.

The age distribution of participants revealed that the majority, 70% (31 respondents), were between 18 and 20 years old, while 25% (11 respondents) were aged 21 to 23. Only 2% (1 respondent each) fell into the 24–26 and 30+ age categories. Regarding academic standing, sophomores constituted the largest group at 59% (26 respondents), followed by juniors at 25% (11 respondents). Freshmen made up 7% (3 respondents), and seniors represented 9% (4 respondents).

When analyzing participants' declared majors, Business Administration was the most common at 34% (15 respondents), followed by Finance at 27% (12 respondents). Other reported majors included Accounting (5%), Information Systems (7%), Marketing (5%), Management (2%), and Combination Degrees (2%). An additional 18% of respondents reported “Other” majors, which included disciplines such as Biology, Criminology, and Engineering.

The racial composition of respondents showed that 52% identified as White/Caucasian, 23% as Hispanic/Latino, 20% as Asian, 2% as Black/African American, and 2% as “Other.” Gender distribution was evenly split, with 50% male and 50% female participants.

3.1.2 *Comparison with Recent College and University Demographics*

Comparisons with institutional data indicate the demographics align closely with official statistics from the University of Florida (UF) and the Warrington College of Business for Fall 2023. For race, the survey closely mirrored UF demographics (White: 50%, Hispanic/Latino: 25%, Asian: 11%, Black: 6%) and Warrington-specific demographics (White: 55%,

Hispanic/Latino: 21%, Asian: 9%, Black: 4%). A notable observation was the higher participation of Asian respondents, which may reflect a bias introduced by the researcher's Asian name, as the survey was distributed through online platforms.

The gender distribution also aligned with institutional data, showing similarity to Warrington's reported demographics (Male: 44%, Female: 56%) and UF's overall gender distribution (Male: 56%, Female: 44%). Finally, the prevalence of Business Administration and Finance majors in the survey reflects the general trends of enrollment reported by the Heavener School of Business, where these are consistently the most popular disciplines.

3.2 *Multiple Choice Section Analysis*

Table 2

Method	Experienced	Found Helpful	Found Unhelpful	Not Participating
Recorded Lecture Videos	42	17 (40%)	12 (29%)	12 (29%)
Virtual Live Lectures	25	2 (8%)	8 (32%)	12 (48%)
Virtual Office Hours	19	2 (11%)	7 (32%)	12 (63%)
Proctored Online Exams	41	1 (2%)	15 (37%)	1 (2%)
Quizzes	41	4 (10%)	3 (7%)	6 (15%)
Writing Assignments	26	1 (4%)	9 (35%)	5 (19%)
Reading e-Books	37	2 (5%)	14 (38%)	14 (38%)
Lecture Materials	39	23 (59%)	2 (5%)	6 (15%)
Previous Exams	37	29 (78%)	0 (0%)	2 (5%)
Traditional Practice Questions	22	11 (50%)	2 (9%)	3 (14%)
Adaptive SmartBook Assignments	38	9 (24%)	5 (13%)	8 (36%)
Interactive Simulations	30	9 (30%)	4 (13%)	7 (23%)
Case Studies	16	2 (13%)	5 (31%)	4 (25%)

The survey assessed student preferences and experiences with various online learning methods. Below, each method is discussed in detail, including the percentage of participants who found it helpful, unhelpful, or chose not to participate.

Recorded Lecture Video was one of the most widely used methods, with 42 students (95%) indicating they had experience with it. Of these, 17 (40%) found it helpful, while 12 (29%) each reported it as unhelpful or chose not to participate. Recorded lectures provide time flexibility but may be underutilized when ungraded.

Only 25 students (57%) reported participating in virtual live lectures, making it one of the least utilized methods. Among them, just 2 (8%) found it helpful, while 8 (32%) found it unhelpful, and 12 (48%) did not participate. This method's low helpfulness may stem from the lack of time flexibility compared to recorded lectures.

Nineteen students (43%) used virtual office hours, which includes the office hours for both professors and teaching assistants. However, just 2 (11%) found it helpful, while 7 (37%) considered it unhelpful, and 12 (63%) chose not to participate. Similar to live lectures, virtual office hours may suffer from scheduling conflicts and the ungraded nature of the method.

Forty-one students (93%) experienced proctored online exams, but only 1 (2%) found them helpful, while 15 (37%) found them unhelpful. Just 1 (2%) did not participate. Students cited challenges such as strict monitoring and technological issues, which likely contributed to the low helpfulness rating.

Quizzes had high participation, with 41 students (93%) taking quizzes. Of these, 4 (10%) found them helpful, 3 (7%) unhelpful, and 6 (15%) did not participate. While not polarizing, quizzes appeared neutral in student engagement and effectiveness.

Only 26 students (59%) experienced writing assignments. Of these, just 1 (4%) found them helpful, while 9 (35%) found them unhelpful, and 5 (19%) did not participate. The relatively low helpfulness may relate to students' perception of relevance or the nature of writing tasks.

Among 37 students (84%) who read e-books, 2 (5%) found them helpful, while 14 (38%) found them unhelpful, and 14 (38%) did not participate. Students may find e-books unengaging compared to interactive or application-based methods.

Thirty-nine students (89%) accessed lecture materials, which include the PowerPoint slides, lecture notes, and other materials that can be used when listening to the lectures. with 23 (59%) rating them as helpful—the highest percentage among the methods studied. Only 2 (5%) found them unhelpful, while 6 (15%) did not participate. This indicates that well-structured lecture materials significantly support learning.

Thirty-seven students (84%) used previous exams as a study tool. An overwhelming 29 (78%) found them helpful, the highest effectiveness score among methods. Only 2 (5%) did not participate, and none found this method unhelpful, reflecting its utility in exam preparation.

Twenty-two students (50%) practiced with traditional questions. Among these, 11 (50%) found the method helpful, 2 (9%) unhelpful, and 3 (14%) did not participate. This method remains effective for those who engage with it.

Adaptive SmartBooks were used by 38 students (86%). Nine (24%) found them helpful, while 5 (13%) found them unhelpful, and 8 (36%) chose not to participate. The method’s interactivity may appeal to some but not all learners.

Interactive simulations engaged 30 students (68%). Nine (30%) found them helpful, 4 (13%) unhelpful, and 7 (23%) did not participate. Simulations offer practical application but may

lack wide applicability across disciplines.

Case studies, used by 16 students (36%), saw just 2 (13%) find them helpful, while 5 (31%) found them unhelpful, and 4 (25%) did not participate. These results suggest case studies may be niche tools that depend on the class or instructor.

As for additional information, two students (5%) found none of the methods helpful, while three (7%) found none unhelpful. Ten students (23%) reported not participating in any methods. A notable additional response mentioned "Study Edge," a private tutoring service, as a helpful resource. One participant stated that the perceived effectiveness of these methods depends heavily on the class and instructor.

3.3. *Free Response Section Analysis*

3.3.1. *Positive Key Factors*

Table 3

Positive Key Factor	Frequency
Flexibility (schedule, pacing)	8
Ability to watch recorded lectures	4
Clear course structure	3
Organized online materials	2
In-person lectures	2

The open-ended responses highlighted key factors that contributed to students' positive and negative experiences with online learning methods. The most frequently mentioned benefit was flexibility, cited by 8 students. This included the ability to schedule learning at convenient times and pace themselves. Four students specifically noted that recorded lectures were helpful, allowing them to revisit content as needed. A clear course structure (3 mentions) and organized

online materials (2 mentions) were also valued. Additionally, 2 students expressed appreciation for having in-person lectures available, even in a predominantly online format, as this added a sense of balance to their learning experience.

3.3.2. *Negative Key Factors*

Table 4

Negative Key Factor	Frequency
Professors' teaching quality/methods	8
Difficulty with proctored exams	3
Lack of engagement/personal connection	4
Disparity between learning materials and exams	2
Disconnection from students/UF community	2
Unstructured lessons	2

The quality of teaching methods was the most reported negative aspect, mentioned by 8 students. This often referred to professors' ineffective delivery of material in an online setting. Lack of engagement or personal connection was another significant concern, cited by 4 students, indicating a desire for more interaction with instructors and peers. Proctored exams presented challenges for 3 students, who found them stressful or logistically difficult. Other concerns included a disconnect from the UF community (2 mentions), unstructured lessons (2 mentions), and mismatches between learning materials and assessments (2 mentions). These free responses underline the importance of flexibility, organization, and engagement in the online learning environment, while also pointing to areas where improvements can enhance the student experience.

4. Discussion

4.1 *Discussion from Multiple Choice Analysis*

Recorded lecture videos and lecture materials stand out as methods students found most helpful, with 40% and 59% of participants, respectively, highlighting their usefulness. These methods offer flexibility, allowing students to revisit content at their own pace. Additionally, previous exams were rated as helpful by 78%, suggesting students value resources that mimic assessment conditions. These preferences align with free response mentions of flexibility and clear structure as positive factors in the online learning experience.

Proctored online exams received significant negative feedback, with 37% labeling them unhelpful. This aligns with free-response comments highlighting technical difficulties and stress associated with these assessments. Virtual live lectures and office hours also scored poorly, with only 8% and 11% finding them helpful, respectively. The unpopularity of these methods may stem from their lack of flexibility and the challenges of maintaining engagement in a virtual setting.

Participation varied widely across methods, with recorded lecture videos, quizzes, and proctored exams having the highest levels of engagement (all above 40 participants). Conversely, methods like virtual office hours and case studies had low participation, with only 19 and 16 students, respectively, engaging in these methods. This disparity suggests a preference for asynchronous or easily accessible methods over those requiring live or specialized interaction.

The findings highlight a trade-off in student preferences: flexibility is highly valued, but it often comes at the cost of personal engagement and interactive learning. While students appreciated organized materials and resources tailored for independent study, methods requiring real-time participation or rigid structures were less favorably received.

4.2 *Discussion from Free Response Analysis*

The emphasis on flexibility aligns with the high number of students who found recorded lectures helpful (40%) and lecture materials (59%). These methods allowed for independent pacing and review, which is a significant advantage of online learning. Conversely, the dissatisfaction with teaching quality and lack of engagement echoes the lower helpfulness ratings for virtual live lectures (8%) and virtual office hours (11%), as these require direct interaction and effective delivery, areas that some professors struggled to adapt to in an online format.

The concern about proctored exams being stressful, as mentioned by 3 students, is reinforced by the quantitative finding that 37% found this method unhelpful. The logistical challenges and technical requirements, such as the use of cameras and ID scanning, likely contributed to this negative sentiment. Similarly, the lack of engagement cited in the free responses aligns with the perception of online methods as impersonal, reflecting a broader challenge in replicating in-person connections in virtual environments.

The contrast between the positive focus on flexibility and the negative focus on engagement underscores a key tension in online learning. While students value the ability to tailor their schedules, this often comes at the cost of real-time interaction and community-building. For example, in-person lectures were mentioned positively by 2 students, suggesting that some degree of hybrid learning might address this gap.

To address concerns about unstructured lessons and mismatches between materials and exams, clearer communication and alignment between coursework and assessments are needed. Additionally, incorporating more interactive and engaging methods, such as live polls or group discussions during virtual lectures, might improve engagement without compromising flexibility.

4.3. *Limitations and Challenges*

This study faced several limitations that may affect the generalizability of its findings. First, the lack of freshman participation is likely due to the survey's focus on major-specific courses that require prerequisites, which freshmen are less likely to have completed. Additionally, the limited reach of the survey to juniors and seniors—possibly influenced by the platforms used for distribution, such as Canvas pages, Reddit, and GroupMe—skewed the age group toward younger students (18–20 years old).

Another notable limitation is the sample size of 44 participants. While this is statistically significant for exploratory research, it does not fully represent the larger Warrington College of Business student body. Moreover, the survey was open for only a few weeks, which restricted participation from students enrolled in later semesters, such as spring or summer, and potentially limited the diversity of responses.

4.4. *Implications*

The results of this study provide actionable insights for the Warrington College of Business and other academic programs that use similar online teaching methods. By incorporating students' preferences into future course designs, the college could enhance learning outcomes, including improved grades, reduced retakes of core courses, and better understanding of course materials. Furthermore, aligning teaching methods with student expectations could lead to higher class participation and overall satisfaction, fostering a more positive academic experience.

This research also highlights the need to strike a balance between flexibility and engagement in online learning. While asynchronous resources like recorded lectures are valuable, introducing interactive elements—such as live polls or small group discussions during

virtual lectures—could address students' concerns about engagement without compromising their need for flexibility.

4.5. *Recommendations for Future Research*

Future research should aim for a larger and more diverse sample size to better capture the full range of student experiences. Expanding the study period to include different semesters could also help incorporate insights from a broader group of participants. Additionally, exploring hybrid course designs that blend asynchronous resources with structured, interactive components could offer valuable perspectives on how to bridge the gap between flexibility and engagement in online education.

Investigating the impact of tailored interventions, such as training faculty in effective virtual engagement strategies or redesigning proctored exams to minimize stress, could provide practical solutions to some of the challenges identified in this study. Overall, a deeper exploration of the trade-offs between flexibility and interactivity in various disciplines could further refine online learning methods to better meet student needs.

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