How Digitally Experts are Digital Natives?
About Online Experiential Learning of Digital Marketing Students

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Abstract
The Covid19 pandemic transformed education, accelerating online and hybrid learning while exposing gaps in technology infrastructure, engagement, and equity. Experiential online learning, focusing on active engagement and applying theory to practice, emerged as a solution to these challenges. This study examines its impact on students' willingness-to-learn, ease-of-use of technology, and personal expertise during digital marketing courses, with a focus on GenZ learners, whose digital confidence might shape their learning. Using a mixed-methods approach, 178 Master's students shared qualitative insights, while 257 students completed surveys measuring key variables pre- and post-course. Results showed significant improvements in willingness-to-learn, ease-of-use, and expertise. Self-confidence moderated ease-of-use but not the other outcomes, benefiting all students equally in motivation and expertise. The findings highlight experiential learning's effectiveness in boosting skills and engagement, emphasizing structured, interactive methods for GenZ.
Keywords: Online Experiential Learning, Digital Natives, Digital Marketing, Mixed method, Expertise, Ease-of-Use, Willingness-to-Learn

Introductory Literature Review

Context. The Covid-19 pandemic has catalyzed a profound transformation in the educational landscape, ushering in hybrid teaching models and rapid adoption of online platforms (Gewin, 2020). While these changes have spurred innovation in pedagogical practices, they have also exposed significant challenges, particularly concerning technology infrastructure, student engagement, and educators' readiness to deliver effective online learning experiences (Zou et al., 2021; Zhai and Du, 2020; Zhang et al., 2020). Despite these obstacles, educators have demonstrated remarkable adaptability, highlighting the resilience of the education sector in navigating unprecedented challenges (Cavanaugh et al., 2023; Christian et al., 2021). This transition has been prompting educators to explore innovative pedagogical approaches to ensure continuity in learning (Sahu, 2020).

This context led to a paradigm shift in educational practices, necessitating a reevaluation of traditional teaching methods and a greater emphasis on adaptability and innovation (Christian et al., 2021). However, there still exists a potential disparity between students' performance and actual learning (Guo, 2020). This gap has been particularly evident in the domain of student engagement, where the lack of direct interaction in online environments can lead to reduced motivation and focus (Bigne et al., 2018; Djedidi, 2021). This can be reduced thanks to experiential learning where *"an individual's life experiences, education and work play a central role in their learning and understanding of new knowledge"* (Bartle, 2015).

In the domain of marketing education, these challenges are amplified by the increasing demand for experiential learning—a pedagogical approach that emphasizes real-world applications and interactive, student-centered learning experiences (Kolb, 2014). Experiential learning is particularly relevant for Generation Z students, who exhibit unique learning preferences shaped by their digital upbringing, including a desire for autonomy, real-time feedback, and on-demand resources (Yuen et al., 2008; Dede and Lidwell, 2023). This generation's digital proficiency and preference for self-directed learning experiences underscore the need for educational institutions to embrace innovative approaches that cater to their evolving needs and

preferences (Spanjaard et al., 2018; Jiusto and DiBiasio, 2006). However, little attention has been given to how marketing students adapt to online experiential learning environments, especially in the post-Covid era, where hybrid and online models have become a norm rather than an exception (Meng et al., 2024).

This study addresses this gap by exploring the adaptation of Master's students in digital marketing classes to online experiential learning, focusing on individual factors such as willingness-to-learn, ease-of-use of technology, personal expertise, and self-confidence in technology use. Unlike previous research, which often relies on literature from non-marketing domains, this paper anchors its discussion within the marketing discipline to ensure relevance for its audience. By combining qualitative and quantitative methods, it provides insights into how digital marketing students navigate the complexities of online experiential learning, offering implications for educators to design effective digital learning environments.

In particular, this paper seeks to answer the following questions: How does online experiential learning influence students' willingness to learn, ease-of-use of digital tools, and personal expertise? To what extent does self-confidence in technology use moderate these relationships? By addressing these questions, we aim to contribute to the ongoing discourse on adapting marketing education to the evolving needs of a post-Covid digital learning landscape.

In essence, the convergence of the *Covid-19* pandemic and the emergence of Generation Z learners has precipitated a paradigm shift in educational practices, necessitating a reevaluation of traditional teaching methods and a greater emphasis on adaptability and innovation (Cavanaugh et al., 2023; Christian et al., 2021). By acknowledging the challenges and opportunities of this transformative period, educators can effectively navigate the complexities of the modern educational landscape and ensure that learners are equipped with the skills and resources necessary to thrive in an increasingly digital world (Timmis et al., 2016).

Transition to online learning. Overnight, students found themselves thrust into the world of online learning as a result of the *Covid*-19 pandemic. This sudden transition posed significant challenges as they navigated new digital platforms, adjusted to remote instruction, and grappled with the absence of face-to-face interactions with instructors and peers. The shift required not only technological adaptation but also a reevaluation of study habits, time management skills, and methods of communication. Many students experienced a decline in motivation and a sense of disconnection from their peers and instructors (Means and Neisler, 2021). Despite these hurdles, many students demonstrated resilience and adaptability, finding innovative ways to engage with course material and maintain academic progress amidst unprecedented circumstances. The research has underscored how instructors and class expectations have been adjusted to adapt to this abrupt transition. Moreover, it has shed light on a potential disparity between student performance and actual learning (Shim and Lee, 2020; Guo, 2020).

Online learning post Covid-19. Even if social isolation during Covid-19 reinforced opportunities for students to engage in online learning (Qian et al., 2021), when the pandemic was over, online learning permeated the learning routine. Indeed, some studies (Haningsih and Rohmi, 2022) reported the way online learning affected students' preference and learning routine. Bachelor's and master's students claimed resuming face-to-face learning or at least hybrid methods as it is better for understanding and collaborating. Besides, doctoral students expressed their preference for face-to-face learning since it is perceived as better for understanding the material, building communication, and collaborating.

Marketing education has evolved significantly in recent years, with innovative teaching methods increasingly being employed to enhance student engagement and learning outcomes. Hansen and Wilson (2023) emphasize the importance of creativity in fostering engagement, introducing "meme-based" exercises as an innovative pedagogical tool. Similarly, Fandos-Herrera et al. (2023) highlight the critical role of personality traits in shaping students' learning outcomes and attitudes. Their research underscores the impact of active classroom

participation, particularly through structured discussions, on fostering deeper learning and positive attitudes toward the subject matter.

Meng et al. (2024) analyzed 25 researches dealing with online learning during the pandemic where results did not allow to state whether online learning is effective. However, they identified forces that alter its effectiveness such as infrastructure factors, instructional factors, social interaction, negative emotions, flexibility, and convenience. To our knowledge, previous studies never included important factors related to individuals characteristics that affect the learning process such as expertise (Benjamin, 2014), motivation (Valerio, 2012) and students' self-confidence and relationship with the technology (Pellas, 2014) which is the main gap this paper is tackling by introducing variables such as: willingness-to-learn, ease-to-use, personal expertise and self-confidence in technology use.

Experiential learning is defined by *"an individual's life experiences, education and work play a central role in their learning and understanding of new knowledge"* (Bartle, 2015; Fry et al., 2009; Kolb and Kolb, 2009). **Willingness-to-learn** reflects students' intrinsic motivation to actively participate in learning, which is a key determinant of long-term success (Valerio, 2012). **Ease-to-use** focuses on technology acceptance, an essential element of online learning, where mastery and confidence in using digital tools facilitate engagement (Serrano et al., 2019). Finally, **personal expertise** refers to the development of skills and knowledge that students acquire in an experiential learning context, beyond traditional academic outcomes. Emphasizing these aspects helps us better understand how students interact with educational technologies and adapt to a digital learning environment (Archambault et al., 2022). **Self-confidence in technology use** due to its importance in students' ability to interact effectively with online platforms, a crucial factor for **digital natives** (Kundu, 2020). While previous studies showed that the older the students (doctoral studies) the more autonomous compared to younger students in master's and bachelor's program (Rafique et al, 2021, Yu, 2021) while Haningsih and Rohmi (2022) found that there is no difference between Master's and Bachelor's students in terms of autonomy in online learning. This generation, being naturally more familiar with technology, is often perceived as having greater confidence in their digital skills, which can enhance their engagement in online learning environments (Margaryan et al., 2011). Other studies introduced the way GenerationZ self-confidence helped create a positive atmosphere in class and enhanced their participation, reduced their anxiety and created comfort with their classmates (Akbari and Sahibzada, 2020).

However, this self-confidence may vary, and we wanted to explore whether this variation influences the impact of online experiential learning on marketing learning. Our literature review helped formulating the following hypothesis:

H1a: Online experiential learning enhances the willingness-to-learn.

H1b: Self-confident students benefit more from the impact of online experiential learning on willingness-to-learn.

H2a: Online experiential learning enhances ease-to-use.

H2b: Self-confident students benefit more from the impact of online experiential learning on ease-to-use technology.

H3a: Online experiential learning enhances personal expertise.

H3b: Self-confident students benefit more from the impact of online experiential learning on personal expertise.

Research Methodology

This study uses a qualitative research and quantitative methodology followed by Creswell (2015), as this approach enables to obtain a deeper and more nuanced understanding of the digital online experiential learning during the covid-19 pandemic. By combining these two approaches, triangulating data from different sources helps validate and reinforce conclusions about use of digital technologies (Dzwigol, 2022).

Thematic analysis of open-ended responses. Of all the master's students, 178 answered the survey that includes open questions (qualitative approach). The objective is to know more about students' perceptions, motivations and hinders related to advantages, disadvantages and expectations from an ideal online class. Thematic analysis has been realized (Miles and Huberman, 2014; Hashimov et al., 2015) and was double checked by the research team for internal validity and reliability. The data are collected in accordance with ethical guidelines to meet safety, privacy, GDPR, and anonymity standards. For clarity's sake, extra quantification was realized using *TROPES* software (see Table 1 – cf. Appendix 1).

Quantitative data collection. Data are collected using surveys amongst the students enrolled in *Master's digital business* classes that use online experiential learning techniques. The questionnaires consisted of 10 items, each rated on a five-point Likert scale (1: strongly disagree to 5: strongly agree). Measured variables are: willingness-to-learn (Jones and Reynolds, 2006), ease-to-use (Davis, 1989), personal expertise (Mitchell and Dacin, 1996) and self-confidence in technology use (Fanni, 2014).

Before starting the course, 257 master's students (Male = 53%, Female = 47%) filled the first questionnaire, then they followed an online course using experiential learning pedagogy. After the end of the class, the 257 students filled a second questionnaire with the same questions. Data was processed using software *SPSS14*. Factor analysis was realized for the scales (*alpha of Cronbach* **Willingness-to-learn**$_{Before}$ = 0.803; *alpha of Cronbach* **Willingness-to-learn**$_{After}$ = 0.819; *alpha of Cronbach* **Ease-to-use**$_{Before}$ = 0.765; *alpha of Cronbach* **Ease-to-use**$_{After}$ = 0.801; *alpha of Cronbach* **Personal Expertise**$_{Before}$ = 0.697; *alpha of Cronbach* **Personal Expertise**$_{After}$ = 0.756). Hypotheses were tested with paired samples tests (Cohen et al., 2013).

Description of the class and its experiential learning pedagogy. In spring 2020, in the midst of the covid crisis, students took their course online. The students who completed the questionnaire were taking digital marketing courses in management faculties (French and Belgian). The courses were given at Master 2 level to students of around 22 years of age who, in principle, enter the job market the following year in business fields.

These students followed the class using the technologies in an active way: (creating digital marketing campaigns, with video making, using platforms for collaborative work, social media analysis, etc.). The course was usually given face-to-face to students, but had to be adapted to online teaching because of the confinement. The course was designed to be interactive, putting students in an active learning situation. The students formed groups and proposed group reflection on digital campaigns, possible interactions on platforms for collaborative work, and reflective work that addressed both the analysis of a company and its digital marketing, and the teamwork achieved (metacognitive reflection). we also ask for the use of several platforms, mini-videos (YouTube channel style), we ask for a reflection on the sector, a comparison of the players, their digital marketing strategy (mobile) and application comparison, and above all a critical perspective (with recommendations)

Results

Thematic analysis of open-ended responses helped to better understand participant experiences and gain insight into the motivations, social contexts surrounding the pedagogical practices and challenges encountered by students. Main themes and their co-occurrence with learning alone online, learning online with others and face-to-face classes are presented in Table 1 - cf. Appendix 1. Online experiential learning are the contexts where learning difficulties, technology barriers and lack of technological skills are felt the most.

Quantitative study. The Student's t-test showed a significant evolution of the concepts and helped validating H1a, H2a, and H3a: **Willingness-to-learn** (μ_{Before} = 4.377; μ_{After} = 4.498; t = 2.109; p = 0.036), **Ease-to-use** (μ_{Before} = 2.921; μ_{After} = 3.168; t = -5.719; p<0.000) and **Personal Expertise** (μ_{Before} = 3.942; μ_{After} = 4.615; t = 8.171; p = 0.001). To test the rest of the hypothesis, students' profiles were created based on their **Self-Confidence** in technology use scale as

follows: >=4: self-confident (n = 150); < 4: less-self-confident (n = 107). The t-test showed different results: Δ**Willingness-to-learn** ($\mu_{Self\_Confident}$ = -0.113; $\mu_{Less\_Self\_Confident}$ = -0.130; F = 1.026; p = 0.312; H1b rejected), Δ**Ease-to-use** ($\mu_{Self\_Confident}$ = 0.280; $\mu_{Less\_Self\_Confident}$ = 0.202; F = 6.256; p = 0.013; H2b accepted) and Δ**Personal Expertise** ($\mu_{Self\_Confident}$ = -0.140; $\mu_{Less\_Self\_Confident}$ = 0.019; F = 0.503; p = 0.479; H3b rejected).

This means that self-confident students achieve higher enhancement in terms of ease-of-use of technology thanks to online experiential learning, compared to less confident students. However, both profiles of students benefit equality from the enhancement of willingness-to-learn and personal expertise thanks to online experiential learning.

Concluding Discussion

Overnight, educators and students were shifting into the world of online experiential learning as a result of the *Covid*-19 pandemic. The shift required not only technological adaptation but also a reevaluation of study habits, time management skills and methods of communication. Despite these hurdles, many students demonstrated resilience and adaptability, finding innovative ways to engage with course material and maintain academic progress amidst.

In the contemporary digital age, Generation Z often exhibit a high level of confidence in their technological prowess, particularly concerning social media platforms and other digital tools. However, this confidence doesn't always translate into a genuine desire to learn or ease in acquiring new knowledge.

Many students grow up immersed in technology, using smartphones, social media, and various digital applications effortlessly. This exposure often leads to a sense of overconfidence in their technological abilities. They might assume that being proficient in navigating social media platforms equates to being adept at learning new skills or grasping complex concepts. Despite their comfort with technology, some students may lack intrinsic motivation to engage in meaningful learning experiences. They may prioritize passive consumption of content on social media over active participation in educational pursuits. This preference for instant gratification and entertainment can overshadow their willingness to invest time and effort in acquiring new knowledge or mastering challenging subjects.

When faced with unfamiliar or challenging learning tasks, students who rely heavily on their perceived technological savvy may struggle to adapt. Their confidence might falter when confronted with the need for sustained effort, critical thinking, or problem-solving skills. Rather than embracing learning opportunities, they may resist stepping out of their comfort zone, preferring to stick to familiar technologies and activities.

While GenerationZ often exhibit a high level of confidence in their technological prowess, particularly concerning social media platforms and other digital tools, our study showed no impact of this self-confidence on the expertise gained thanks to online experiential learning, except for ease-to-use. Online experiential learning showed significant positive impact on GenerationZ enhancement of digital skills and motivation to learn more. These results go in line with previous research calls to equip learners with the skills to thrive in the digital world (Timmis et al., 2016) and to learn how to learn (Rudolph et al., 2023; Tlili et al., 2023). This topic holds significant relevance for educators and the digital learning industry, including platforms like Coursera. This research has some limitations that can pave the way for future research. First, the digital marketing class is mandatory which induces self-selection bias. Future research can explore the nature of digital business classes and its impact on the learning process can help. Future research can also include a control group that can help better disentangle the impact of the variables chosen for the model. In future explorations, we could employ more sophisticated methods such as SEM – Structural Equation Modeling to complement the analyses with structural modeling and examine the relationships between the studied variables.

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Appendix 1

Table1: challenges and paradox of students in online experiential learning

Number	Category	alone online	online course	Face-to-face course
1	Learning difficulties	62%	27%	11%
2	More Learning	35%	26%	39%
3	Technology barriers	64%	31%	5%
4	Lack of technological skills	50%	35%	15%
5	Lack of communication	/	81%	9%
6	Motivation to learn	14%	34%	52%
7	Autonomous learning	56%	38%	6%
8	Absenteeism	/	38%	62%