The Use of Miro in Teaching Practice

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Abstract

The COVID-19 pandemic has hugely affected our lives, including the daily work of university students and teachers. However, such difficulties can emerge as drivers for change to discover new pedagogical possibilities. Miro is a tool which can help students and teachers cope with the challenges faced during the ongoing COVID-19 pandemic. In this critical reflection, I will explore my experience of using Miro in a digital project created on the website of the Faculty of Arts at the University of Warwick in 2022. The major aim behind this reflection is to show how Miro can be used as a novel way of engaging with students in a physical classroom or virtual spaces. The article discusses using the versatile digital platform Miro as a pedagogical tool for motivating students' creativity in composition or literature classrooms. The key question that my reflection seeks to answer is 'how can teachers use Miro to increase student engagement and consequently adapt to the modern and post-pandemic needs of education?' It is expected that this reflection will deepen both teachers' and students' knowledge of Miro as well as provide teachers with a new tool and method for online teaching.

Keywords: Miro; software; digital tool; teaching; online collaboration whiteboard; COVID-19

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Introduction

One of the most difficult tasks that most teachers face, particularly in a time of pandemic, is finding ways of engaging with students in a physical classroom or virtual spaces. According to Wallgren et al., (2021), 'in an ever increasingly globalised world, where at the same time long distance travel must be limited for climate reasons, the need for online user studies will only increase even after the current pandemic' (Ibid: 1788). I further argue that the COVID-19 pandemic has heavily impinged on university education with a significant amount of teaching being converted into a distance or online format, most notably during 2020-2021 (Masalimova et al., 2022). In this regard, Alfiya R. Masalimova says: '[I]n 2020, humanity faced a coronavirus pandemic, which accelerated the shift to distant learning to the point that it became the only viable mode of education and communication' (n.p). This is also reflected in the words of both V. Viktoria and M. Aida (2020), 'in 2020 mankind faced such a problem as coronavirus pandemic, which was the main factor in the rapid transition to DL and it suddenly changed in to the only possible form of education and communication' (Ibid: 439). As noted by C. Rapanta et al. (2020), such a situation has required an 'urgent and unexpected' (923) change impacting on 'social, cognitive and facilitatory' (Ibid: 923) aspects of teaching.

Miro, which was launched in 2011 and gained popularity in the last two years due to its seamless experience and its facilitation of remote working culture, is a digital tool that may help students' engagement and creativity in classrooms.ⁱ It is an online collaborative whiteboarding platform that can be used to visualise ideas and work on projects either individually or with a team (**Figure 1**). It enables distributed teams to innovate and work effectively together, from brainstorming with digital sticky notes to planning and managing agile workflows. It helps its users including project managers, developers, and consultants co-create and bring meetings to life. It offers them a diverse set of features and membership options.

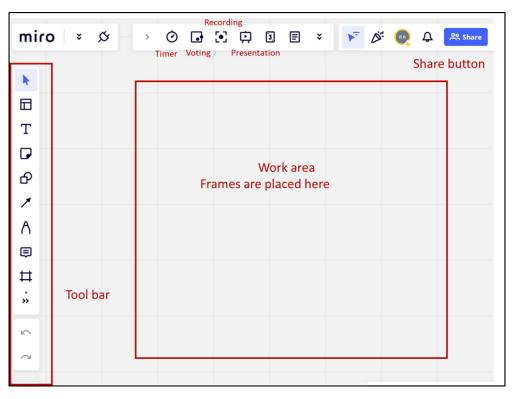


Figure 1: Miro Board [Author created image]

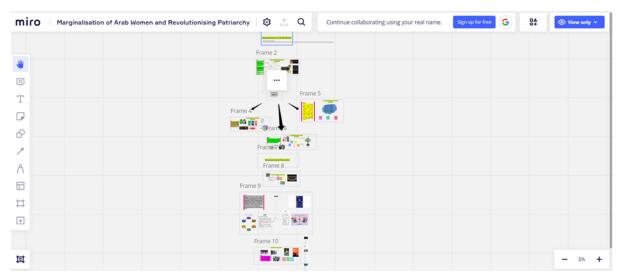
In this critical reflection, I shed light on the key capabilities and best practices for running successful remote meetings and workshops by utilising this software. I will also show the main features that this software has through a digital project that I have created and published on the website of the Faculty of Arts at the University of Warwick. ^{II} At the 119th annual PAMLA conference, I gave a presentation titled 'Using Technology to Decolonise Hegemonic Narratives' in the roundtable Increasing Student Engagement: Tools and Tricks for Teachers. ^{III} This roundtable session explored ways of engaging with students in a physical classroom or virtual spaces. Presentations during the roundtable discussed the use of websites or technology and tangible objectives for students to reach the results hoped for in composition or literature classrooms.

My experience of using Miro is worth sharing with the readers of Exchanges. I believe that this act of sharing will enhance my experience, which may quickly be forgotten if it is not shared. Additionally, it will keep the learning alive, and relevant, bridging the gap between theory and practice as well as encouraging future growth. Ultimately, it will also help educators find effective solutions for new situations. As Gibbs (**1988**) puts it: 'It is not sufficient simply to have an experience in order to learn. Without reflecting upon this experience, it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalisations or concepts can be generated. And it is generalisations that allow new situations to be tackled effectively' (**Ibid: 14**).

Outline of the Project

I have used Miro to create a project titled 'Marginalisation of Arab Women and Revolutionising Patriarchy' for the students of the Faculty of Arts at the University of Warwick (**Figure 2**). ^{iv} The project is published on the website of the Faculty of Arts. It has been also recently published in PAMLA Arts Matter and on Arts Faculty News. ^v





The topic of this project is related to my PhD, which is about contemporary Arab women writers, filmmakers, and artists in an international frame. As the sole worker on this project, I used this software to depict the severe suffering that most Arab women undergo because of the patriarchal social system, which oppresses Arab women's sexual, political and social freedom. Such a system encourages male leadership, domination, and power, while women are subject to economic dependence, violence, domestication, and the peripherals of decision-making. As a result, these repressive existing social traditions are responsible for depriving the majority of Arab women of the feeling as independent individuals. I also aimed to show how Arab women writers, filmmakers and artists challenge and revolutionise prevailing notions of gender in the male-dominated Arab world, in which men hold authority over women, children, and property. More specifically, I am interested in the themes of sexuality and war. In this regard, I reflected on the manifestations, authorities and consequences of sexual repression that many Arab women undergo. My views are expressed in (Figure 3), where I attribute some of the negative outcomes of sexual repression (e.g., honour killing) to Arab patriarchal society and its institutions.

In addition, I sought to shed light on the importance of war for raising issues of womanhood and sexuality within the context of women becoming active in conflict. In other words, I showed the ironic sense of war, specifically how the Lebanese civil war (1975-1990) paradoxically presaged and created a framework in which Arab women's political claims for equality could be made. vi The Lebanese Civil War contributed to the change of gender roles because of the social, political and economic participation of women from different religious traditions and social backgrounds. Women occupied a place in the public sphere either through combat, supportive roles, physical caretaking, or engaging in peace movements, the work force, and most importantly in the literary arena. Their engagement in war, although it drew on nationalist sentiments rather than for the purpose of achieving personal freedom, led to the fight for their rights after war. This was due to the new sense of empowerment and freedom they got through involvement in the national cause. The Miro project consists of a number of frames. vii For the purpose of this work, these frames have been filled as examples to how students may respond to the tasks.

Figure 3: A visual summary of my argument shown in the Miro project [Author Created Image]



Honour Killing

Features of Miro

With Miro and its versatile, dynamic navigation, and the integration of multimedia possibilities, one can take the advantage of a full set of collaboration capabilities for making cross-functional teamwork and organising meetings as well as workshops. This can be effectively done by using video chat, presentation, sharing, and many other features. The mind map tool that Miro provides, for example, helped me show the different means that the dominant regional patriarchal society uses to marginalise women in the Arab world and exclude them from literature and social discourse. The female body is simply a vessel that a patriarchal society makes use of or suppresses for its own agenda to obtain total power. Arab women's ignorance is nurtured by society, especially their ignorance of their own anatomy, which is equated with virtue. This has made many Arab women writers preoccupied with placing sexuality, sexual repression and emotional abuse at the centre of interest, even though it is extremely dangerous and may subject them to abuse and criticism and even death threats by those individuals or groups who are anti women's rights. (Figure 4). For the task (1) in my project, I explained that the social laws and regimes of Arab society are blamed for assigning themselves the responsibility to domesticate Arab women, and thus confining women's interests to the private or domestic sphere, in which they follow prescribed cultural roles and waste their power. Then, I asked the students to use the mind map to brainstorm the main means used by a patriarchal Arab society for marginalisation of women.

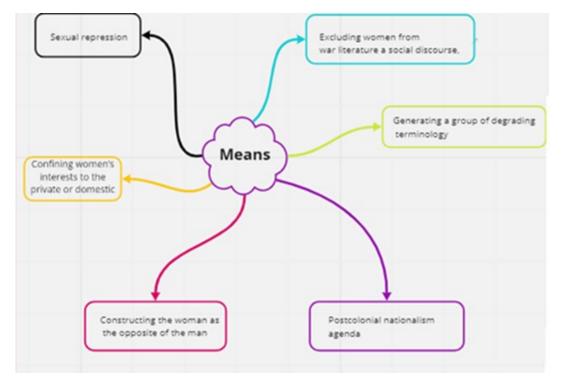


Figure 4: An example of using a mind map on the Miro board [Author Created Image]

Within the same and other frames, Miro allows me as a user to add relevant media (e.g., images, videos, quotations, etc.). For instance, I was able to upload covers of two books by Simone de Beauvoir and Toril Moi for further information about women's liberation and feminism. These books are landmarks in the history of feminism. Consequently, using mind maps, sticky notes, capturing websites, and uploading related images, videos and books help make this project more interesting and engaging for those learners interested in feminism and women's issues. Miro has several features that include:

- An infinite canvas to help its users ideate, strategize, get organised, and work with teams without constraints.
- Whiteboarding tools like sticky notes, a pen, shapes, arrows, and smart drawing, which let users easily co-create.
- 200+ best-practice templates to facilitate users' brainstorming, agile, active responses, design-thinking activities, and strategic planning.
- Integrations for users' favourite tools including Office 365, Azure DevOps, and OneDrive to streamline their workflows and see the big picture of their projects. ^{viii}

The aim behind reflecting my use of this digital tool is to change perspectives in terms of data visualisation and its tools, which make users able to process information faster and to use that information for boosting

productivity and results. This, in turn, not only broadens understanding, but also helps use insights to effect change/influence others. By showing the various benefits of using Miro and its features, both educators and learners will visualise how they can work effectively together. In this respect, S. Cottrell says: 'Critical reflection for academic and professional purposes . . . is structured, focused and conscious, with the end purpose of developing our understanding' (2017: 188). I enjoy using Miro not only because I can share my ideas on this board, but also because it is easy to learn, simple to use and conducive to collaboration and discussion, without prior understanding of the mechanism of Miro. In addition, the information that I include is automatically saved. The user does not need to worry if they add or delete anything. Another thing that I value about Miro is that it is flexible software as it is adaptable to multiple uses. For example, there is a slide show view option, and the frames order can be changed. Furthermore, similar to other software tools, e.g. PowerPoint, blank templates can be created each time I want to run a session with students, which might be of greater value in terms of saving my time in preparing classroom materials. Another thing is that its users can choose whether they would like their project to be of one consistent form or a variety of free forms. I have chosen a free form for my project to make it livelier by using harmonised colours that are available on Miro.

I have learned from this process that Miro helps its users to digitally transform their teaching material and design thinking process. Miro also helps create a list of ideas or topics to focus on for an important project, and thereby develop a user story or journey map. This facilitates running a more engaging or ground-breaking project for a team in an agile culture. Moreover, Miro relates to the theme of 'connection' as it can be connected to some other common virtual tools, such as MS Teams, Google Drive, Slack, Asana, Trello, and SurveyMonkey. It can be also used as a part of video meeting tools like Hopin or Whereby, where a user can share their Miro board (like they would their screen) and participants can add to the Miro board without opening a new browser tab.

Distinctiveness

The systematic use of online digital whiteboards in academic teaching 'facilitates far-flung users to communicate and interact with each other collaboratively' (**Prasetya, 2017: 121**). Teachers can easily integrate students or teammates. It is undoubted that many other design tools are more commonly used. However, Miro offers a different and simpler usage opportunity. Online learning is feasible only when participants have computer literacy and online access (**Fedynich, 2013: 5**). If students and instructors have insufficient digital competence, they are likely to fall behind when learning online (**Adedoyin & Soykan, 2020: 5**). Yet, Miro is

not only relatively easy to use, but it also has a wide range of tools to convey ideas and has plenty of templates for specific purposes. It allows the community to create open and free templates for anyone who needs them in addition to the official ones provided by Miro. It also gives users the freedom to do whatever they desire with the space. It is very intuitive and responds in a fluid way that it seems to know what users are trying to do. All the other diagramming tools that I have used before, such as Visio, Lucid, Omni, are comparatively clunky, restrictive and need prior understanding of diagramming and mind mapping. They are like an oldfashioned schoolteacher that wants learners to work in a formal and oriented way. They do not also provide the collaborative/cloud platform required for a collaborative work.

In addition, Miro is multipurpose software with functional features. It is a versatile tool which has a vast range of applications. For example, its whiteboard can be utilised in different ways such as a presentation editing tool or an explanation board. I think that online meetings and project discussions in online settings are the strongest feature that Miro offers compared to other tools that only provide visual screen sharing. Through the use of a digital tool such as Miro, students and teachers become both learners and designers of collaborative strategies, experimenting and discovering new ways of presenting, designing and engaging with one another and the other stakeholders (Brandao et al., 2021: 125). This confirms the types of interaction that V. A. Thurmond (2003) defines as '[t]he learners' engagement with the course content, other learners, the instructor and the technological medium used in the course' (4). Learners use mind maps, sticky notes, tables or any kind of media (images, videos, websites) to share their ideas rather than depending only on educator's ideas and materials. As a result, this would also facilitate learners' autonomy as 'Autonomy in learning is immediately related to innovation, creativity and self-efficacy' (Serdyukova & Serdyukov, 2013: 2). When students' autonomy is increased, they can have greater success in online English learning (Dafei, 2007; Lee, Pate, & Cozart, 2015) for instance. To develop learners' autonomy and motivation, students need support and satisfaction (Chen & Jang, 2010: 742). Moreover, teachers should enhance learners' autonomy by giving them more responsibility, seeding good learning attitudes which suit each individual learner, 'which will be much effective than the only a large quantity of teachers' efforts' (Dafei, 2007: 15). Thus, fulfilling those aspects, teachers need to develop both their technological skills and subject content to avoid being outdated in this modern time (Bailly, 2010). Ribbe and Bezanilla (2013) recommend that teachers should try to create as authentic a learning environment as possible. Another important feature is that the stickers or frames can be locked for the purpose of restricting board editors from accidentally

moving the content inside the frame. The option to lock and unlock frames depends on a user's plan type and access level. For these reasons, I consider Miro a suitable application to get the job done remotely in project and joint idea storms.

Advantages

The use of Miro is deemed to be positive with clear advantages, yet with a few disadvantages. Using Miro supports students' interactivity and collaboration especially in the context of online learning. This makes it potential for use in future teaching work as long as it needs no previous training, and the quality of work improves with using and thereby contributing to adapting and reorganising courses towards an online format.

Miro can be used for brainstorming ideas that help elicit students' opinions about a specific topic as a warm-up activity before a speaking task. In my project, I asked the students involved if honour killing is legal and how we can stop it. Based on students' responses, I could structure the lesson content according to students' previous knowledge and interests in order to enhance their engagement. In addition, teachers can ask an open-ended question and allow students to add their ideas in the form of post-it notes to the board. For example, task no.6 is an open-ended question, in which I divided the students into two groups. One group should brainstorm the solutions that society should do to help women achieve freedom and reclaim their rights in patriarchal society. While the other group should share their ideas regarding women's efforts in terms of getting empowered in such kind of society. The goal behind raising such openended questions is mainly to draw the students' attention to the various ways that can be used by both society and women themselves to achieve radical social change in terms of women's empowerment. Some of the proposed solutions that I got from students in both groups include liberating Arab women's bodies that have a political and social significance, freeing Arab men from their outmoded traditional ideology, raising awareness that Arab woman's real enemy is represented in an unjust society and not men as individuals, reclaiming the legitimacy of Arab women's own sexuality by shattering the polarisation of women between virgin and whore, as well as rebelling against male fervent attempts to domesticate women and keep them in the domestic sphere. In doing so, the students appreciated the possibility to take notes and sketch together on ideas as a way to document discussions in the project teams, which would be seen as a huge help in the students' digital work process. Miro would also be perceived as an effective way to mixed-mediaco-work, exemplified by game board development, where it sparks interesting discussion between all stakeholders, including the students.

Miro can be useful in evaluating students' concentration and attitude during class. As it is hard to keep students' attention during an online lesson, the teacher can create a warm-up activity to liven up and increase energy after each section of a lesson. For instance, the teacher can ask students to use an emoji or write a short sentence to show their feelings and expectations. For the task no. 2, for example, I asked the students to use an emoji to express their feelings about honour crimes, and I got various responses including sad and angry emojis. This not only draws students' attention back to the lesson, but it is also useful in helping the teacher find out whether the students are paying attention to the lesson. Besides, at the end of the class, the platform can be used to collect students' questions and expectations about the lesson content.

Miro is also useful for group work activities. Teachers can create several frames and divide the class into smaller groups. Each group will be then assigned to a frame as their own working space. For example, the groups are asked to collect information about a specific topic. Each group member will work together and post what they can find (videos, images, text, links to websites, etc.) in their own group's working area on the board. Teachers can check the progress of groups in real-time and provide assistance if necessary. After completion, the students can also see other groups' works. They can also comment and discuss directly on the board.

In addition, Miro can also be used for individual work, which will facilitate students' autonomy as mentioned before. Students can be autonomous and create their own Miro boards and use them as digital workbooks with each frame for an assignment. They can add texts or upload videos of their oral assignments and share them with their teachers for feedback. Since students will use the board for the whole semester, teachers can encourage students to respond to the feedback, edit the assignments according to students' abilities and track their progress easily. Generally, working with online platforms like Miro from home also entails some conveniences that make students continue to use those platforms even after the pandemic because it instantly provides a structure for collaboration and meetings not depending on travel and meeting in person. Hence, the pandemic has forced students and teachers to get better in digital participation methods and working with tools, such as Miro, that helps understand the digital divide and find ways to bridge it.

Limitations

Based on the experience of using Miro in online teaching, one can identify a few limitations besides its numerous advantages. Limitations include lack of structure, difficulty in locating specific posts at times, and a feeling of

isolation from peers if the course structure is asynchronous. This means its users can get lost in the onscreen information when a lot of frames are simultaneously in use. A further point that is worth mentioning is that teachers should beware of screen fatigue and the duration of activities, be they online or in classrooms. Moreover, a clear drawback when moving to online platforms when conducting online teaching is that teachers run the risk of excluding people that for some reason cannot work collaboratively using these types of platforms such as blind people. According to Phan Thach et al. (2022), another potential limitation of Miro is that a free account only allows teachers to create up to 3 interactive boards. Other features such as voting, video chat, and timer would also be unavailable for free. Finally, some challenges may emerge when conducting proper online workshops with users who are unfamiliar with digital platforms. Thus, to overcome this, it is important to spend some time on introducing the digital online platform in order to make all workshop participants comfortable in using the tool. Thus, for the purpose of making digital cocreation workshops more accessible and efficient, careful planning and organization are needed.

Conclusion

The COVID-19 pandemic has led many in education to rethink how collaboration can take place remotely and reimagine the typical online discussion using a visual discussion board. Within an online graduate course, a platform like Miro can be a great resource and method for enabling synchronous or asynchronous collaboration. Additionally, Miro is a great pedagogical methodology for implementing digital tools in educational activities and identifying the possibilities of modern digital tools in educational activities. When online teaching is performed with the support of Miro, students will be empowered to enjoy learning. Consequently, students will have greater interaction, learning motivation and concentration.

All things considered, I will continue to use Miro in the future as it is a useful tool when working with students. I will use it to demonstrate different concepts in online workshops to post-graduate colleges or co-workers and also to share knowledge with students who can be easily and cohesively involved in the teaching process. Finally, I will also be using this great tool to give a clear picture of my overall teaching planning or work strategy and findings.

Raad Khair Allah is a PhD candidate at the Faculty of Arts/ Department of English and Comparative Literary, University of Warwick, UK. The title of her thesis is 'Contemporary Arab Women Writers, Filmmakers and Artists in an International Frame'. She is a member of the seminar series organising committee at CSGW/Center for the Study of Women and Gender at the same institution. She was a candidate for the Paula Svonkin Creative Art Award at the Pacific Ancient and Modern Language Association (PAMLA) conference in Los Angeles, USA, 2022. Prior to joining the University of Warwick, she worked as an English lecturer at Damascus University (part-time, 2009-2012) and the Syrian Private University (full-time, 2014-2018).

Image List

Figure 1: Miro Board [Author created image]

Figure 2: My Project [Author Created Image]

Figure 3: A visual summary of my argument shown in the Miro project [Author Created Image]

Figure 4: An example of using a mind map on the Miro board [Author Created Image]

References

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-13. Available at:

https://www.tandfonline.com/doi/full/10.1080/10494820.2020.1813180?scroll =top&needAccess=true&role=tab [Accessed: 19 December 2022].

Bailly, S. (2010). Chapter five supporting autonomy development in online learning environments: What knowledge and skills do teachers need. *Digital Genres, New Literacies and Autonomy in Language Learning*, 81-99.

Emilio Brandao (B), Marco Adelfio, Shea Hagy, and Liane Thuvander (2021). Collaborative Pedagogy for Co-creation and Community Outreach: An Experience from Architectural Education in Social Inclusion Using the Miro Tool. Department of Architecture and Civil Engineering, Chalmers University of Technology, Sven Hultins gata 6, 412 96 Gothenburg, Sweden.

Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741-752.

Cottrell, S. (2017). *Critical Thinking Skills : Effective Analysis, Argument and Reflection* (Third edition.). Palgrave.

Fedynich, L. V. (2013). Teaching beyond the classroom walls: The pros and cons of cyberlearning. *Journal of Instructional Pedagogies*, 13. Available at: <u>https://files.eric.ed.gov/fulltext/EJ1060090.pdf</u> [Accessed: 19 December 2022].

Dafei, D. (2007). An exploration of the relationship between learner autonomy and English proficiency. Available at: <u>https://www.asian-efl-journal.com/pta_Nov_07_dd.pdf?origin=publication_deta</u> [Accessed: 19 December 2022].

Gibbs, G. (1988). *Learning by Doing: A Guide to Teaching and Learning Methods*. UK: FEU.

Lee, E., Pate, J. A., & Cozart, D. (2015). Autonomy support for online students. *TechTrends*, 59(4), 54-61.

Masalimova, A. R., Khvatova, M. A., Chikileva, L. S., Zvyagintseva, E. P., Stepanova, V. V., & Melnik, M. V. (2022). Distance Learning in Higher Education During Covid-19. *Frontiers in Education*, 7. DOI: <u>10.3389/feduc.2022.822958</u> [Accessed: 19 December 2022].

Prasetya, D., Ashar M. (2017). Design of interactive whiteboard to support Elearning. In: *1st International Conference on Vocational Education and Training*.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: refocusing teacher presence and learning activity. *Postdigital Sci. Educ.* 2(3), 923–945. DOI: <u>10.1007/s42438-020-00155-y</u> [Accessed: 19 December 2022].

Ribbe, E., & Bezanilla, M. J. (2013). Scaffolding learner autonomy in online university courses. *Digital Education Review*, (24), 98-112. Available at: <u>https://core.ac.uk/download/pdf/39131169.pdf</u> [Accessed: 19 December 2022].

Serdyukova, N., & Serdyukov, P. (2013, May). Student Autonomy in Online Learning. In: *CSEDU* (pp. 229-233). Available at: <u>https://www.scitepress.org/Papers/2013/43531/43531.pdf</u> [Accessed: 19 December 2022].

Phan Thi Ngoc Thach, Ho Dinh Van1, Nguyen Thi Huynh Loc (2022). Improving Non-Majored Freshmen's Speaking Fluency in the E-learning Environment through the MS-Teams. 1Language Institute, Van Lang University, Viet Nam, *International Journal of TESOL & Education*, Vol. 2; No. 1.

Thurmond, V. A. (2003). Examination of interaction variables as predictors of students satisfaction and willingness to enrol in future web-based courses while controlling for student characteristics. Available at: https://www.proquest.com/docview/305317558 [Accessed: 19 December 2022].

Viktoria, V., and Aida, M. (2020). Comparative Analysis on the Impact of Distance Learning between Russian and Japanese University Students, During the Pandemic of COVID-19. *Educ. Q. Rev.* 3:438–446. DOI: 10.31014/aior.1993.03.04.151 [Accessed: 19 December 2022].

Wallgren, P., Babapour, M., Eriksson, S. (2021) 'How to Make Advanced Online User Studies Meaningful', in: *Proceedings of the International Conference on Engineering Design (ICED21)*, Gothenburg, Sweden, 16-20 August 2021. DOI: 10.1017/pds.2021.440 [Accessed: 19 December 2022].

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Endnotes

^{vi} Ironic because the Lebanese civil war happened in a way contrary to what is expected and caused Arab women's empowerment.

ⁱ More information about Miro is available at: <u>https://miro.com/about/</u>.

ⁱⁱ For this project, I have got a certificate of Digital Humanities for Post Graduate Researchers from the same above institution. In addition, I was a candidate for The Paula Svonkin Creative Arts Award in the 119th annual conference of PAMLA in the United States in 2022.

^{III} PAMLA is the Pacific Ancient and Modern Language Association in the USA.

^{iv} See: <u>https://warwick.ac.uk/fac/arts/dal/modules/digitalhumanitiesforpgrs/marginalisationarabwomen</u>.

^v See: <u>https://www.pamlaartsmatter.com/pamla-2022/raad-khair-allah</u> and <u>https://warwick.ac.uk/fac/arts/news/arts_fac_news_new/?newsItem=8a17841a85e330030185e39232df1aa7,</u> respectively.

vii All objects on a board can be separated into groups using the frames feature.

viii See: https://sidequestvr.com/app/6271/miro.