ONLINE VS ONSITE: LESS SATISFACTION, BUT SIMILAR EFFECTIVENESS AND ACADEMIC INTEGRITY

Łukasz Tanaś

PhD, Department of Psychology, SWPS University (Warsaw, Poland)

Abstract

The debate about the effectiveness of online and onsite education is one of the most significant topics in recent years. The current report presents data from an obligatory Bachelor's degree course for full-time, first-year, psychology students. The course consisted of 30 didactic hours of an online lecture and 24 didactic hours of the workshop. All the workshop groups were taught by the same lecturer, but importantly, half of the workshop groups were run online (n=71) and half onsite (n=64). Due to various personal reasons, each person from this group of international psychology students decided whether to study online or onsite for the duration of the entire semester. Three groups of variables were monitored during the course: a) Study Effectiveness: 12 literature quizzes; 12 written assignments; midsemester exam; cumulative final exam; b) Academic Integrity: written assignments were submitted using Google Classroom with originality reports turned on. The algorithm compared students' work with web pages and books, flagging uncited text; c) Student Satisfaction: anonymous course evaluation (8 items, Likert-type scale). Results show that the online vs onsite students did not differ with respect to Academic Integrity, as well as mid-semester or final exams. Online students however studied less systematically, obtaining significantly lower scores on literature quizzes. Online students evaluated their workshops as less "interesting" than onsite students, but there was no difference in other aspects of evaluation (e.g. There was much to learn; the lecturer was prepared). Implications of those results are discussed.

Keywords: Online learning, student satisfaction, academic integrity, learning effectiveness.

1. Introduction

Well-designed learning experiences should find a balance between being: effective, efficient, and enjoyable (Neelen & Kirschner, 2020). In recent years online education clearly became much more efficient: easier to use, cheaper, and with more universal access. It offers an option to engage in teacher-student contact hours, or collaborative teamwork, despite physical distance. The important question is: what about the effectiveness and enjoyability of such learning experiences? The current study compares these two parameters in a Bachelor-level course offered in two modalities: online vs onsite.

2. Method

The academic year 2021/22 marked the end of COVID-19 restrictions in Poland, but globally many travel and procedural difficulties remained. Students from the international Psychology in English program at SWPS University were offered an option to study online or onsite for the duration of the spring semester. Students made their choices before the semester started and were grouped accordingly for the small class workshops (about 20 people per group), with all the lectures being held online. This enabled a comparison of the effectiveness and enjoyability of the same course, led by the same lecturer, but in partially different modalities. The design of this comparison is correlational, as it cannot be ruled out that the choices made by the students, with regards to the course modality, were non-random and related to their previous effectiveness or enjoyability of education at SWPS. It should be emphasized however that the specific context of the pandemic enhances the probability that the choice of modality, in most cases, was forced by random life-circumstance-related events, such as the requirement to travel back to one home country, problems in obtaining a Visa or other difficulties in travel or housing conditions.

2.1. Course and participants

Data comes from an obligatory Bachelor's degree course in Developmental Psychology (full-time, 1st year, 6 ECTS) at the Faculty of Psychology, SWPS University (Warsaw, Poland). Students in this study were of international origin, with ~40% coming from various European Union countries (incl. Poland), 20% coming from Turkey, 20% from post-Soviet non-EU countries, and 20% from the rest of the world. Most data were obtained from n = 64 (onsite) and n = 71 (online) students. Course evaluation data was anonymous, not obligatory, and the sample size for this set of results is lower, with n = 36 (online) and n = 38 (onsite).

The course consisted of 15 meetings / 30 didactic hours of lecture and 12 meetings / 24 didactic hours of workshops. Scheduling was almost identical for the workshops done online and onsite (all organized within the same week). Lecture preceded the workshop on a particular topic.

2.2. Learning effectiveness and academic integrity

Learning effectiveness was measured in four ways: 1) 12 literature quizzes, one at the beginning of each workshop; 2) 12 essay assignments, prepared outside of classroom time and delivered before each workshop; 3) Midsemester multiple choice exam; 4) cumulative final multiple choice exam. Both multiple choice exams were delivered online and were in an open-book format with questions checking for comprehension and application of concepts, not verbatim memorization.

Essay assignments were submitted using Google Classroom with originality reports turned on. The algorithm compared students' work with web pages and books, flagging uncited text. This enabled students to manually check their work for authenticity, and unintentional plagiarism before they turn it in their work. The teacher was unable to see this initial report. After students turn in their work another plagiarism check was automatically run and provided to the teacher.

2.3. Learning enjoyability

Learning enjoyability was measured by student course evaluation, administered online during one of the last workshops/lectures, without the presence of the teacher. It was anonymous and not obligatory. Students answered the following questions on a 5-point scale (from "definitely no" to "definitely yes"): 1) The classes were conducted in an interesting way. 2) One could learn a lot during the classes. 3) The tutor was well-prepared for the classes. 4) Classes were conducted in accordance with the syllabus. 5) Lecturer treated the participants with respect. 6) Lecturer checked whether the content was understandable for the participants. 7) There was an opportunity to ask questions or discuss issues during the classes. The last question: "How do you assess the level of requirements during the classes?" was answered on a 5-point scale with labels from "too easy", through "adequate" at the midpoint, to "too difficult".

3. Results

Online and onsite students did not differ with respect to plagiarism and most measures of learning effectiveness, apart from systematic literature quizzes, where online students performed more poorly. Online and onsite students did not differ with respect to most aspects of course evaluation apart from "interest", as online students enjoyed the course less. Results are described in Table 1.

4. Discussion

The current study compared the effectiveness and enjoyability of learning experiences in two modalities: online and onsite, during a Bachelor-level psychology course. Results clearly show that student performance in the most comprehensive, summative measures of learning effectiveness: final and midterm exams, was unaffected by their chosen modality of studies. This suggests that online and onsite collaborative work in small classes can be equally effective when it comes to achieving overall study goals in the context of individual knowledge.

Performance in individual essay assignments, as well as academic integrity in those tasks, was also not compromised in the online modality. This suggests that students working online do not necessarily feel less obligation to behave ethically while doing independent work. Student actions are not anonymous in either case and physical classroom presence seems not to give any additional benefit for ethical norm following. It should be noted however that the procedure applied in the current study was not based on unannounced plagiarism checks, but rather each student received feedback on their possible norm violation and had the option to correct this error before the information was passed on to the lecturer. Despite this, ~30% of students submitted an essay with substantial nonoriginal content at least

once and 5% tried this on 5 or more occasions (out of 12). Crucially, this did not happen more frequently in the online modality.

Finally, the only significant differences between onsite and online modalities show up in two, possibly interconnected, variables. Online students did not read the assigned textbook chapters as systematically as onsite students did, and they also judged the small group classes to be conducted in a less interesting way. A likely explanation of those results is that the current technology of online collaborative work, especially interactive, multi-participant discussions is the weakest aspect of this modality. Lively discussions are less frequent and the enjoyment of social conversation is fading. From the student perspective, this means that the main rationale for systematic reading of literature - the ability to participate in synchronous class discussions in an informed way – is less apparent. Online education is certainly more flexible, it offers each student the possibility of engaging in more tasks at their chosen time or place, but the unintended negative outcome seems to be the loss of the additional value of the small group discussion. This loss is not visible in the overall, individual assessment of general course knowledge, possibly because the standard multiple-choice final exams do not test for information gained from the idiosyncratic knowledge-building events, which emerge from well-managed group conversations.

5. Conclusions

Main conclusions from this study: a) onsite and online modalities can be generally as effective when it comes to individual core course knowledge and online modality can be considered for use when it offers more learning efficiency; b) online modality needs better tools for high pace multi-participant group discussions in order to maintain learning enjoyment; c) in absence of better conversation tools lecturers should come up with additional reasons for students to keep up with systematic literature reads.

Table 1. Comparison of learning effectiveness, integrity, and enjoyability in onsite vs online modalities.

Variable	Onsite		Online		Sig.
	M	SD	M	SD	
Workshop Literature Quizzes (total pts)	**17,7**	**3,5**	**15,7**	**4,9**	**p < 0.01**
Workshop Essay (total pts)	16,1	4,9	15,4	6,1	n.s.
Midterm exam (pts)	17,0	3,1	16,5	3,8	n.s.
Final exam (pts)	17,2	3,2	16,5	3,8	n.s.
Plagiarism (occurrences)	1,1	2,2	1,2	2,5	n.s.
The classes were conducted in an interesting way	**4,8**	**0,5**	**4,4**	**0,8**	**p < 0.01**
One could learn a lot during the classes	4,8	0,5	4,7	0,5	n.s.
The tutor was well-prepared for the classes	4,9	0,2	4,9	0,2	n.s.
Classes were conducted in accordance with the syllabus	4,8	0,4	4,8	0,5	n.s.
Lecturer treated the participants with respect.	4,8	0,4	5,0	0,2	n.s.
Lecturer checked whether the content was understandable for the participants	4,7	0,7	4,6	0,7	n.s.
There was an opportunity to ask questions or discuss issues during the classes	4,9	0,3	4,9	0,3	n.s.
How do you assess the level of requirements during the classes?	3,3	0,6	3,6	0,7	n.s.

References

Neelen, M., & Kirschner, P. A. (2020). *Evidence-Informed Learning Design: Creating Training to Improve Performance*. Kogan Page Publishers.