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Student and Teacher perceptions and experiences:  
How do they align?

ARTICLES

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# The influence of remote learning environment and use of technology on university students' behavioural engagement in contingency online learning

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**Abstract:** The shift of instruction imposed on higher education institutions by the pandemic-related restrictions bolstered the interest in students' online class participation. This study investigates university students' engagement in remote foreign language classes during the COVID-19 lockdown. While engagement is a multi-faceted construct, we only aim to explore its behavioural dimension. The authors felt compelled to acknowledge and comprehend their students' behaviour in contingency online learning (COL). Through a qualitatively oriented exploratory case study, we sought to answer two research questions related to the extent the use of technical equipment and remote physical environment influenced students' engagement. The study was conducted with students enrolled in regular, in-person Bachelor's or Master's degree courses to qualify as teachers of English at primary or

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lower-secondary schools. The results indicate that the use of technology did not prove to be a significant obstacle to online learning engagement. Concerning the remote physical environment, the learning process was compromised most significantly by the intimate character of the home-working space. We believe that our findings will help educators to rationalise their expectations and formulate best practice recommendations.

**Keywords:** Student engagement; contingency online learning; remote learning environment; technology; higher education; ELT.

## I. Introduction

The history of online learning is more than twenty years long, with no other milestone as outstanding as the worldwide pivot to online classes induced by the onset of the global pandemic in 2020. This uncompromising shift to the remote form of instruction across all levels of education immediately earned a reputation as an improvised yet valued emergency response. It was welcomed by many but hoped to never be deployed again by most.

Compared to 1148 UK academics participating in a 2020 study who perceived “online migration” as disrupting their professional performance,<sup>1</sup> the Czech higher education approach to the mandatory emergency mode in education oscillated between the rejection of most remote teaching tools other than email and an instantaneous acceptance of videoconferencing, screen sharing, online testing, or after-hours digital messaging.<sup>2</sup> The outlook for the 2020/21 academic year dashed the hopes of global online learning becoming a matter of the past, nonetheless, there was a change in optics and attitude. Now viewed as a norm, the intentionally designed online classes made fewer allowances for the reluctant participants of online instruction and emphasized full cooperation. Additionally, effective communication in contingency online learning (COL) was to be enhanced by adequate handling of the technology.<sup>3</sup>

The authors of this article, all university educators with first-hand experience of the pivot to emergency online instruction forced by the

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<sup>1</sup> Richard Watermeyer et al., “COVID-19 and Digital Disruption in UK Universities: Afflictions and Affordances of Emergency Online Migration,” *Higher Education* 81, no.3 (2021): 631-636.

<sup>2</sup> Marie Fritzová, “Kvalita distanční výuky na katedrách a ústavech historie v době covid-19,” *Pedagogická orientace* 30, no.2 (2020): 257, 260.

<sup>3</sup> cf. Thanassis Karalis and Natassa Raikou, “Teaching at the Times of COVID-19: Inferences and Implications for Higher Education Pedagogy,” *International Journal of Academic Research in Business and Social Sciences* 10, no. 5 (2020): 488.

COVID-19 pandemic, set out to explore university students' engagement in emergency online learning. Engagement is affected by a plethora of variables, many of which are outside the scope of this paper. While we recognise many cognitive, social and emotional aspects as fundamental components of engagement, we only aim to explore the behavioural phenomena. The reason is twofold. Firstly, our goal is to share empirical evidence without delving into the domains of psychology and sociology. Secondly, we strive to provide tangible results related to two significant variables directly responsible for students' engagement in online learning. Consequently, we decided to work with the following research questions:

- (1) To what extent did technical equipment influence students' engagement?
- (2) To what extent did the physical environment influence students' engagement?

Question (1) is directly related to the technical devices used in online learning. We experienced students' difficulties ranging from "too small a screen to see anything" to "I don't even have my own device." Another frequently discussed issue is using a webcam, which is controversial. Therefore, we wanted to gather data from our students to help us understand their position, which would allow us to tailor the instruction accordingly. Question (2) works with the idea that, while implementing COL, the institution does not control the remote physical learning environment. Every student comes from a different social and economic setting, which directly affects their physical learning environment, for example sharing a room with another sibling, excessive noise from outside, or lack of suitable furniture (a chair and a desk). We believe that unfavourable conditions may significantly hinder the learner as mentioned by Karalis and Raikou, whose respondents expressed discontent with the lack of social contact, specifically the spontaneity of classroom teacher - student interaction.<sup>4</sup> Conversely, some students might welcome the possibility of choosing their environment, hence why we decided to explore this area as well.

The inquiry into students' engagement in online lessons was guided by creating and processing a questionnaire focused on the correlation between students' engagement and the use of technical equipment and physical environment, respectively. The interest in uncovering the extent of students' engagement in online lessons stemmed from the need to acknowledge and

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<sup>4</sup> cf. Karalis and Raikou, "Teaching at the Times of COVID-19," 490.

comprehend the students' behaviour in COL – the form of instruction which, at least within Czech educational institutions, defined the 2020/2021 academic year.

## II. Theoretical background

### II.1. Research in student engagement

The concept of student engagement is a relatively recent theoretical model attracting the growing attention of both education theorists and practitioners.<sup>5</sup> It has proven to be a significant factor influencing academic performance and therefore, its study can have notable practical implications for course organisation, classroom management and teaching practice.<sup>6</sup>

Student engagement is a multi-faceted and dynamic construct, and as a result, it is surrounded by what Reschly and Christenson call “conceptual haziness” – the absence of a single comprehensive definition.<sup>7</sup> Trowler's literature review found that most of the reviewed articles to date lacked clear definition statements for engagement.<sup>8</sup>

The fact that student engagement research, including online engagement, is still marked by the absence of a concise definition and clearly defined categories is linked to the complexity of the construct.<sup>9</sup> Many research enquiries may require a tailored definition of student engagement, depending

<sup>5</sup> Melissa Bond et al., “Mapping Research in Student Engagement and Educational Technology in Higher Education: A Systematic Evidence Map,” *International Journal of Educational Technology in Higher Education* 17, no. 1 (2020): 1, <https://doi.org/10.1186/s41239-019-0176-8>; also cf. Sandra Christenson, Amy L. Reschly, and Cathy Wylie, “Preface,” in *Handbook of Research on Student Engagement*, eds. Sandra Christenson, Amy L. Reschly, and Cathy Wylie (New York, NY: Springer, 2012), v-vii.

<sup>6</sup> Jung-Sook Lee, “The Relationship between Student Engagement and Academic Performance: Is It a Myth or Reality?,” *The Journal of Educational Research* 107, no. 3 (2014): 177-185, <https://doi.org/10.1080/00220671.2013.807491>; Robert M. Carini, George D. Kuh, and Stephen P. Klein, “Student Engagement and Student Learning: Testing the Linkages,” *Research in Higher Education* 47, no. 1 (2006): 1-32, <https://doi.org/10.1007/s11162-005-8150-9>.

<sup>7</sup> Amy L. Reschly and Sandra L. Christenson, “Jingle, Jangle, and Conceptual Haziness: Evolution and Future Directions of the Engagement Construct,” in *Handbook of Research on Student Engagement*, eds. Sandra Christenson, Amy L. Reschly, and Cathy Wylie (New York: Springer, 2012), 3.

<sup>8</sup> Vicki Trowler, *Student Engagement Literature Review* (Heslington: The Higher Education Academy, 2010), 20, [https://www.heacademy.ac.uk/system/files/studentengagementliteraturereview\\_1.pdf](https://www.heacademy.ac.uk/system/files/studentengagementliteraturereview_1.pdf).

<sup>9</sup> Bond et al., “Mapping Research in Student Engagement and Educational Technology,” 2.

on their particular contexts and purposes. The definition proposed by Bond et al., which synthesises the key features identified by existing research, describes student engagement as “the energy and effort that students employ within their learning community, observable via any number of behavioural, cognitive or affective indicators across a continuum [...and] shaped by a range of structural and internal influences, including the complex interplay of relationships, learning activities and the learning environment.”<sup>10</sup>

A hierarchical model as established by Skinner and Pitzer consists of four main levels promoting specific kinds of engagement: the institutional level (e.g. school, church, local organisations), school level (including curricular and extracurricular activities), classroom level and finally the academic work level with engagement defined as “constructive, enthusiastic, willing, emotionally positive and cognitively focused participation with learning activities.”<sup>11</sup>

Student engagement is recognised as a meta-construct featuring three main dimensions, or subconstructs: behavioural, affective/emotional, and cognitive,<sup>12</sup> with emphasis on the interdependence and mutual overlapping of the three facets.<sup>13</sup> While behavioural engagement includes positive conduct, attention, effort, and involvement in class activities, emotional engagement concerns positive social relations with teachers, classmates, and the institution as a whole. Finally, cognitive engagement means active, self-controlled involvement in complex learning processes.<sup>14</sup>

When approaching these dimensions as a continuum, the spectrum of behavioural engagement ranges from positive involvement, manifest in attendance, in-class attention, and participation, via the more-or-less neutral position of non-engagement or indifference to the negative pole, represented by adverse behaviour.<sup>15</sup>

<sup>10</sup> Bond et al., “Mapping Research in Student Engagement and Educational Technology,” 3.

<sup>11</sup> Ellen A. Skinner and Jennifer R. Pitzer, “Developmental Dynamics of Student Engagement, Coping, and Everyday Resilience,” in *Handbook of Research on Student Engagement*, eds. Sandra Christenson, Amy L. Reschly, and Cathy Wylie, (New York: Springer, 2012), 22.

<sup>12</sup> Jennifer A. Fredricks, Michael Filsecker, and Michael A. Lawson, “Student Engagement, Context, and Adjustment: Addressing Definitional, Measurement, and Methodological Issues,” *Learning and Instruction* 43 (2016): 2; Jennifer A. Fredricks, Phyllis C. Blumenfeld, and Alison H. Paris, “School Engagement: Potential of the Concept, State of the Evidence,” *Review of Educational Research* 74, no. 1 (2004): 60, <https://doi.org/10.3102/00346543074001059>.

<sup>13</sup> Christenson, Reschly, and Wylie, “Preface,” vii.

<sup>14</sup> Fredricks, Filsecker, and Lawson, “Student Engagement, Context, and Adjustment,” 2.

<sup>15</sup> Trowler, *Student Engagement Literature Review*, 5-6.

However, disengagement is understood as a self-standing concept (not a mere absence or lack of engagement) of the same complexity as engagement, conditioned by a range of intrinsic factors such as psychological obstacles, low motivation or frustrated expectations, and extrinsic factors such as teaching quality, learning management platform (LMS) access, or financial stress.<sup>16</sup> Interestingly, online teaching and learning are listed among negative external factors as they minimise opportunities for personal interactions with peers and staff, and time spent in the academic environment.

A study focusing on individual differences in engagement impact indicates that underachieving students profit from increased engagement more than their better-performing classmates, or that engagement is translated into academic achievement differently in junior as opposed to senior students.<sup>17</sup> A slightly different typology is applied in Pittaway's engagement assessment framework, which recognises five converging elements of engagement: personal, academic, intellectual, social, and professional.<sup>18</sup>

Due to its complexity, the assessment of student engagement requires using a variety of perspectives and methods.<sup>19</sup> A practical overview of measurement tools and approaches has been provided by Fredricks and McColskey, who found that self-report surveys are the most common method to measure student engagement, followed by experience sampling (ESM) and teacher ratings.<sup>20</sup> The self-report method is particularly convenient in situations where observation methods cannot be applied, as in the case of distance learning.<sup>21</sup>

<sup>16</sup> Lucy Chipchase et al., "Conceptualising and Measuring Student Disengagement in Higher Education: A Synthesis of the Literature," *International Journal of Higher Education* 6, no. 2 (2017): 35, <https://doi.org/10.5430/ijhe.v6n2p31>.

<sup>17</sup> Carini, Kuh, and Klein, "Student Engagement and Student Learning," 13-14.

<sup>18</sup> Sharon M. Pittaway, "Student and Staff Engagement: Developing an Engagement Framework in a Faculty of Education," *Australian Journal of Teacher Education* 37, no. 4 (2012): 40, <https://doi.org/10.14221/ajte.2012v37n4.8>.

<sup>19</sup> Jacquelynne Eccles and Ming-Te Wang, "So What Is Student Engagement Anyway: Commentary on Section I," in *Handbook of Research on Student Engagement*, eds. Christenson, Sandra, Amy L. Reschly, and Cathy Wylie (New York, NY: Springer, 2012), 137.

<sup>20</sup> Jennifer A. Fredricks and Wendy McColskey, "The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-Report Instruments," in *Handbook of Research on Student Engagement*, eds. Sandra Christenson, Amy L. Reschly, and Cathy Wylie (New York: Springer, 2012), 765-766.

<sup>21</sup> Curtis R. Henrie, Lisa R. Halverson, and Charles R. Graham, "Measuring Student Engagement in Technology-Mediated Learning: A Review," *Computers & Education* 90 (2015): 48, <https://doi.org/10.1016/j.compedu.2015.09.005>.

## II.2. Research in the use of digital technology in higher education

To defend the position of digital technology in teaching as a fully integrated one, Bax predicts that “technology becomes invisible, embedded in everyday practice and hence ‘normalised’” and continues by arguing that “a wristwatch, a pen, shoes, writing—these are all technologies which have become normalised to the extent that we hardly even recognise them as technologies.”<sup>22</sup>

The teaching style of higher education, which has been traditionally considered reluctant, sceptical, or openly technophobic, is embracing the benefits of the flexibility of digital technology that make instruction more accessible.<sup>23</sup> Simultaneously, these institutions promote the role of the instructor, which, although undergoing a radical change induced by the presence of digital aids in the teaching process, remains highly visible in tasks such as communication with students, mentorship, guidance and evaluation.<sup>24</sup>

Additionally, survey data prove that several contextual factors such as “digitalisation policy and commitment of the university administration, institutional equipment, technical and educational support, basic digital skills, and technology-related teaching skills” are vital in facilitating digital learning activities.<sup>25</sup>

A theory of the blurred distinction between “traditional” and online courses presents two reasons for this process.<sup>26</sup> One is the speed of the development of online meeting tools that allow users to interact in patterns similar to those present in the classroom environment. The second reason relates to the substantial extent of research into effective learning strategies with recent findings of increased (compared to the traditional classroom) learners’ activity in online courses, which involve and induce sharing,

<sup>22</sup> Stephen Bax, “CALL—Past, Present and Future,” *System* 31, no. 1 (2003): 23, [https://doi.org/10.1016/S0346-251X\(02\)00071-4](https://doi.org/10.1016/S0346-251X(02)00071-4).

<sup>23</sup> Catherine Caws and Trude Heift, “Evaluation in CALL: Tools, Interactions, Outcomes,” in *The Routledge Handbook of Language Learning and Technology*, eds. Fiona Farr and Liam Murray (Abingdon: Routledge, 2016), 133; Joachim Schöpfel and Otmane Azeroual, “Current Research Information Systems and Institutional Repositories: From Data Ingestion to Convergence and Merger,” *Future Directions in Digital Information* (2021): 19-37, <https://doi.org/10.1016/B978-0-12-822144-0.00002-1>.

<sup>24</sup> Caws and Heift, “Evaluation in CALL,” 133.

<sup>25</sup> Sarah I. Hofer, Nicolae Nistor, and Christian Scheibenzuber, “Online Teaching and Learning in Higher Education: Lessons Learned in Crisis Situations,” *Computers in Human Behavior* 121 (2021): 3, <https://doi.org/10.1016/j.chb.2021.106789>.

<sup>26</sup> Judith V. Boettcher and Rita-Marie Conrad, *The Online Teaching Survival Guide: Simple and Practical Pedagogical Tips*, 3<sup>rd</sup> ed. (San Francisco: John Wiley & Sons, 2021), 6.



discussion, and cooperation. According to Boettcher and Conrad, learners are more exposed in online classes, especially in terms of immediate confrontation of their preparedness for the session, which enhances students' motivation to do their homework.<sup>27</sup> Conversely, these authors stress that using a large array of online tools in learning poses a certain threat to the students' ability to choose the efficient ones, for example the drawbacks of the infinity of resources provided by the internet. In addition, edutainment is mentioned as a progressive element of technology-enhanced instruction, which on the other hand, may prove distractive when used excessively.<sup>28</sup>

Maximising outcomes of learning through technology thus requires more than a simple explanation of its features and handling. Training tailored to the learners' needs to use learning technology and teachers' pedagogical strategies influences the students' attitude towards technology in learning and their learning achievements.<sup>29</sup>

Interactive technological equipment such as videoconferencing tools adds to the flexibility, pedagogical variety, and cost-effectiveness of instruction while encouraging student autonomy and their ability to self-direct learning. Additionally, online study sessions promote motivation for life-long learning, especially when both students and teachers realise that various issues may be studied differently and still relate to work and practice.<sup>30</sup>

A clear outline of approaches to online communication used in the learning process provides a discrete and manageable mode of interaction between students and teachers. There are aspects, such as the students' preference of either synchronous or asynchronous information exchange, text-based format or videoconferencing, being given more time to reflect or an opportunity to react spontaneously, that educators need to take into consideration when planning and executing online instruction, namely in emergency remote teaching (ERT) or a temporary online pivot.<sup>31</sup>

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<sup>27</sup> Boettcher and Conrad, *The Online Teaching Survival Guide*, 7.

<sup>28</sup> B. V. Ramana Murty and K. Narasimha Rao, "Digital Pedagogy – An Opportunity or a Threat?," in *Proceedings of International Conference on Digital Pedagogies (ICDP)* (2019), 3, <https://doi.org/10.2139/ssrn.3375701>.

<sup>29</sup> Philip Hubbard, "Making a Case for Learner Training in Technology Enhanced Language Learning Environments," *Calico Journal* 30, no. 2 (2013): 164-165, <https://doi.org/10.11139/cj.30.2.163-178>.

<sup>30</sup> Pirkko Jokinen and Irma Mikkonen, "Teachers' Experiences of Teaching in a Blended Learning Environment," *Nurse Education in Practice* 13, no. 6 (2013): 527-528, <https://doi.org/10.1016/j.nepr.2013.03.014>.

<sup>31</sup> Emily Nordmann et al., "Ten Simple Rules for Supporting a Temporary Online Pivot in Higher Education," *PLOS Computational Biology* 16, no. 10 (2020): e1008242/4-5, <https://doi.org/10.1371/journal.pcbi.1008242>.

In a study on the effectiveness of a synchronous online teaching platform (Blackboard Collaborate), Tonsmann emphasises that the availability of session recordings cannot fully compensate for absence from the sessions.<sup>32</sup> This confirms the outcomes of numerous previous studies that demonstrate the efficacy of synchronous online instruction compared to asynchronous forms. Breakout rooms were found to be highly effective tools for group discussions, enabling quick and easy group management and providing a comfortable discussion environment for students.

### II.2.1. Use of webcams in COL

The deployment of videoconferencing tools significantly enhances synchronous online teaching; nevertheless, the views on using webcams remain mixed. While visual presence has been reported to have a positive impact on the experience and effectiveness of online learning,<sup>33</sup> this mode of technology-facilitated interaction also entails several specific challenges. They include, above all, the problem of heightened self-awareness, altered social interaction and experience, privacy issues and the employment of new modalities.<sup>34</sup>

Privacy and presence issues generated by the use of videoconferencing platforms along with technical problems are viewed as disturbing in COL.<sup>35</sup>

<sup>32</sup> Guillermo Tonsmann, "A Study of the Effectiveness of Blackboard Collaborate for Conducting Synchronous Courses at Multiple Locations," *InSight: A Journal of Scholarly Teaching* 9 (2014): 58, <https://doi.org/10.46504/09201404to>.

<sup>33</sup> cf. Tonsmann, "A Study of the Effectiveness of Blackboard Collaborate," 54-63; Masanori Yamada and Kanji Akahori, "Awareness and Performance through Self-and Partner's Image in Videoconferencing," *Calico Journal* 27, no. 1 (2009): 1-25, <http://www.jstor.org/stable/calicojournal.27.1.1>.

<sup>34</sup> cf. Jose Eurico de Vasconcelos Filho et al., "Image, Appearance and Vanity in the Use of Media Spaces and Video Conference Systems," in *Proceedings of the ACM 2009 International Conference on Supporting Group Work* (2009), 253-262, <https://doi.org/10.1145/1531674.1531712> 2009; Nicolas Guichon and Cathy Cohen, "The Impact of the Webcam on an Online L2 Interaction," *Canadian Modern Language Review* 70, no. 3 (2014): 331-354, <https://doi.org/10.3138/cmlr.2102>; ; Lorenz S. Neuwirth, Svetlana Jović, and B. Runi Mukherji, "Reimagining Higher Education During and Post-COVID-19: Challenges and Opportunities," *Journal of Adult and Continuing Education* 27, no. 2 (2021): 141-156, <https://doi.org/10.1177/14779714209477381477971420947738>; Christine Develotte, Nicolas Guichon, and Caroline Vincent, "The Use of the Webcam for Teaching a Foreign Language in a Desktop Videoconferencing Environment," *ReCALL* 22, no. 3 (2010): 293-312, <https://doi.org/10.1017/S0958344010000170>.

<sup>35</sup> Mohammad H. Rajab and Mohammed Soheib, "Privacy Concerns over the Use of Webcams in Online Medical Education during the COVID-19 Pandemic," *Cureus* 13, no. 2 (2021), <https://doi.org/10.7759/cureus.13536>; Nordmann et al. "Ten Simple Rules," 2, 6.

Nevertheless, most likely due to technological advancement and gradual internet quality enhancement, they have not been reported as a significant challenge in the most recent studies (carried out in developed countries).<sup>36</sup> Rather than seeing webcams as generally beneficial, students appreciate their use in relation to specific activities, such as giving and following a presentation or small group discussion.<sup>37</sup>

In foreign language learning, webcams provide additional benefits such as comprehension facilitation and perceived accuracy awareness.<sup>38</sup> Telles's study focused on students' perceptions of webcam images in online language classes and found that, while appreciating increased feelings of proximity and familiarity, communication facilitation, and comprehension enhancement, survey participants reported increased pre-occupation with their own image and its control.<sup>39</sup> Concerns over the disclosure of social and cultural information were also mentioned. These findings correlate with the outcomes of studies on self-awareness and social interaction, such as those conducted by Yamada and Akahori and Miller et al., which show that receiving video feedback (i.e. seeing one's own image on the screen) increased the participants' self-awareness and self-directed attention and, consequently, influenced both progress and the perception of the video conversation.<sup>40</sup>

The previously recorded reluctance to use webcams became visible in the recent lockdown periods that prompted mandatory shifts to online learning.<sup>41</sup> While the teacher's use of a camera and its availability may

<sup>36</sup> Rajab and Soheib, "Privacy Concerns over the Use of Webcams,"; Svenja Bedenlier et al., "Facilitating Student Engagement through Educational Technology in Higher Education: A Systematic Review in the Field of Arts and Humanities," *Australasian Journal of Educational Technology* 36, no. 4 (2020): 126-150, <https://doi.org/10.14742/ajet.5477>.

<sup>37</sup> Bedenlier et al., "Facilitating Student Engagement through Educational Technology," 139-140; Rajab and Soheib, "Privacy Concerns over the Use of Webcams," 6.

<sup>38</sup> Masanori Yamada and Kanji Akahori, "Social Presence in Synchronous CMC-Based Language Learning: How Does It Affect the Productive Performance and Consciousness of Learning Objectives?," *Computer Assisted Language Learning* 20, no. 1 (2007): 37-65, <https://doi.org/10.1080/09588220601118503>.

<sup>39</sup> João Antonio Telles, "Do We Really Need a Webcam? - The Uses that Foreign Language Students Make Out of Webcam Images during Teletandem Sessions," *Letras & Letras* 25, no. 2 (2009): 7-9, <https://www.researchgate.net/publication/253594664>.

<sup>40</sup> Yamada and Akahori, "Social Presence in Synchronous CMC-Based Language Learning," 37-56; Matthew K. Miller et al., "Through the Looking Glass: The Effects of Feedback on Self-Awareness and Conversational Behaviour during Video Chat," in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (2017), 5271-5283, <https://doi.org/10.1145/3025453.3025548>.

<sup>41</sup> Tonsmann, "A Study of the Effectiveness of Blackboard Collaborate," 58.

enhance student motivation,<sup>42</sup> students generally prefer not to turn their cameras on.<sup>43</sup> The main reasons identified by Castelli and Sarvary include being concerned about personal appearance (41%), concerns regarding people and their physical surroundings being seen in the background (26% and 17% resp.), weak internet connections (22%) as well as the understanding that not having a camera on is normal.<sup>44</sup> Regarding the belief that webcam usage can effectively imitate face-to-face classroom experience, Rajab and Soheib report a supportive reaction from only a few respondents.<sup>45</sup>

In addition, a crucial determinant enhancing the reluctance to use webcams is the improvised home learning environment, with distracting elements and privacy issues.<sup>46</sup> Student concerns regarding their appearance and opening their private spaces to others have also been recorded by Reich et al.<sup>47</sup> According to their findings, self-consciousness linked to seeing one's own image on the screen also increased learning anxieties in some students. One responding teacher in the survey reported "life" as a barrier to synchronous online learning, referring to the problems of equity and students' family and social backgrounds and the consequent vulnerabilities.

The transfer of all classes online involves the risk of what has become known as 'Zoom Fatigue' - feelings of exhaustion caused by prolonged videoconferencing sessions.<sup>48</sup> Four major hypothetical causes of the condition

<sup>42</sup> İdris Göksu et al., "Distance Education amid a Pandemic: Which Psycho-Demographic Variables Affect Students in Higher Education?," *Journal of Computer Assisted Learning* (2021): 9, <https://doi.org/10.1111/jcal.12544>.

<sup>43</sup> Una Cunningham, and Anna Bergström, "Reimagining Learning in a Language Education Course Thrust Online: Social Constructivism in Times of Social Isolation," in *Teaching, technology, and teacher education during the covid-19 pandemic: Stories from the field*, eds. Richard E. Ferdig et al. (Fairmont, Association for the Advancement of Computing in Education (AACE), 2020), 453. <https://www.diva-portal.org/smash/get/diva2:1508596/FULLTEXT02.pdf>.

<sup>44</sup> Frank R. Castelli, and Mark A. Sarvary, "Why Students Do Not Turn On Their Video Cameras during Online Classes and an Equitable and Inclusive Plan to Encourage Them to Do So," *Ecology and Evolution* 11, no. 8 (2021): 3569, 3572, <https://doi.org/10.1002/ece3.7123>.

<sup>45</sup> Rajab and Soheib, "Privacy Concerns over the Use of Webcams," 6.

<sup>46</sup> Lorenz S. Neuwirth, Svetlana Jović, and B. Runi Mukherji, "Reimagining Higher Education During and Post-COVID-19: Challenges and Opportunities," *Journal of Adult and Continuing Education* 27, no. 2 (2021): 148, <https://doi.org/10.1177/14779714209477381477971420947738>.

<sup>47</sup> Justin Reich et al., "Remote Learning Guidance from State Education Agencies during the COVID-19 Pandemic: A First Look," *EdArXiv* (April 2, 2020): 8, 12, <http://doi:10.35542/osf.io/437e2>.

<sup>48</sup> Jeremy N. Bailenson, "Nonverbal Overload: A Theoretical Argument for the Causes of Zoom Fatigue," *Technology, Mind, and Behavior* 2, no. 1. (2021): 1, <https://doi.org/10.1037/tmb0000030>.

include excessive and highly intense amounts of close-up eye gaze, a considerably higher cognitive load in video chats compared to personal conversation, increased self-evaluation from looking at one's own video image, and restrictions on social and physical mobility. The existing research thus indicates that, while online classroom rules should clarify expectations regarding webcam usage, sharing one's video image should remain optional.<sup>49</sup>

### II.3. Research in physical environment in online learning

Student engagement in learning of any kind (online or in-class) is necessarily linked to the learning environment. The link between the two phenomena is considered a crucial indicator of the learning effectiveness of online instruction in higher education. A fully online learning environment that allows education to be universally accessible claims responsibility in terms of effectiveness with student engagement as a benchmark.<sup>50</sup>

The extent to which learning in online courses is considered meaningful relates to social interaction and the experience of social practices.<sup>51</sup> While learning is viewed as an interactive process, it is necessary to consider the outcomes of interaction within the online learning environment where not all communication can be defined as “educationally valuable talk”,<sup>52</sup> i.e. interaction that is constructive, critical, and substantiated.

Unexpected and sudden changes in the learning environment profoundly affect students' sensitivity towards the structure of the learning system. The findings of Lauret and Bayram-Jacobs demonstrate the extent to which students value structure in learning.<sup>53</sup> The study lists such aspects as proper instruction,

<sup>49</sup> cf. Rajab and Soheib, "Privacy Concerns over the Use of Webcams"; Neuwirth, Jović, and Runi Mukherji, "Reimagining Higher Education During and Post-COVID-19"; Castelli and Sarvary, "Why Students Do Not Turn On Their Video Cameras".

<sup>50</sup> c.f. Chin Choo Robinson and Hallett Hullinger, "New Benchmarks in Higher Education: Student Engagement in Online Learning," *Journal of Education for Business* 84, no. 2 (2008): 101-109, <https://doi.org/10.3200/JOEB.84.2.101-109>; Sarra Ayouni et al., "Innovations of Materials for Student Engagement in Online Environment: An Ontology," *Materials Today: Proceedings* (2021), <https://doi.org/10.1016/j.matpr.2021.03.636>.

<sup>51</sup> e.g. Sedef Uzuner, "Educationally Valuable Talk: A New Concept for Determining the Quality of Online Conversations," *Journal of Online Learning and Teaching* 3, no. 4 (2007): 400-410, <https://jolt.merlot.org/documents/uzuner.pdf>; Carla Meskill, ed., *Online Teaching and Learning: Sociocultural Perspectives* (London: Bloomsbury, 2013), 6, <https://doi.org/10.1558/calico.v32i1.25658>.

<sup>52</sup> Uzuner, "Educationally Valuable Talk," 400, 402.

<sup>53</sup> Dirk Lauret and Durdane Bayram-Jacobs, "COVID-19 Lockdown Education: The Importance of Structure in a Suddenly Changed Learning Environment," *Education Sciences* 11, no. 5 (2021): 221/14-17, <https://doi.org/10.3390/educsci1105022>.

clearly articulated expectations, or uniformity in tools used in lessons as comprising the perception of stability and security of the learning process. The authors claim that to support the feeling of a safe learning environment under emergency or extreme circumstances, educators are expected to take an interest in students' well-being by asking direct questions and making themselves available for communication. The study respondents expressed their opinion on what aspects of the online learning environment they found most negative and labelled the limited possibility to interact with each other as the second worst, while the lack of structure in instruction came first.<sup>54</sup>

Higher education institutions implementing emergency online learning must provide a comprehensive strategy and communicate it clearly to both students and teachers. The introduction of a detailed contingency plan promoting respect and acceptance of the necessary changes in behaviour affects the overall handling of the crisis situation by all stakeholders.<sup>55</sup> A case study conducted by Iglesias-Pradas et al. focusing on students' academic performance during emergency online learning shows a significant increase in the quality of the students' results, highlighting the crucial role of university organisational strategy in reaching beyond digitalisation equipment.<sup>56</sup> Additionally, the perception of the students' online status as a valid one (a norm) signals the institutional awareness of their needs and additionally illuminates their academic engagement.<sup>57</sup>

The need for self-isolation at home arising from COVID-related regulations impacted the quality of the learning process. The students' struggle with finding the right learning strategy for themselves in online learning at home is reported as significantly more challenging than experiencing technical difficulties. Issues such as little self-discipline, lack of suitable learning materials and an unfit learning environment appear to be the most critical ones.<sup>58</sup> Interacting with the outside world from home via online

<sup>54</sup> Lauret and Bayram-Jacobs, "COVID-19 Lockdown Education," 221/14.

<sup>55</sup> Hofer, Nistor, and Scheibenzuber, "Online Teaching and Learning in Higher Education," 8.

<sup>56</sup> Santiago Iglesias-Pradas et al., "Emergency Remote Teaching and Students' Academic Performance in Higher Education during the COVID-19 Pandemic: A Case Study," *Computers in Human Behavior* 119 (2021): 106713/8, <https://doi.org/10.1016/j.chb.2021.106713>.

<sup>57</sup> Sarah O'Shea, Cathy Stone, and Janine Delahunty, "'I 'Feel' like I am at University Even Though I am Online." Exploring How Students Narrate Their Engagement with Higher Education Institutions in an Online Learning Environment," *Distance Education* 36, no. 1 (2015): 55, <https://doi.org/10.1080/01587919.2015.1019970>.

<sup>58</sup> Wei Bao, "COVID-19 and Online Teaching in Higher Education: A Case Study of Peking University," *Human Behavior and Emerging Technologies* 2, no. 2 (2020): 114, <https://doi.org/10.1002/hbe2.191>.

platforms leads to undesirable interruptions such as, for example, a video conference disturbed by pets or family members suddenly appearing on the screen, undesirably diverting the participants' attention.<sup>59</sup>

The obligation of schools to provide a safe, educational environment to students is applicable even when learning shifts to the online format. Many institutions define student digital privacy rights, including the right to keep the webcam off for reasons such as an unwillingness to disclose the details of the student's home or the fact that the student is undocumented and strives to protect their privacy.<sup>60</sup> The Privacy Commission of the Philippines issued a guideline on the use of webcams, underlining the importance of using virtual backgrounds to avoid the undesirable disclosure of the private spaces of teachers and students.<sup>61</sup>

Mental health problems arising from the abrupt and global shift from in-class to online learning are feared to become an unwanted consequence of the pandemic situation. It is evident that the routine of attending school has a protective factor to it defined by social contact or a sense of belonging.<sup>62</sup> The objective visibility of students within online lessons contrasts with their feeling of being invisible and thus inconsequential. The feeling of belonging and mattering as a university student naturally stems from social interactions where one feels valued and connected, and their actions are viewed as autonomous and competent. Students who experienced the sudden change from the in-class to online format viewed the latter negatively. Decreases in motivation and engagement and overall dissatisfaction with their objective and expected academic achievements were reported among the key issues.<sup>63</sup>

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<sup>59</sup> Olasile Babatunde Adedoyin and Emrah Soykan, "Covid-19 Pandemic and Online Learning: The Challenges and Opportunities," *Interactive Learning Environments* (2020): 5, <https://doi.org/10.1080/10494820.2020.1813180>.

<sup>60</sup> American Civil Liberties Union, *ACLU Annual Report 2020* (New York: ACLU, 2021). <https://www.aclu.org/report/aclu-annual-report-2020>.

<sup>61</sup> National Privacy Commission, "Privacy Commission's Updated Online Learning Guidelines Advise Schools to Enforce Social Media Policy," last edited November 11, 2021, <https://www.privacy.gov.ph/2021/02/privacy-commissions-updated-online-learning-guidelines-advise-schools-to-enforce-social-media-policy>.

<sup>62</sup> Organisation for Economic Co-operation and Development, *The Impact of COVID-19 on Student Equity and Inclusion: Supporting Vulnerable Students during School Closures and School Re-Openings*, (Paris: OECD Publishing, 2020). [https://read.oecd-ilibrary.org/view/?ref=434\\_434914-59wd7ekj29&title=The-impact-of-COVID-19-on-student-equity-and-inclusion](https://read.oecd-ilibrary.org/view/?ref=434_434914-59wd7ekj29&title=The-impact-of-COVID-19-on-student-equity-and-inclusion).

<sup>63</sup> Avi Besser, Gordon L. Flett, and Virgil Zeigler-Hill, "Adaptability to a Sudden Transition to Online Learning during the COVID-19 Pandemic: Understanding the Challenges for Students," *Scholarship of Teaching and Learning in Psychology* 8, no. 2 (2020): 98, <https://doi.org/10.1037/stl0000198>.

### III. Materials and methods

In our work, university students' engagement in remote foreign language instruction during the COVID-19 lockdown has been investigated through a qualitatively oriented exploratory case study. Its focal point is how students perceived themselves as being engaged or disengaged in their online courses and the various factors, namely technical equipment and the physical environment, they experienced as facilitating or hampering their lesson engagement.

The study was administered at the Faculty of Education, University of South Bohemia, using voluntary response sampling with students who enrolled in regular in-person Bachelor's or Master's degree courses to qualify as teachers of English at primary or lower-secondary schools. However, due to the ongoing pandemic, their instruction in the 2020/2021 academic year had to be delivered remotely.

For a deeper understanding of the students' perceptions regarding their participation, a questionnaire entitled *Students of English reflecting on their engagement in contingency online lessons* was created and distributed electronically among all the students at the English department immediately upon the termination of classes of the academic year in June 2021. The students were instructed to fill in the questionnaire with information and comments related to seminars, not lectures, where English is the predominant communication tool and where they are encouraged to express their opinions on a variety of topics or present their knowledge and skills in front of their classmates. They were also informed about the purpose of the study and its adherence to the university's ethical standards of anonymity and confidentiality.

The questionnaire consisted of sixteen questions. The first three questions identified demographic information, including gender, degree programme and year of study. Six closed questions centred on the type, quality and general use of technology. Out of these, the first four questions required respondents to provide answers on a five-point Likert scale (always – most of the time – often – sometimes – never) and the following two used a six-point Likert scale (100 – 80 – 60 – 40 – 20 – 0%).

- How often did you use electronic devices (desktop, laptop, tablet, mobile phone) to connect to your online lessons?
- Did you experience any difficulties with your device, the internet connection or managing your applications in MS Teams?
- Did you have a camera?
- Did you turn your camera on during lessons?



- To what extent did the devices you used enable you to engage in your lessons?
- How many per cent of the total time of the lessons did you have your camera on?

Seven questions were open, enabling the respondents to comment on technical difficulties, reasons for turning or not turning cameras on, and factors that encouraged or discouraged engagement in contingency online lessons. The questionnaire also contained sixteen statements related to engagement in lessons, learning conditions and optimum format of online instruction to which participants responded using a five-point Likert scale (strongly agree – agree – undecided – disagree – strongly disagree). The two multi-statement Likert scales comprised 9 and 6 statements, respectively. Fleiss Kappa was calculated to measure the interrater agreement.<sup>64</sup> Given the nature of the statements and the fact that no “correct” answer exists, the overall agreement among the respondents was only slight; 4.33% for the 9-statement Likert scale, and 9.61% for the 6-statement Likert scale.<sup>65</sup> For comparison, we also calculated Fleiss Kappa for a simplified 3-point scale (as opposed to the original 5-point scale), where Strongly Agree and Agree responses were collapsed into the category Positive Response, and Strongly Disagree and Disagree became Negative Response. Such account results in 9.84% agreement for the 9-statement Likert scale, and 21.28% for the 6-statement Likert scale.

A total of 129 respondents, 77 (60%) Bachelor’s and 52 (40%) Master’s degree students training to become ELT teachers, voluntarily completed the online, anonymous questionnaire using MS Forms. Three-fourths were female, one-fourth was male, and one respondent did not specify their gender. This uneven split roughly reflects the actual male-to-female ratio in the ELT study programme.

We acknowledge that the main limitation of our study is linked with the population-specific sample. The non-probability sampling technique used in data collection is typical for exploratory and qualitative research, but it entails a higher risk of sampling bias. In our case, students with stronger opinions about the topic were more likely to participate in the survey. However, implementing voluntary response sampling still makes it possible to develop an understanding

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<sup>64</sup> Joseph L. Fleiss, "Measuring Nominal Scale Agreement among Many Raters," *Psychological Bulletin* 76, no. 5 (1971): 378 - 382. <https://doi.org/10.1037/h0031619>.

<sup>65</sup> Richard J. Landis and Gary G. Koch, "The Measurement of Observer Agreement for Categorical Data," *Biometrics* 33, no. 1 (1977): 159–74. <https://doi.org/10.2307/2529310>.

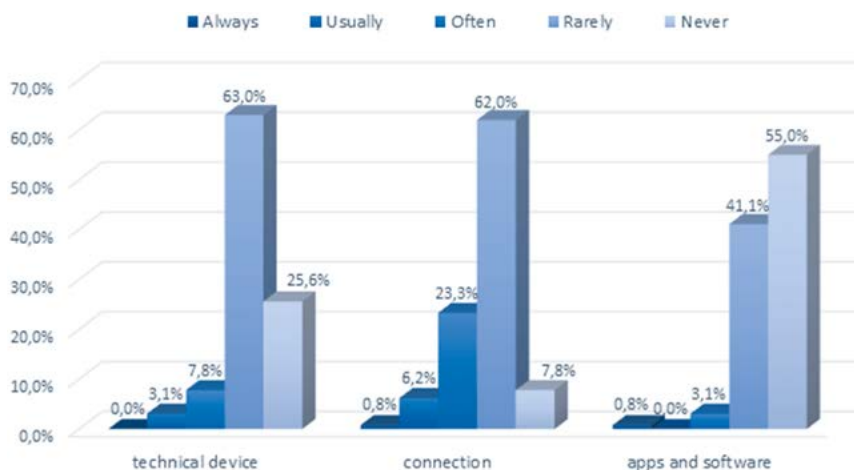
of certain phenomena in the population but limits the conclusions we can draw from the data, as findings can only be generalised to similar student populations. Moreover, the focus of the study is very narrow as it examines selected phenomena of students' engagement in very particular circumstances (contingency online learning). Lastly, we are also aware of the fact that mixed-method approach would have yielded more comprehensive results.

## IV. Results

### *IV.1. Influence of technical equipment on student engagement*

Each device for connecting to online lessons has its specific benefits and drawbacks such as screen size, malfunctioning microphones or unstable connections that are directly relevant to user experience. The most selected device in our sample was a laptop with more than 85% of students using it always, often, or sometimes, followed by a mobile phone with a slightly over 25% usage rate, a desktop computer with 15%, and a tablet with an 11% usage rate. A laptop was also indicated as the device that enabled the most effective engagement: 61.9% of students experienced that using a laptop made it technically possible to be fully engaged in lessons. In comparison, less than 30% indicated that full engagement was possible when using a mobile phone, a desktop computer or a tablet.

Regarding technical difficulties, we found that these occurred relatively infrequently (see Figure 1). More than 90% of respondents only rarely or never struggled with their technical device or applications in the platform (MS Teams), 23.4% often struggled, and 61.7% rarely experienced difficulties with the internet connection. Despite their paucity, technical problems often notably impeded the students' understanding of the delivered content, the clarity and promptness of their responses to questions, and the quality of their presentations. As two respondents put it, "Occasionally the unstable connection distracted me from properly concentrating on my lesson" and "I often did not have the courage to answer questions because I did not want to interrupt the flow of the lesson with my technical problems, even though I normally interact all the time. With the bad connection, I often missed what the teacher was saying, which made me reluctant to engage as I was afraid of saying something that had already been said by someone else." In the case of problems with the internet connection, students often attempted to solve the situation by swiftly switching to a different device, usually from a computer to a mobile phone. This obstacle was considered particularly frustrating at the very beginning of lessons and in courses with a larger proportion of discussion-based activities because "communication on unstable Wi-Fi is hell".



**Figure 1**  
Technical difficulties

Although more than 80% of students had a webcam at their disposal all or most of the time, the vast majority (90%) rarely or never turned it on. The respondents could further explain why they turned on their webcam or why they did not. Some respondents listed one main reason, some more than one, and some chose not to comment further. All the provided explanations were then categorised into the following groups:

#### Reasons why students turned their webcams on (number of students)

It was requested by the instructor (77)

When I had something to say, gave a presentation or did an exam (43)

To make the instructor happy, to show respect or deeper interest in the topic (14)

When there was a reasonable number of students in the course or when classmates did the same (13)

During my teaching practice (5)

#### Reasons why students did not turn their webcams on (number of students)

The instructor did not request it, or I did not find it necessary (54)

I did not want to be seen because I felt awkward or self-conscious about my physical appearance (22)

Other classmates had their cameras off, and I did not want to stick out (22)

Turning on a webcam usually caused technical problems, especially in large groups (21)

I did not want to be seen because I did not want my private space to be exposed (14)

Laziness, I just did not want to turn it on (8)

I was doing other things (8)

Furthermore, two-thirds of students indicated that classmates' webcams being active had a positive effect on engagement in online lessons.

#### *IV.2. Influence of technical equipment on student engagement*

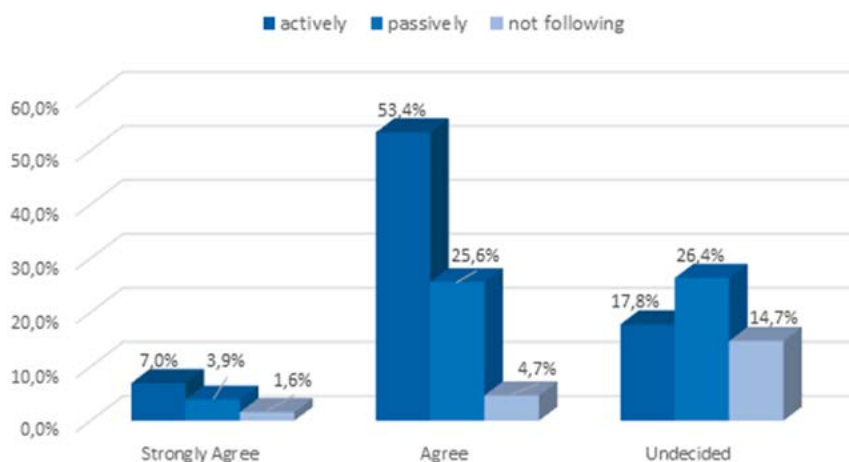
Regarding the respondents' learning conditions, 69% agreed or strongly agreed that they were acceptable. However, only 38.7% agreed or strongly agreed that they were not distracted by their surroundings.

Table 1 shows how the respondents perceived themselves regarding their engagement in lessons:

**Table 1**  
Students' engagement in online lessons

	strongly agree	agree	undecided	disagree	strongly disagree
I was focused during online lessons.	7%	53.4%	17.8%	20.2%	1.6%
I responded to my instructors' questions and cues during online lessons.	31.8%	45.7%	14.7%	7.8%	0%
I responded to my classmates' questions and cues during online lessons.	12.4%	38%	17.8%	30.2%	1.6%
I engaged in other unrelated activities on the same or different device during online lessons, such as using social media or gaming.	18.6%	31%	16.3%	30.2%	3.9%
I engaged in other unrelated activities during online lessons, such as walking a dog or cooking.	14%	31%	16.3%	25.6%	13.1%

	strongly agree	agree	undecided	disagree	strongly disagree
I connected to my online lessons, but I did not actively engage; I merely followed the lessons.	3.9%	25.6%	26.4%	37.1%	7%
I connected to my online lessons, but I did not actively engage, and I did not follow the lessons.	1.6%	4.7%	14.7%	40.3%	38.8%



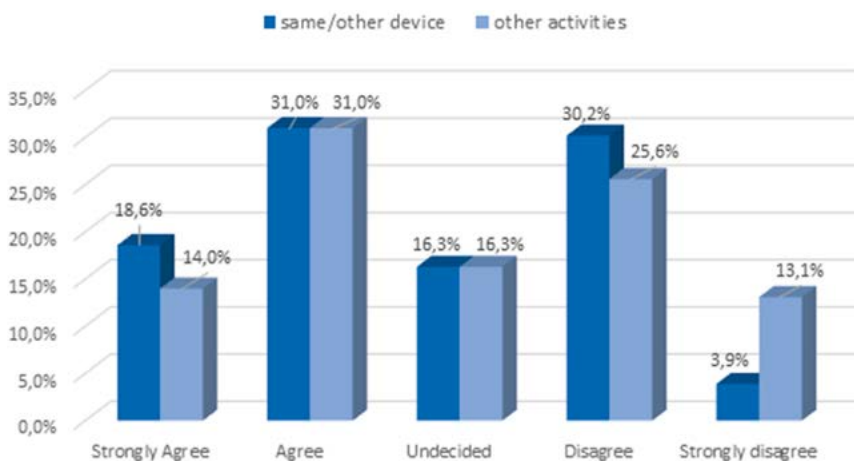
**Figure 2**  
Following lesson content

The figure’s percentage total does not equal 100% (for each respective question), as it only contains the positive and neutral answers from a five-item scale—the negative answers are excluded from the figure for better clarity.

The results visualised in Figure 2 indicate that 60% of students actively engaged in their English lessons. Additionally, the open answers exposed an array of factors that encouraged the students’ engagement in online lessons. The most frequent explanations were “interesting content of the course and/or suitable activities, such as discussions or group tasks” (23) and “when I was directly approached by the instructor” (22), followed by “when the

conditions were favourable”, namely stable internet connections and no disturbances (14) and “the personality and methods of the instructor” (8). Fewer than five respondents listed the following factors: when other classmates were active, when it was required, when nobody else responded, when they knew the answer, when the cameras were on, their intrinsic motivation to study, and smaller group size.

Figure 3 shows that 45-50% of students admitted to engaging in various unrelated activities. Among the factors that discouraged the students’ engagement in online lessons, “disturbances in the surrounding and/or technical problems” dominated with 42 responses followed by “possibility/temptation to do other things simultaneously” (9), “feeling afraid or awkward” (7), “interaction was not expected by the instructor or the type of the course” (7), and “tiredness and/or a lack of motivation or concentration” (6). Fewer than five respondents reported that they did not engage actively because they did not know the answer, the group was too large, or there were enough students engaged in classwork already. Disturbances also included unstable daily routines caused by severe COVID-19 restrictions. Some respondents took up new jobs, which collided with their school timetables. Some respondents touched on fear, namely of “speaking into a black hole”, “appearing stupid”, “answering wrong”, or “speaking in public generally”.



**Figure 3**  
Engagement distractions

In additional comments, our respondents summarised their unprecedented learning experience and compared online with standard face-to-face lessons. While some acclimated to the new system quickly and easily, others considered it chaotic and tiring. Furthermore, some found standard lessons more convenient and easier to concentrate on and looked forward to returning to school; others revealed new and desirable benefits in online learning. In addition to the obvious answer that “not having to commute saved me a lot of time and money”, they appreciated prompt communication with their instructors outside class time (via chat or email), the possibility to learn from recorded materials at any time, and several even admitted that “a bit of online anonymity made me actually more engaged”. Two students suggested that elements of online learning should be incorporated into their study programmes.

## V. Discussion and recommendations

According to the 2020 OECD report on the impact of school closures on students during the pandemic, the lack of social contact can have dire consequences for vulnerable individuals, such as those from broken families.<sup>66</sup> Moreover, female students incur additional risks compared to male students during school closures, including an increased burden in domestic duties.

In terms of engagement, almost 80% of students taking part in our study interacted with their instructors, but only half of them responded to classmates’ questions and cues—only a few individuals connected to their online lessons without engaging with or even following the lessons. Approximately half of the students admitted to simultaneously engaging in various unrelated activities during their online lessons. These included activities such as gaming and chatting on the same or a different device as well as activities not connected with a technical device, such as household chores. These findings correspond to a study by Trowler, which describes behavioural engagement as ranging from positive involvement (e.g. attendance, in-class attention, and participation) via the neutral position classified as non-engagement or indifference to manifestations of adverse behaviour.<sup>67</sup>

Several respondents acknowledged that a mandatory webcam would not eliminate multitasking, but it would limit the range of possible distractions.

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<sup>66</sup> Organisation for Economic Co-operation and Development, *The Impact of COVID-19 on Student Equity and Inclusion*.

<sup>67</sup> Trowler, “Student Engagement Literature Review,” 5-6.

However, in accordance with Chen and Yan, who stress the necessity to discuss (specifically mobile phone) multitasking from the point of view of its interference with the specific type of tasks,<sup>68</sup> the issue of multitasking grows beyond the scope of online learning, and therefore it should not be interpreted as a direct correlate of deficient engagement practices.

Numerous recent studies<sup>69</sup> reported several issues related to online learning, namely those of privacy, socioeconomic status disclosure, and feelings of self-consciousness induced by camera use. One theme that emerged in our work was that many problems could be eliminated by adopting relatively simple measures. Firstly, it is advisable to hide self-view to diminish the issue of self-consciousness caused by the webcam. Self-view may draw excessive attention from the student to their image, which is disruptive. Secondly, to counter the concerns related to anonymity and the undesired showing of the student's physical environment, we recommend using either virtual or blurred backgrounds. It is of utmost importance that students be provided with practical suggestions on how to deal with these issues if the process of online learning is to be effective. The suggested measures are easy to implement and highly effective and recommending them at the start of the course may help students alleviate some of their concerns and feel comfortable in online lessons.

The open answers in our survey revealed further recommendations for instructors concerned about enhancing student engagement in COL circumstances. In addition to the apparent standards such as teaching in smaller groups, making content relevant and appealing, working interactively, or employing group tasks, the students felt more engaged when their instructors called them out directly. This was appreciated particularly by students who identified themselves as introverted. Some students even considered this measure to be more effective concerning their lesson engagement than making a webcam mandatory. Some students also pointed out that empathetic practices, such as the teachers' additional support and a more compassionate approach, boosted their lesson engagement.<sup>70</sup>

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<sup>68</sup> Quan Chen and Zheng Yan, "Does Multitasking with Mobile Phones Affect Learning? A review," *Computers in Human Behavior*, 54 (2016): 35.

<sup>69</sup> e.g. Castelli and Sarvary, "Why Students Do Not Turn On Their Video Cameras,"; Reich et al., "Remote Learning Guidance from State Education Agencies."

<sup>70</sup> c.f. Letitia Basford, "'COVID Keepers': The Teaching Strategies We Should Hold Onto after the Pandemic Ends," *Academia Letters*. Article 2332 (2021), <https://doi.org/10.20935/al2332>.



Lastly, we anticipated differences in engagement between BA and MA students, as was observed in other studies.<sup>71</sup> The assumption was that MA students would be more familiar with the academic environment, the teaching staff, and each other, which would in turn result in enhanced commitment and engagement. However, the survey results do not corroborate our expectations, as there is no indication of the MA students being more engaged overall. Furthermore, one important factor observed among MA students was that they treated COL as an opportunity to combine work and study. Such an observation invites a reflection on the state of emergency caused by the pandemic, which (seems to have) dulled the students' traditional sense of responsibility towards their schoolwork. No matter how accessible and engaging the online classes were, the pandemic status quo shifted their focus to their private lives.

## VI. Conclusion

The original reason behind this study was to explore the students' perception of their behavioural engagement in COL. Firmly believing that effective measures must build on solid foundations, we strove to complement our own experience with the opinions of our students to understand the complexity of their contingency learning experience. Even though our respondent sample was restricted, some of our results, such as those concerning the use of camera during online sessions, reaffirm and uphold existing findings and thus provide research support in the relevant areas. Hence, the next task is to create relevant guidelines to serve teachers and students alike in similar times of need. Presenting our findings, we hope that they could offer additional insight and guidance in COL and related modes of teaching and learning. Although COVID-19-induced COL in higher education institutions may never be deployed again, the hundreds of studies published between 2020 and 2022 by Taylor & Francis, Cambridge Core, Springer, and others contain vital data from first-hand testimonies, which impel and deserve further inquiry. The current war in Ukraine and other military conflict situations and crises in the world validate the ongoing adequacy of COL and dedicated research in this domain.<sup>72</sup>

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<sup>71</sup> e.g. Bedenlier et al., "Facilitating Student Engagement through Educational Technology."

<sup>72</sup> Mykhailo Sherman et al., "The Future of Distance Education in War or the Education of the Future (The Ukrainian Case Study)." *Futurity Education* 2, no. 3 (2022): 1-9, <https://futurity-education.com/index.php/fed/article/view/15>; Ghislain Mervyl S. J. Kossingou et al., "Proposal of the Solution of Virtual Basic Schools in Rural Areas of African Countries in

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