



Teaching during COVID-19: Faculty members' perceptions during and after an 'exceptional' semester

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ABSTRACT

Purpose

With the arrival of the Covid-19 pandemic in Europe in March 2020, Higher Education Institutions (HEIs) worldwide were confronted with creating online courses to complete the semester. While emphasizing positive elements such as flexibility and innovative solutions, the literature focused on numerous faculty problems such as online fatigue, emotional wellbeing, and stress. This paper explores faculty perceptions of teaching during the exceptional circumstances of the Covid-19 pandemic.

Design/methodology/approach

Two surveys, in the first week and at the end of the semester, were conducted at a business school in Switzerland via the program Lima. Ninety faculty members participated in the survey. In the first survey, 56.7% responded and 70.9% in the second.

Findings

The findings revealed that the faculty's impressions of their online courses remained positive. The most significant issue cited was time. According to faculty estimations, more than ten additional hours per week were spent preparing for online courses. Nonetheless, many faculty members reported interest in continuing online practices in their future courses.

Practical implications

The Covid-19 pandemic pushed HEIs to embrace the digital revolution while teaching in a competence-oriented mode. However, moving forward, HEIs must mitigate the long-term effects by careful planning and evaluating their digital readiness as an institution and offering training for their faculty and students when necessary.

Originality

The study contributes to the existing literature by analyzing one stakeholder group, i.e., faculty members, and their perceptions of teaching during a worldwide pandemic.

KEYWORDS: Higher Education Institutions (HEIs), Covid-19 pandemic, lockdown, online courses, emergency remote learning

Introduction

Over the past decades, with the evolution and proliferation of technology, teaching and learning approaches have changed. Technology has infiltrated the classrooms in the form of the Internet, Wikis, blogs, videos, etc., and proven an effective tool for faculty and students and the learner's mastery came into focus with the demand of a competence-based teaching (Bates, 2019). Many institutions have included the digitalization of their courses and programs into their 3-, 5-, or 10-year strategies (Boettcher and Conrad, 2016) and developed appropriate policies for online learning (Sobaih, Hasanein, and Elnasr, 2020). Nonetheless, stakeholders in education, notably higher education, have been reluctant to embrace rapid change preferring traditional, i.e., 'proven', teaching methods to innovative methods (Bunshaft, Curtis-Fink, Gerstein, Boyington, Edwards, and Jacobson, 2015). That is, until the beginning of 2020, when academia faced its greatest challenge yet, with a pandemic, that would change the scope of education in an abrupt and urgent manner. Educational institutions were obliged to move traditional face-to-face courses to online education hastily and in a matter of days.

The arrival of Covid-19 in Europe in early 2020 required urgent societal changes, including lockdowns for all businesses and schools. Higher Education Institutions (HEIs) worldwide were confronted with challenges in the short term, such as creating online versions of traditional courses overnight and attempting to continue the semester as 'normally' as possible. As a response to the lockdowns, many HEIs focused on transitioning content to an online environment with little consideration or training of online pedagogy (Crawford, Butler-Henderson, Rudolph, Malkawi, Glowatz, Burton, Magni, and Lam, 2020). They appeared to be unprepared for this transition due to a lack of resources and knowledge and inappropriate or obsolete technology to make this shift.

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3 In March 2020, Swiss HEIs shifted from traditional face-to-face education to fully-
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5 online programs in a week. Nonetheless, like HEIs in other countries, Switzerland was not
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7 adequately prepared to handle the digital transformation quickly. Recent literature has
8
9 addressed some of the most significant challenges HEIs faced in this transitional period
10
11 (Crawford et al., 2020; Gonzalez, de la Rubia, Hinez, Comas-Lopez, Subirats, Fort, and
12
13 Sacha, 2020; Murphy, 2020; Skulmowski and Rey, 2020; Tesar, 2020; Toquero, 2020), and
14
15 several studies have focused uniquely on the faculty's perceptions of this transition in HEIs in
16
17 the EU (Bryson and Andres, 2020; Giovannella, Passarelli, and Persico, 2020; Rapanta,
18
19 Botturi, Goodyear, Guardia, and Koole, 2020). In one of the earliest studies published in
20
21 March 2020 (when many HEIs were beginning to close), Bao (2020) offered some initial
22
23 reflections on the status of taking courses online. Bao (2020) described this rapid move online
24
25 as a "massive, disruptive shift" (p. 114), which served as a trigger of reflection on what
26
27 content, how much, and in what manner faculty should adjust to the 'new' needs of their
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29 students. Other studies have examined education at different levels or from a student
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31 perspective. To date, the only study that has been found was concerned with a Swiss HEI in
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33 Lugano and their faculty's perceptions both during and after the spring semester (Rapanta et
34
35 al., 2020). This paper intends to provide additional perspectives on faculty perceptions
36
37 towards online learning by analyzing one Swiss HEI in Fribourg.
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44 While the Covid-19 pandemic initially affected the traditional (i.e., face-to-face)
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46 Swiss educational system, which, like many HEIs, is typically slow to respond to change, this
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48 exceptional semester has also offered potential opportunities toward greater digitalization in
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50 the (very) near future. What was originally a project for the long-term, Swiss HEIs have seen
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52 that digitalization can be done when necessary and could be implemented effectively when
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54 moving forward. This study concludes with recommendations for action to better prepare
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56 HEIs for this shift toward digitalization. A caveat: The researchers in this paper are in no way
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2
3 suggesting that the rapid shift online in the emergency circumstances of Spring 2020 can be
4 compared to the strategic development of distance learning programs; instead, the researchers
5 are using the Covid-19 semester as a catalyst for reflection on how holistic and effective
6 online courses and programs could be created in the future.
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11 12 **Theoretical Background** 13

14 The purpose of the Swiss business school used in this study is similar to other HEI
15 business programs. That is, it focuses on providing students with an application-oriented
16 education to prepare them for their future careers. Being well prepared in the business world
17 means being competent in a professional environment, which implies acting and reacting
18 appropriately, combining resources, and mobilizing and transferring them from one context
19 into another. This includes the capacity of autonomous learning and personal engagement (Le
20 Boterf, 2006).
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30 Jean Piaget introduced the link of competence to education when he defined the
31 process of learning as an interaction between individuals and their physical and social
32 environments (Bond, 2012). This created a basis for constructivism where learning is
33 analyzed in the context of individuals' dynamic reality in their social environments.
34 Individuals are searching for strategies to understand their surroundings and resolve problems
35 together with others. According to Bates (2017), learning is a social process that encourages
36 communication between students, teachers, and other stakeholders. Consequently, faculty are
37 supposed to concentrate on the learner's development through "reflection, analysis and the
38 gradual building of layers of depths of knowledge through conscious and ongoing mental
39 processing" (Bates, 2019, p. 71). The shift from analyzing the learning rather than the
40 teaching is the main characteristic of competency-oriented training. Students prove they have
41 mastered a specific course by demonstrating specific knowledge and skills, known as
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3 competencies (O'Sullivan & O'Sullivan, 2014). The faculty's role switches accordingly from
4
5 the learning outcome's assessor to the facilitator of the learning itself.
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8 The shift to online-learning has had a high impact on the way faculty approach
9
10 teaching in a competency-oriented strategy as it needs an elaborate environment where
11
12 learners engage in meaningful learning processes (O'Sullivan & O'Sullivan, 2014). The
13
14 creation of this environment is demanding but very much needed for the students to find
15
16 motivation and strategies for their learning.
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18 19 **Literature Review**

20 21 *General online learning*

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23
24 The role of faculty in an online pedagogy is to initiate the learning process and
25
26 accompany student learning, i.e., as a faculty mentor, to acquire the competencies necessary
27
28 in the domain taught (Boettcher and Conrad, 2016). As for the content, they have to find the
29
30 starting point for learning and formulate online interactivity based on it (Salmon, 2002) and
31
32 evaluate which activity can contribute to the acquisition of the skills wanted. In the Covid-19
33
34 circumstances, faculty quickly considered numerous options for both their online and offline
35
36 teaching methods that would be the most effective for retaining student engagement with their
37
38 courses (Bryson and Andres, 2020). Many researchers have investigated the determinants of
39
40 student satisfaction through their relationships with faculty, peers, technology, and resources
41
42 (Alqurashi, 2019; Boettcher and Conrad, 2016; Bolliger and Martindale, 2004; Green,
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44 Tanford and Swift, 2018; Kelsey and D'souza, 2004; Roberts, Irani, Telg and Lundy, 2005;
45
46 Strachota, 2006). Across all studies, the faculty have been cited as the most significant
47
48 determinant of student satisfaction. Further, the literature confirmed that students appreciated
49
50 faculty members who were available and flexible and offered timely feedback. Nonetheless,
51
52 there is scant research on faculty satisfaction during the Covid-19 lockdowns. For this reason,
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54 the faculty perceptions of online learning have been chosen as the focus of this paper.
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Opportunities

The greatest opportunity for creating effective online courses comes at the beginning of the learning journey. According to Boettcher and Conrad (2016), the most important element of online courses is ‘presence’, or how faculty engage with their students online. Practice leads to the acquisition of competence and needs deliberate as well as collaborative learning (Hattie, 2012) and, therefore, presence. There are three types of presence: Social, cognitive, and teacher (Boettcher and Conrad, 2016). The latter is also referred to as ‘facilitatory’ (Rapanta et al., 2020). Teaching presence includes the course materials prepared before class and the monitoring and shaping of the course. It can include coaching, clarification (Boettcher and Conrad, 2016), and feedback (Bao, 2020).

Cognitive presence is defined as “the extent to which the professor and the students are able to construct and confirm meaning through sustained discourse (discussion) in a community of inquiry” (Boettcher and Conrad, 2016, p. 82), including learning goals. Cognitive presence is a critical component of overall engagement, where students see learning as something in which they can participate and control (Bao, 2020; Green et al., 2018). Hattie (2012) referred to this as ‘targeted learning’ which was summarized as being clear about what is to be learned from the lesson (the learning intention), knowing that the desired learning has been achieved (the success criteria), communicating the learning intentions, and letting the students know what success looks like. Defining learning intentions and success criteria is crucial to the faculty when preparing their courses; however, it is equally important to communicate these elements to the students as well.

Of the three, social presence is one of the most crucial components of the quality of online learning experiences from a student perspective (Horzum, 2015) as both faculty members and students project personal characteristics and become ‘real’ people to each other (Boettcher and Conrad, 2016). Social presence is essential for motivation and a determinant of

1
2
3 overall student satisfaction. Thus, it is crucial to establish a social relationship that supports
4
5 social presence, fosters online interaction, and creates a proper learning environment (Sobaih
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7 et al., 2020). According to Horzum (2015), students derived the most satisfaction in online
8
9 learning when their social presences are high. Through social, cognitive, and teaching
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11 presences, students feel an emotional bond with faculty and other staff (Frawley, Goh, &
12
13 Law, 2018) and experience a sense of belonging (Green et al., 2018). Understanding the
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15 factors that lead to a better cognitive and social presence are therefore an important aspect of
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17 creating and promoting successful online learning.
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21
22 Another point significant of the learning outcome in a distant learning mode is digital
23
24 readiness which is defined as the degree to which people use technology to carry out online
25
26 tasks (Zalite and Zvirbule, 2020). This digital readiness leads to other online teaching
27
28 opportunities that emerged before and during the Covid-19 semester, including heightened
29
30 awareness of technological tools that could effectively be used in the courses, offering better
31
32 chances for providing personalized feedback. The new techniques in online teaching need a
33
34 reflection on which of these add value to the teaching when used in a competence-oriented
35
36 perspective. They also need more intensive sharing between colleagues (Giovannella et al.,
37
38 2020). This exchange is often neglected as all the preparation, teaching, and reflection does
39
40 not necessarily reflect the need for exchange with others. Nonetheless, it has been shown that
41
42 learning performance improves significantly when teachers decide to work together and focus
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44 their efforts on the classroom activities (Kempfert and Rolff (2005).
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49
50 According to Boettcher and Conrad (2016), “all learners do not need to learn all course
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52 content; all learners do need to learn the core concepts” (p. 199). This premise questions the
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54 validity of the previous perceptions that faculty members may have held regarding the
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56 importance of imparting their knowledge on the students in traditional lecture-style and
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58 opened the door to new methods of teaching and learning – especially if the acquisition of
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3 competencies is the main focus of the teaching. Faculty members created more interactive
4
5 activities through the use of technology in their classes. They curated new resources and
6
7 developed new solutions to support learning outcomes and enhance learning engagement
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9 (Bryson and Andres, 2020), which proved particularly motivating to the faculty (Alea, Fabrea,
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11 Roldan and Farooqi, 2020). In one study, a third of teachers communicated their interest in
12
13 adopting a blended configuration for future teaching activities (Giovannella et al., 2020).
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15 Thus, the Covid-19 semester offered the faculty a ‘push’ to implement innovative solutions
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17 through the use of technology.
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21 Nonetheless the literature emphasized a cautious approach toward radical shifts toward
22
23 online courses moving forward. In early 2020, UNESCO expressed a concern that
24
25 transitioning to online learning is a “highly complex undertaking for education systems, even
26
27 in the best of circumstances” (Ali, 2020, p. 19), which the Covid-19 pandemic was not. While
28
29 many decisions were taken in the emergency circumstances of the Covid-19 semester, some
30
31 of these decisions were rash and lacked authentic reflection (Rapanta et al., 2020) or were
32
33 based on improvised solutions (Bryson and Andres, 2020). Giovannella et al. (2020) caution
34
35 that surviving the Covid-19 semester may have led some to believe (potentially over-
36
37 optimistically) that HEIs are ready to move to online courses once and for all.
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40 41 42 *Barriers for teaching/learning*

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44 The rapid transition from face-to-face to online settings caused numerous problems for
45
46 faculty (Bryson and Andres, 2020). Online fatigue, emotional wellbeing, and stress were
47
48 frequently cited in the literature as barriers to embracing online teaching practices (Alea et al.,
49
50 2020; Giovannella et al., 2020). The faculty also reported an increased workload when
51
52 preparing online courses (Giovannella et al., 2020; Zalite and Zvirbule, 2020). According to a
53
54 study by Bryson and Andres (2020), one hour of delivery equals one hour of preparation, but
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56 it can be more. All of the previous literature, both pre-and post-Covid-19, have cited time as a
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3 barrier in online learning: For faculty with a full course load, added preparation time was
4 stressful; for students, the time in front of a computer and the time to complete tasks was
5
6 often cited. The issue of over-compensation and course overload was an additional challenge.
7
8 Faculty members struggled to balance the appropriate volume of independent work (Zalite
9
10 and Zvirbule, 2020) while respecting the contact hours necessary to pass the courses. They
11
12 struggled with the concepts of reducing course content and establishing what content is
13
14 'essential' to their courses. Further, they often improvised solutions to online delivery
15
16 (Bryson and Andres, 2020) in a trial and error methodology.
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22 The online environment makes it difficult to analyze student reactions and measure if
23
24 authentic learning is taking place. The learning experience can be too task-oriented and
25
26 impersonal and relies on students' self-discipline to complete tasks and attend classes (Bryson
27
28 and Andres, 2020). Procrastination was cited as a barrier for effective learning, particularly in
29
30 an online environment: Keeping students on task and away from off-task activities during
31
32 class and while studying is a challenge for the modern college educator (Tindell and
33
34 Bohlander, 2012). In numerous studies, students reported a lack of concentration, family
35
36 problems, or discomfort using video-camera (Giovannella et al., 2020). Teaching online
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38 courses should emphasize discouraging students' multitasking behavior while recognizing
39
40 that the methods for doing so may be very different from face-to-face courses. That same
41
42 digital readiness that is touted as an opportunity can also be a challenge when there is a gap
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44 between readiness and user from one country to another (Ali, 2020; Zalite and Zvirbule,
45
46 2020). These discrepancies can be remediated by improving faculty's readiness and
47
48 capabilities to implement technology (Alea et al., 2020; Ali, 2020; Giovannella et al., 2020;
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50 Zalite and Zvirbule, 2020). While students need the training to learn how to learn online,
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60 faculty need to learn how to teach effectively online.

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3 In moving toward the future, faculty members need training to effectively plan, teach,
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5 and evaluate their courses together in a new light, that of the
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7 online/remote/blended/hybrid/hyflex/other settings (Alea et al., 2020; Ali, 2020; Giovannella
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9 et al., 2020). This Covid-19 semester offered HEIs the opportunity to evaluate better the
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11 reality and potential of digitalization in higher education (Zalite and Zvirbule, 2020). Faculty
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13 recognized the opportunities for enhancing the learning experience, which entailed new and
14
15 previously untested, approaches to teaching (Bryson and Andres, 2020). They were often
16
17 uncertain of their technological and pedagogical choices throughout this Covid-19 semester
18
19 (Ali, 2020; Bryson and Andres, 2020). Nonetheless, faculty need to be encouraged to express
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21 themselves openly regarding what went well and what did not go well in their online
22
23 experiences. Empowering the faculty and building their confidence can assure faculty
24
25 members that they will not be penalized for trying new things, particularly regarding
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27 technology (Ali, 2020). A joint effort between faculty members and management in installing
28
29 a team spirit is critical. As Hattie (2012) suggests, HEs need to provide a trusting and safe
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31 climate in which teachers can freely share the evidence of impact of their teaching on student
32
33 learning.

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40 Previous research has posited several recommendations when moving forward into the
41
42 online teaching environment. For instance, HEIs should encourage digital teaching concepts
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44 that combine pedagogical concepts with technological possibilities (Dräger and Müller-Eiselt,
45
46 2017). In the future, instructional approaches, content, interaction, and assessments will need
47
48 to be adapted (Ali, 2020). Nonetheless, faculty must be trained for all stages in the digital
49
50 school development processes (Ali, 2020; Dräger and Müller-Eiselt, 2017). To do so,
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52 digitalization in education should be underpinned by research (Dräger and Müller-Eiselt,
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54 2017) that has established best practices that could be replicated in other HEIs, regardless of
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56 area of studies or degree program.
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To initiate a fruitful conversation with our faculty that could eventually be used to create online courses in the future, we set the following research questions:

RQ1: What was the overall perception of the faculty in one Swiss HEI during the transition into (emergency) online courses?

RQ2: What was the overall perception of the faculty in one Swiss HEI at the end of the emergency remote semester?

RQ3: How much support did faculty members in Swiss HEIs have during the Covid-19 semester?

RQ4: What was the greatest challenge faculty members in Swiss HEIs faced during the transition to emergency online courses?

RQ5: What challenges will faculty members face moving forward into more 'stable' online teaching settings?

Methodology

At the majority of Swiss HEIs, one week of pause between the last face-to-face course and the first online course was implemented at most Swiss institutions. At the Swiss HEI in this study, this time was allocated for teacher training (five face-to-face and online courses), especially on the new learning environment to address any issues concerning online-teaching. Previous studies have predominantly chosen a quantitative survey methodology as the means to gauge the perceptions of HEI stakeholders (both faculty and students) on online learning (Bollinger and Martindale, 2004; Frawley et al., 2018; Sobaih et al., 2020); thus, we chose to implement a structured survey to gather faculty members' perceptions of online learning during and at the end of the Covid-19 semester. Further, with the Covid-19 restrictions on meeting in person, a survey was the most judicious choice for gathering data.

Once the online teaching started, an initial structured survey consisting of five scaled questions was distributed, offering the possibility to comment on the questions, and one open

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3 question was sent to the administrative staff, the teachers, and the students a week into the
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5 online teaching. A second structured survey consisting of the original five questions and one
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7 open question with an additional question regarding adaptations for exams was sent again at
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9 the end of the semester. As this study's purpose concerns the aspect of teaching, we have
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11 chosen to focus on the survey for the teachers. It was executed via the program LIMA on
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13 March 30, 2020, and sent to all teachers in the undergraduate program. Lima is recommended
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15 by the Swiss HEI's when surveys have to be conducted anonymously and in different
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17 languages. Their IT service provides technical support for these surveys, which are used once
18
19 per semester for course evaluations.
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24 An invitation to answer the survey was sent by the Head of Pedagogical Management,
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26 informing the participants that the survey was conducted entirely anonymously and all data
27
28 would be dealt with complete confidentiality. The Management of the HEI consented that the
29
30 data obtained could be used within this publication as its results had already been
31
32 disseminated in other forms to the students and faculty members. Out of a potential 90
33
34 respondents, 51 faculty members responded to the survey (participation rate of 56.7%). The
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36 results of the survey were immediately tabulated and communicated to the students as well as
37
38 the professors. An almost identical questionnaire was sent to this same group on June 12,
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40 2020, when all courses had ended, but final exams had not yet taken place. In the second
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42 survey, 61 out of 86 faculty members responded (participation rate 70.9%). The four faculty
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44 members who did not teach through the end of the semester were eliminated from this second
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46 survey.
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51 The survey consisted of the critical areas for faculty members, namely, the overall
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53 impression of online courses, the quality of communication from the school's management,
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55 the pedagogical support received, the time needed to adapt to online learning, the adaptations
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57 necessary for the creation of online exams, and the potential to use this experience for
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3 teaching in the future. The respondents had the choice to answer in German or French, as the
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5 HEI in this study is a bilingual institution; thus, all administrative procedures are available
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7 in both languages. Thus, participants responded to the questions in their native language,
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9 which ensured they understood the question and gave answers that reflected their perceptions.
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12 The survey questions concluded with a final question asking for further unsolicited
13
14 comments:

- 15
16
17 1. My first impressions of distance learning are
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19 very good / good / moderate / not so good / bad / very bad
20
21
- 22 2. How do you judge the quality of the communication made by the management during
23
24 the last two weeks?
25
26 excellent / good / sufficient / insufficient / place for comments
27
28
- 29 3. What do you think of the school's support for the introduction of distance learning
30
31 (advice, help with the installation and use of different technical tools...)?
32
33 very good / good / moderate / not so good / bad / very bad / place for comments
34
35
- 36 4. How do you estimate the time you had to invest to adapt to online teaching?
37
38 much / moderate / little / place for comments
39
40
- 41 5. How do you see the adaptations needed to create on-line exams? > very easy / easy /
42
43 moderate / complicated / very complicated >> Question only in the survey at the end
44
45 of the semester
46
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- 48 6. Do you feel that the adaptations / efforts / changes made during this period may be
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50 useful for the future?
51
52 yes / partially, no / place for comments
53
54
- 55 7. Final comments on the remote teaching experience

56 Results

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3 The initial results can be seen on the tables that follow. Each table contains the results
4
5 from the survey conducted in the beginning of the distance learning semester and at the end of
6
7 that same semester.
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9
10 *Insert Table 1 here*
11

12 Despite the initial great challenge and concerns of the faculty members, the
13
14 satisfaction remained quite high, as approximately 62 % had a good or very good feeling
15
16 concerning their online courses in March. This satisfaction only mildly dipped in June to 61
17
18 %. Those faculty members who expressed a moderate impression were fewer in June (26% to
19
20 21%) and those with a negative perception rose from March to June (12 % to 18 %).
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22

23
24 *Insert Table 2 here*
25

26 The time element was a complex topic. The faculty members who reported much more
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28 time in March (75%), decreased to 63% in June. This could be explained by a greater facility
29
30 in using new tools or a more efficient organization of their time. In fact, the moderate and
31
32 little categories seem to reflect a shift from the initial panic and potentially inefficient
33
34 practices (18% and 8% respectively in March), to more sensible choices as the weeks passed
35
36 (35% and 2% in June). Figure 1 summarizes a breakdown of how this time was spent by the
37
38 faculty members over the remote semester.
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42 *Insert Figure 1 here.*
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44 The questions in the survey offered the opportunity to comment on the topics. The
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46 extra time spent on the preparation of the courses was perceived as more than three times
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48 compared to usual face-to-face teaching; some participants mentioned even more (5 to 7 times
49
50 more). Among the additional activities was the preparation of course material that could be
51
52 handled in online teaching and learning and how to use unfamiliar tools such as the learning
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54 management system (LMS) or video conference systems. Being confronted with difficult
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56 situations in the home office or with students with special needs was also added to their
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workload. A better exchange with colleagues would have helped, but although this service was offered 3 x per week, few faculty members made use of it. One professor summarized it this way: *"It is clear that the teaching materials intended for "normal" face-to-face teaching cannot be used unchanged for distance learning. In my case, especially the creation of adapted teaching material took a lot of time (screen casts, detailed solutions, etc.), but it was also a pleasure to do!"* The attempt to transfer teaching material that can be used by distant communication tools seemed to be the main challenge during this period.

Insert Table 3 here.

The measures set up for the teacher's support were globally appreciated, especially in March with 82 % considering it good or very good. By June, these numbers declined to 73 %. Those faculty members who reported a moderate or even bad feeling were 18 % in March and this number rose to 27 % in June. The latter result is disconcerting as the help remained available, but was less appreciated by the faculty members. One possible explanation could be that the faculty members needed more in-depth help or additional training as the semester continued or the upcoming online exams that had to be set up very quickly and were, for most of the faculty members, their first exam at a distance, causing a lot of work, uncertainty and thus anxiety and stress.

Of all of the issues, the greatest concern of the online teaching methodology was, by far, the time-consuming preparation of the courses. Faculty members approved of the many possibilities to take better care of weaker students by giving them more time and creating activities that corresponded better to their needs. Further, being forced to use digital tools that have been implemented in the HEIs before, increased the faculty members' abilities and assurance as well as their flexibility. Nonetheless, faculty members need more time and space to reflect on their courses as online learning complements or replaces traditional teaching. Normally, this would be done beforehand as part of a greater strategic plan to digitalize face-

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2
3 to-face teaching. In this spring semester, shifting from face-to-face presence into online
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5 teaching at a rapid (and necessary) speed created a substantial overload of work and stress,
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7 that could not be resolved by an internal, pedagogical manager or a specific training.
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10 Problems of time management when people were confronted with many other personal
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12 struggles are also shown in a survey carried out by the HES-SO, the institution covering all
13
14 the HEIs in the French speaking part of Switzerland (Bratschi, 2020). Their survey was
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16 addressed to students as well as to the professors and they, too, display the work overload.
17
18 Figure 2 summarizes the answers for the question: “What were the main obstacles you
19
20 encountered during this particular period of distance learning?”
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23
24 *Insert Figure 2 here.*
25

26 Figure 2 shows the reported overload of work by the faculty members; 81% reported
27
28 feeling overwhelmed by the work they needed to complete. Both stress/uncertainty and trying
29
30 to stay in contact were also reported by more than half of the faculty members.
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33
34 *Insert Figure 3 here.*
35

36 Figure 3 shows the amount of workload perceived by both students and faculty
37
38 members in this HES-SO study (Bratschi, 2020). The 1041 faculty respondents answered
39
40 these questions:
41

- 42
43 A. How would you judge the workload in your teaching capacity during the exceptional
44
45 online teaching semester compared to your ‘normal’ workload?
46
47 B. You indicated that the workload was significant or very significant during the
48
49 exceptional online teaching semester. Please estimate the number of supplementary
50
51 hours you spent during this time.
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54 The observations of this study have been confirmed when it comes to the faculty
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56 members: 47% of them indicate that their workload was significantly more important and that
57
58 the additional time climbed up to approximately 10 hours/week. 35% attest to a more significant
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3 workload than usual. Adding this important extra-time for the teaching to the personal
4
5 circumstances of each, we can confirm that the faculty members suffered from the workload of
6
7 moving online in the emergency circumstances. It would be useful to gauge if this time reduces
8
9
10 with more practice and more exposure to online settings.

11
12 Figure 4 summarizes the responses to the question: Do you feel that the adaptations /
13
14 efforts / changes made during this period may be useful for the future?

15
16
17 *Insert Figure 4 here.*

18
19 The usefulness of the experiences during this special semester met a high approval
20
21 with more than 70 % of the faculty members stating that these efforts will serve them in
22
23 future. Taking a closer look at the comments, we can see that the use of the tools, the
24
25 methodology, the environment, and time management issues were the main issues raised by
26
27 the faculty members. Figure 5 summarizes the comments in categories.

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31 *Insert Figure 5 here.*

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33 As seen on Figure 5, the usefulness of the Covid-19 semester can be summarized in
34
35 four areas to take forward: Blended learning, tools, methodology, and flexibility. The faculty
36
37 members' comments have been grouped to demonstrate where the potential synergies could
38
39 happen. For example, the faculty members expressed an interest in implementing some
40
41 blended learning elements when moving forward. They expressed more comfortability with
42
43 the range and use of online tools such as the LMS or video-conferencing to re-use in the
44
45 future. Further, the faculty members recognized that online courses offer the possibility of
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47 personalizing the courses and offering greater opportunities to help the weaker students.
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49 While rethinking the course is normally done between semesters, the Covid-19 semester
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51 obliged the faculty members to question their traditional practices and implement more
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53 innovative solutions. Finally, the shift to online highlighted the benefit of flexibility in both
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3 environment and context. Neither faculty members nor students needed to be on campus
4
5 synchronously to follow a course.
6

7
8 Despite the majority of faculty members believing that the emergency remote
9
10 experience could be useful for their future teaching, some teachers still doubted the
11
12 possibilities of pure online teaching. One faculty member stated in the March survey: « *Some*
13
14 *of the teaching methods could be useful in future courses, but nothing will replace a face-to-*
15
16 *face course.* » / In the survey of June, another, quite similar comment was made:
17
18 « *Imposed distance education allowed me, during the first weeks of this period, to find new*
19
20 *ways to reinvent my courses, create content and a new class dynamic, and motivate students.*
21
22 *In that sense, it was a good experience. However, in the long run, I find that the online*
23
24 *method runs out of steam somewhat. This is why I think that this common experience can*
25
26 *partially have very positive effects on my future practice, but that face-to-face teaching*
27
28 *remains the foundation on which to build a course. Distance learning can complement it in a*
29
30 *very nice way».*
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35 **Discussion**

36
37 This paper examined the perceptions of the faculty members both during the transition
38
39 period into (emergency) online courses and at the end of the same semester. Our findings are
40
41 promising in regards to potential acceptance of partial or fully online courses in the future,
42
43 especially as the online experiment is slowly becoming part of a new teaching reality, as
44
45 many in-presence courses continue to be taught online.
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48 *Overall impression of online teaching*

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51 The first impression of the faculty members in Swiss HEIs concerning their online
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53 courses in the first weeks of the Covid-19 exceptional semester was fairly positive (62.75 %
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55 of the respondents chose “good” or “very good” for the first survey) and remained so through
56
57 the end of the semester with 61.29% choosing “good” or “very good”. This could be
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3 explained by the new opportunities that were presented to the faculty members such as
4
5 curating new resources or finding innovative solutions to replace traditional face-to-face
6
7 courses. This aligns with the best practices suggested in the literature (Alea et al., 2020;
8
9 Bryson and Andres, 2020). In general, faculty members in this study were satisfied with their
10
11 emergency online solutions for ensuring quality teaching and learning during the Covid-19
12
13 semester. Further, many faculty members were open to the possibility of incorporating some
14
15 of the new practices into their courses in the future. This supports the findings of Giovannella
16
17 et al. (2020) which showed a strong interest by faculty members to adopt a more blended
18
19 configuration in the future.
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24 Nonetheless, as posited in the literature, there were some obstacles to overcome during
25
26 this exceptional semester which could explain why the faculty members' negative responses
27
28 ('not so good', 'bad', or 'very bad') rose from 11.8% in March to 18% in June. The faculty
29
30 members in this study faced similar difficulties mentioned in the literature, such as keeping
31
32 the students engaged, as online learning relies on students' self-discipline to complete tasks
33
34 and attend classes (Bryson and Andres, 2020). Further, our faculty members and students
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36 were unprepared for this shift and, subsequently, felt additional stress and unease at times in
37
38 the online environment as confirmed by previous researchers (Ali, 2020; Zalite and Zvirbule,
39
40 2020). This unpreparedness could be mitigated by improving faculty's readiness and
41
42 capabilities to effectively integrate technology into their teaching (Alea et al., 2020; Ali,
43
44 2020; Giovannella et al., 2020; Zalite and Zvirbule, 2020). Though the faculty members may
45
46 have become more comfortable with certain technological elements and more confident about
47
48 planning their online courses as the weeks went on, they may also have found this teaching
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50 method overall to be less satisfying than their traditional face-to-face courses.
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56 *Faculty support during Covid-19 semester*
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Numerous measures of support were offered to faculty members, such as regular office hours for questions via videoconference for 90 minutes three times a week, an LMS platform as an example for interactive tools to experiment them from the student's side with explanations how to set them up, newsletters sent with information how to teach online, and short teacher trainings treating particular subjects. Based on our findings, it is clear that accepting support means another investment of time. Although the pedagogical support team's messages were brief, they were just additional messages amongst all of the messages from the different HEI stakeholders. Faculty members may have missed some of the messages, thus assuming they were not informed about changes or modifications. Faculty They may have voluntarily chosen to ignore these messages as they felt such immense stress and, therefore, were incapable of integrating any other news. In March, faculty members were struggling to prepare their courses, and, in June, to prepare for online exams. For many of the faculty members, it was the first time in their careers that they prepared online exams; this added additional stress at the end of an exhausting semester.

Challenges during the transition

While the literature cited many challenges with moving face-to-face courses online such as online fatigue, increased workload, emotional wellbeing, and stress (Alea et al., 2020; Giovannella et al., 2020; Zalite and Zvirbule, 2020), the greatest challenge by far for participants in this study was time. Faculty members did not have enough time to react, plan, and execute before moving online. While they had emergency training sessions to help them cope with online learning, the training may have also added stress with the growing sentiment that 'there aren't enough hours in the day'. As seen in the literature, additional preparation time and course overload was frequently cited as the faculty members sought a balance between the volume of work and the contact hours necessary to successfully complete the courses (Zalite and Zvirbule, 2020). Many faculty members in our study felt they

1
2
3 overcompensated, and, subsequently, overworked the students (and themselves) during the
4
5 Covid-19 semester.

6 7 *Future of online teaching*

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10 Our results showed that the faculty members would be willing to retain some elements
11
12 from the (emergency) online setting when moving forward in the future. As seen in Figure 4,
13
14 blended learning, the tools, and the methodology that derived from the Covid-19 semester
15
16 could be adapted or adopted for the semesters that follow. The potential for blended learning
17
18 as a complement to traditional face-to-face courses was cited by the faculty members as one
19
20 solution. The ability to hone their skills and comfortability with technological tools offered
21
22 another possibility. Finally, the methodological changes that enhanced student learning (Ali,
23
24 2020; Bryson and Andres, 2020) and which were crucial in the Covid-19 semester, could
25
26 result in permanent changes in many courses. Nonetheless, the literature was quite clear that
27
28 the faculty members need further training to effectively plan, teach, and evaluate their courses
29
30 to effectively engage with any type of blended learning (Alea et al., 2020; Ali, 2020;
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32 Giovannella et al., 2020) to reach the final result of all teaching, i.e., the acquisition of
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34 competences.
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39 40 **Recommendations/Implications/Conclusions**

41 42 *Recommendations for the future*

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44 As mentioned in the literature, faculty members need support on three levels,
45
46 instructional, technical, and peer, to increase communication and, ultimately, student
47
48 satisfaction. In many HEIs, this type of support derives from instructional designers who work
49
50 hand in hand with each faculty member to create the most effective blended/online/hyflex
51
52 options while considering the course and program objectives. One particular direction to be
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54 considered with an instructional designer or a pedagogical expert is how faculty members can
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56 effectively communicate the learning intentions and the success criteria to the students and,
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3 subsequently, adapt a targeted learning approach. In moving forward, it will be particularly
4 crucial to consider each course as a separate entity where targeting learning reigns. What
5 works well in one course may not work in another, even for the same faculty member, subject
6 matter, or program. The faculty members will need to be prepared for that eventuality.
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12 Developing greater flexibility and choosing from different options will improve their teaching
13 assurance and thus their attitude toward the still new mode of online teaching. Targeted
14 learning also means targeted teaching. Faculty training should not focus on the new tools,
15 although their appropriate use is essential, but on their impact on learning. These questions
16 have to be considered in future research.
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24 As seen in previous studies, one of the most complex challenges in an online
25 environment is keeping the students focused on their tasks. As part of this targeted learning,
26 and to increase both motivation and focus, the faculty members must consider how and what
27 they are communicating to their students as feedback. Faculty members can work with
28 instructional designers to explore technological and pedagogical solutions to keep online
29 learners focused on their primary task of learning with or without the faculty member's
30 physical presence. Further, the amount of work (i.e., length of tasks, number of tasks) needs to
31 be reconsidered to ensure learners learn the core competencies without being overwhelmed by
32 the digital aspects such as log-ins, connection problems, microphones, or cameras that are not
33 functioning correctly.
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47 In moving ahead, HEIs need to slow down, reflect, and take decisions based on best
48 practices and, more importantly, their constraints in resources or specificities in courses,
49 programs, and degrees. To successfully shift to effective online courses that encourage
50 authentic student engagement and, subsequently, more significant learning, HEIs need to
51 accept that this shift is resource-intensive in terms of faculty time, requires intense
52 collaboration among the professors, and is resource-expensive terms of technology. Thus, it is
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3 necessary to embrace the digital revolution started by the Covid-19 pandemic but mitigate the
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5 long-term effects by careful planning. HEIs must evaluate their digital readiness as an
6
7 institution, including their faculty and students, and offer training both for students and
8
9 teaching staff when necessary. During the first Swiss confinement in April 2020, the Swiss
10
11 Minister of Health, Alain Berset, spoke about the need to take measures regarding the Covid-
12
13 19 pandemic “as quickly as possible, as slowly as necessary.” (“Plan de sortie de crise”,
14
15 2020). We suggest the same approach toward online teaching. We have begun the shift
16
17 toward online learning quicker than we expected; now, we can use this momentum to prepare
18
19 more effective courses for the future while still taking the time to analyze our choices. While
20
21 the pandemic may be under control, the continuation of online education will stay.
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25 26 *Limitations/Future Studies*

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28 While this study gave a holistic view of the faculty members' perceptions during the
29
30 Covid-19 semester, the results derived from one Swiss HEI and a small sample size, which is
31
32 a limitation. Nonetheless, the results cited in this study have already been confirmed by a
33
34 second study entitled "Rapport du sondage: Enquête auprès des étudiants-e-s et des
35
36 enseignant-e-s HES-SO sur leur vécu des mesures d'enseignement à distance prises durant la
37
38 crise COVID-19" ("Survey Report: Study of students and teachers of the HES-SO on their
39
40 experiences of distance teaching during the COVID-19 crisis") by the national academic body
41
42 of Swiss HEIs called the HES-SO. Their study was conducted in June 2020, and its results
43
44 were published in November 2020). The HES-SO comprises 29 HEIs teaching in six domains
45
46 such as design and visual arts, economy and services, engineering and architecture, music and
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48 performing arts, health, social work with 21'038 students in 2019 and a total number of
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50 employees of 17'167 (2'860 members of the teaching staff) in Switzerland thus offering a
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52 much larger number of respondents and more significant opportunities for interpretation
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54 ('Rapport annuel,' 2020).
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3 The greatest faculty challenge cited in this study and previous literature was the
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5 element of time. While participants were asked to estimate how much more time they invested
6
7 during the Covid-19 semester, the estimations may have been crude. This was a second
8
9 limitation. Knowing how the faculty members spent their time preparing online courses and
10
11 making suggestions to improve their time and course management is a future (and planned)
12
13 study to be conducted in December 2020 at the same Swiss HEI from this study.
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16
17 Other future studies could include investigating how the roles of faculty members in
18
19 the online setting. One study could examine the teachers' role shifted from traditional all-
20
21 knowing/all-powerful controllers to evaluators/activators in the online setting. For Hattie
22
23 (2012), an activator encourages change, and an evaluator judges the change's outcome. In
24
25 short, the faculty member's role shifts to a coach or facilitator. Another study could broaden
26
27 the topic to examine the role of faculty members and students to inform practice and improve
28
29 online courses for the future. The overall aim of these investigations, research, and – finally
30
31 investments - is to overcome the urgency mode of digital teaching and return to structured
32
33 competence-oriented teaching by combining the strength of digital learning with known
34
35 strategies of face-to-face courses.
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Table 1: Faculty Impressions of Distance Learning

My first impressions of distance learning are...	Survey March 2020	Survey June 2020
Very good	15.69 %	19.35 %
Good	47.06 %	41.94 %
Moderate	25.49 %	20.97 %
Not so good	9.80 %	12.90 %
Bad	0.00 %	1.61 %
Very bad	1.96 %	3.23 %

Table 2: Estimation of Time Investment

How do you estimate the time you had to invest to adapt to online teaching?	Survey March 2020	Survey June 2020
Much	74.51 %	62,90 %
Moderate	17.65 %	35.48 %
Little	7.84 %	1.61 %

Table 3: School Support for Distance Learning

What do you think of the school's support for the introduction of distance learning (advice, help with the installation and use of different technical tools...?)	Survey March 2020	Survey June 2020
Very good	37.25 %	43.55 %
Good	45.10 %	29.03 %
Moderate	9.80 %	17.74 %
Not so good	5.88 %	9.68 %
Bad	1.96 %	0.00 %
Very bad	0.00 %	0.00 %

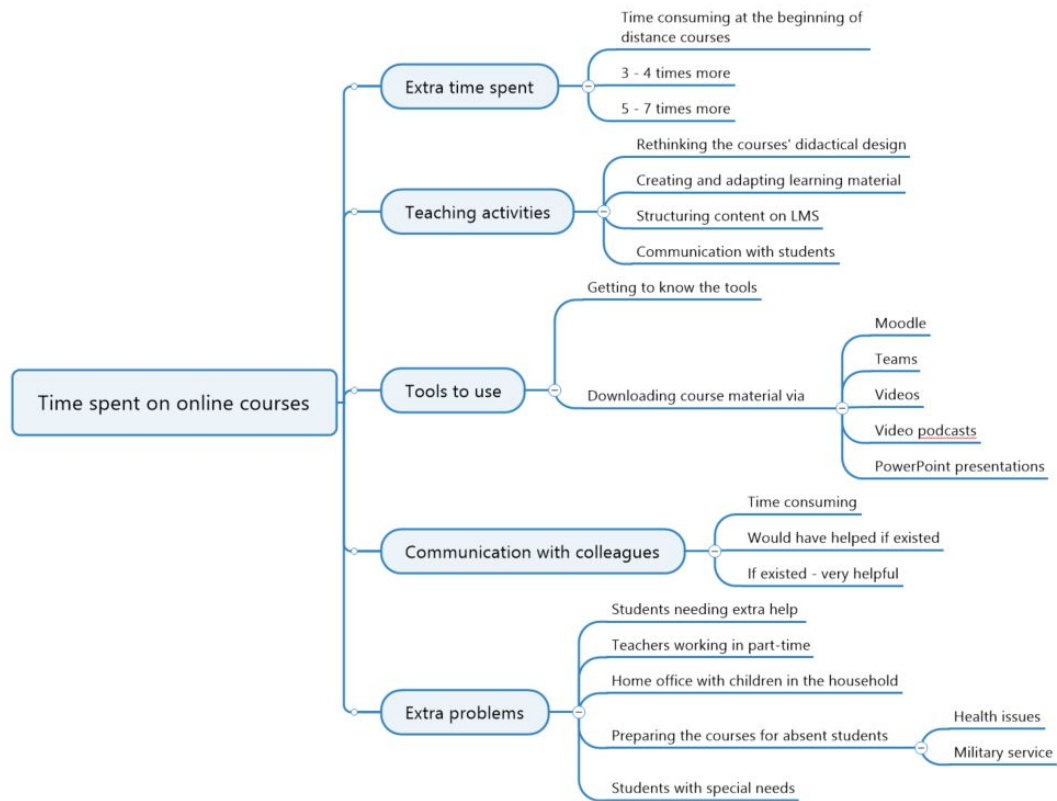


Figure 1. Time spent on online courses

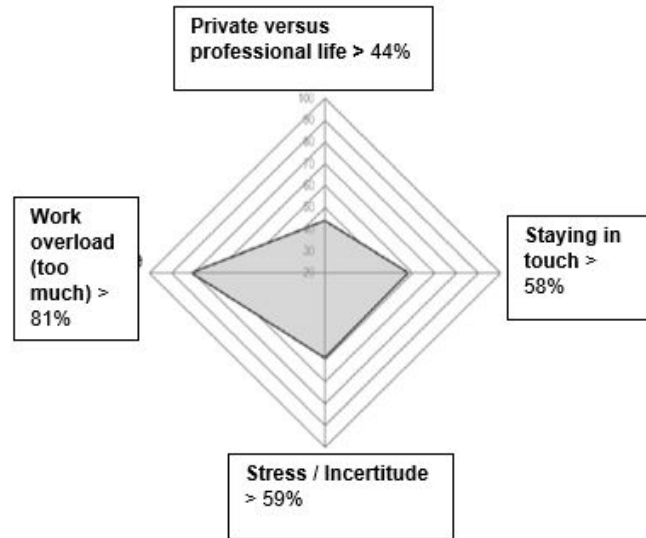
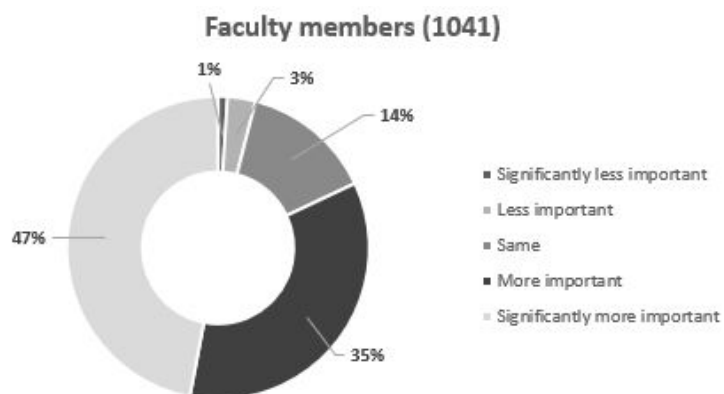


Figure 2. Key difficulties faced by the faculty members while teaching remotely

Source: Bratschi, G. W. forthcoming 2020. Rapport du sondage: Enquête auprès des étudiants-e-s et des enseignant-e-s HES-SO sur leur vécu des mesures d'enseignement à distance prises durant la crise COVID-19. MIS Trend, 1-20.



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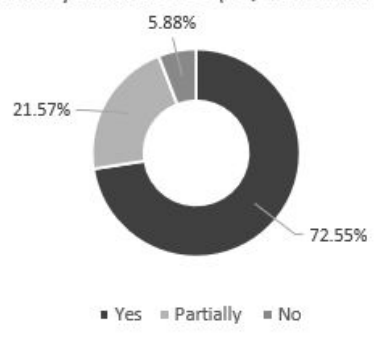
B. Average additional time 9h54 /week (857 answers)

Figure 3. Faculty workload during the Covid-19 crisis

Souirce: Bratschi, G. W. forthcoming 2020. Rapport du sondage: Enquête auprès des étudiants-e-s et des enseignant-e-s HES-SO sur leur vécu des mesures d'enseignement à distance prises durant la crise COVID-19. MIS Trend, 1-20.

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Adaptations/Efforts/Changes for the Future
Survey March 2020 (51/90 answers)



Adaptations/Efforts/Changes for the Future
Survey June 2020 (61/86 answers)

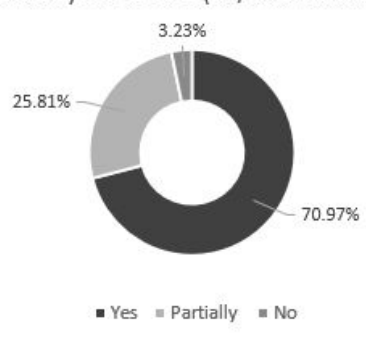


Figure 4. Adaptations for future courses

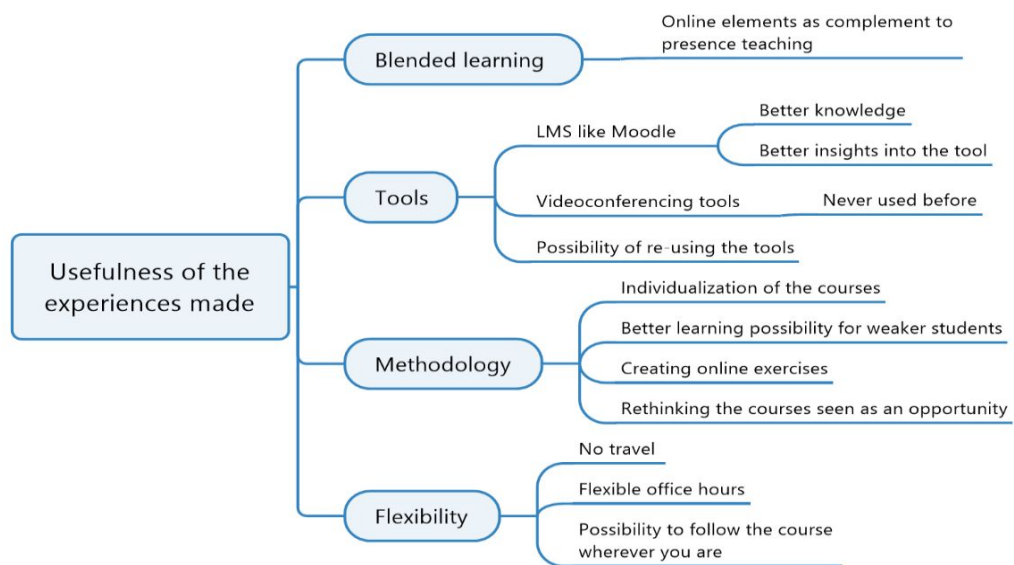


Figure 5. Usefulness of online experience