Positive Surprises and Particular Struggles: A Case Study Exploring Students' Adjustment to Emergency Online Learning and Associated Emotions



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Abstract Even in situations where online learning is a carefully planned and anticipated part of a study program, the move from face-to-face classrooms to computermediated communication environments necessitates a significant role adjustment and instigates a wide array of emotions on the part of students. The coronavirus pandemic presented a unique opportunity to take stock of students' experiences in light of a rapid transition to unknown modes and practices, and to explore associated emotions provoked by such a change. Through a dual theoretical and analytical lens (role adjustment and emotions), we present questionnaire data collected from 40 students enrolled on an English as a Foreign Language (EFL) university course in Belgium regarding their adjustment process to the role of online learner across six core themes: social, teacher, self, course, technology, and other. Patterns of emotions attached to each theme are also identified. From this very specific context, we translate our findings into practical recommendations for teachers to implement in the provision of (emergency) online teaching. While we, as teachers, and our students quickly got to know the weaknesses of online learning firsthand without prior experience of its strengths to guide us, now is the time to deepen our understanding of what it means and takes to be an online learner or teacher in such extraordinary times.

Keywords English language learning \cdot (emergency) Online teaching \cdot Role adjustment \cdot Emotions \cdot COVID-19

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1 Introduction, Context, and Purpose

In the move from face-to-face (F2F) classroom experiences to computer-mediated communication environments, students undergo a significant role adjustment (Cleveland-Innes et al., 2007). Taking on a new role means engaging in "the expected and generally accepted ways of behaving, acting, and interacting" (Knuttila, 2002, as cited in Cleveland-Innes et al., 2007, p. 5) in a specific environment. In addition to the prerequisites and responsibilities attached to the 'more generalized role of learner', online learners must be able to navigate and use new technology, adapt to diverse types and amounts of communication with teachers, peers, and administrators, and assume a greater responsibility for their own learning (Cleveland-Innes et al., 2007, p. 4). These changes instigate a wide array of emotions on the part of students (Cleveland-Innes & Campbell, 2012; Zembylas, 2008), and extensive educational research has shown that both positive and negative emotions impact learning processes and outcomes (Pekrun et al., 2002). Furthermore, adjusting to the new role of online learner may be especially demanding for language students due to the fact that interaction is fundamental to language development. Perhaps stemming from this imperative to participate, language classrooms have been found to invoke intense emotions, from anxiety to enjoyment (see Dewaele & MacIntyre, 2014).

The process of adjustment to an online learning (OL) environment as well as the emotions experienced by first-time online learners have mostly been investigated in situations where OL has been methodically planned. Moreover, students (and teachers) tend to have either proactively chosen to undertake their studies (or teaching) online, or at the very least, online learning unfolds as an anticipated part of the study program. Even when the transition to online learning has been planned, learners may still experience fear for the unknown methodology of online learning, anxiety about technological demands, loneliness due to the lack of F2F interaction, and stress about study-life balance, but also joy and excitement (especially in the initial stages) for the flexibility of OL (Zembylas, 2008, p. 76–77).

While the emergency-induced education solutions implemented in response to the global COVID-19 pandemic must be considered to be distinct from carefully designed, well-established OL experiences (Hodges & Fowler, 2020), similarities can nevertheless be found between the two contexts. For example, as Resnik and Dewaele (2021, p. 3) state, both conditions demand more autonomy from learners than would usually be required in F2F on-campus classes. They found that during COVID-19-induced OL, language learners who scored high in autonomy tended to be able to enjoy their foreign language classes more than their less autonomous peers.

However, there are also undeniable disparities between planned OL and the OL recently experienced by millions of students around the world as a result of the coronavirus pandemic. Firstly, the forced shift from F2F on-campus classes to online alternatives across all arenas of education transpired at lightning speed in March 2020. Learners and teachers alike had no choice but to continue education online to ensure people's safety. Students who were used to seeing their friends and

peers in, between, and after classes each day had to quickly settle for virtual moments together due to the isolation measures. Added to all of this was the persistent fear for one's own and one's family's health. All in all, it can be said that in the case of emergency online learning (EOL), "it is exactly the suddenness of the emotional burden that distinguishes it fundamentally from regular online classes" (Resnik & Dewaele, 2021, p. 2).

Another core difference between planned and EOL resides in the availability and ability of role models (i.e. teachers and peers experienced in OL) to support novice online learners during the transition process. In the initial period of adjusting to an OL environment, students often "grapple with requirements, looking to their own reasoning, other students, and the instructor for direction about the right things to do" (Cleveland-Innes et al., 2007, p. 12). What makes the context of the present role adjustment study particularly unique is that at the onset of the COVID-19 pandemic, neither students nor teachers had ample experience of or clear expectations for learning and teaching online. In many cases, teachers had little to no familiarity with using OL tools, let alone using them effectively to facilitate interaction or to guide students on how to use them successfully. Language teachers faced additional challenges such as learning about the implications of the medium in the context of teaching a language and how best to facilitate communicative competence considering these constraints and affordances (Hampel & Stickler, 2005).

Much of the important emerging research on students' (emotional) experiences of the COVID-19-induced transition to OL has either gathered data from large-scale, quantitative studies using Likert-scale or tick-box questions (e.g. Besser et al., 2020; Garris & Fleck, 2020), explored students' general perceptions of opportunities and challenges (e.g. Aguilera-Hermida, 2020; Biwer et al., 2021; Murphy et al., 2020), or has focused on specific emotions, for example, anxiety and enjoyment (Resnik & Dewaele, 2021) and boredom (Derakhshan et al., 2021). The aim of this chapter is to gain an in-depth understanding of EFL students' early experiences of EOL by focusing on areas which indicated a role adjustment and to explore which emotions students associated with their experiences.

2 Literature Review

2.1 Role Adjustment

The sociological concept 'role' is generally defined as the behaviours, actions, attitudes and qualities of a person in a particular social position which are learned through socialization. Socialization refers to the "learning process through which the individual acquires the knowledge and skills, the values and attitudes, and the habits and modes of thought of the society to which he belongs" (Bragg, 1976, p. 3). This dynamic process is realised through the observation of and interaction with role models. For many novice online learners, however, "role models for learning the required and expected activities are not present until one is already engaged in an online course" (Cleveland-Innes et al., 2007, p. 5). Even when students have begun their OL experience, it is more difficult for them to observe their peers' social and cognitive behaviours from afar (Bork & Rucks-Ahidiana, 2013). In contrast, F2F classes offer students a "transparent opportunity" to witness "countless examples of role model behaviour on a continual basis" (Bork & Rucks-Ahidiana, 2013, p. 5).

Role adjustment is necessitated by the differences in activities and modes of communication in a new environment (Cleveland-Innes et al., 2007, p. 5) which require the (further) development of specific skills. For example, in asynchronous online learning (AOL) environments, learning is typically facilitated through discussion boards and email. Within this context, a priority for first-time online learners is to ascertain how to use the required technology. When independently engaging in the inquiry-based tasks, learners must gain confidence in expressing themselves through the written word and using these text-based messages as a means to constructively interact with peers. Language learners need to adapt to the fact that "communication is limited to one single mode and happens in a delayed fashion" (Hampel & Stickler, 2005, p. 313). In the absence of structured classes where students meet with their teacher and peers in the same space and time, learners must adjust to the teacher's reduced presence and nonimmediate feedback and become more self-directed and self-disciplined in terms of learning progress and time-management.

Cleveland-Innes et al.'s (2007) study found that first-time online learners were able to articulate their adjustment process from F2F classes to AOL in answers to open-ended questions. Five themes arose in the analysis: interaction (quantity and value of written communication with teachers and peers), self-identity (increased responsibility for learning); instructor role (visibility and feedback); course design (effectiveness of course structure and delivery); and technology (issues). Furthermore, a related study measured role adjustment by asking students to assess their anticipated experiences of OL activities compared to (1) previous F2F learning experiences and (2) perceived experienced online learners by rating the learning activities on a range of 'much better' to 'much worse' in each of the two conditions (Garrison et al., 2004). The results showed that in the first comparison, students regarded F2F experiences as more "externally oriented" than OL (thus hinting at adjustments in social and teaching aspects), while in the second comparison, their perceptions of experienced online learners indicated that learning in an online environment is more "internally oriented" (thus hinting at cognitive adjustments) (Garrison et al., 2004, p. 70).

Interestingly, Bork and Rucks-Ahidiana's (2013) research found that even experienced online learners and their teachers may struggle to "understand how their online roles differ from their roles in face-to-face settings" (p. 1). Although students and teachers tended to agree on their expectations for one another's roles, their opinions often diverged on how best to meet those expectations. For example, motivation was collectively viewed as an essential quality of online learners, but while teachers expected students to be self-motivated, students felt that teachers should motivate them with engaging learning activities. In the analysis of role-related expectations for online learners, three core themes which indicated role ambiguity emerged: technological skills, learning management skills, and help-seeking behavior, and in the case of online teachers, the contested areas were communication, feedback, and online presence and pedagogy. These misalignments of skills, behaviors, and attitudes caused stress for both parties, and the frustration expressed by the "largely successful online students" in the study "may help to explain why less successful online students ultimately drop out or fail" (Bork & Rucks-Ahidiana, 2013, p. 24). All in all, the importance of both students and teachers having an indepth understanding of both roles in OL environments was clearly demonstrated.

Indeed, in the recent coronavirus-induced shift to OL, in many cases neither students nor teachers had experience of or clear expectations for learning and teaching online. Both students and teachers new to the OL environment were thus simultaneously trying to construct their new respective roles of online learner and online teacher, but in all likelihood, these roles will have been rather ambiguous due to the lack of available role models. In light of all the chaos surrounding the unprepared teachers and inexperienced students, it can only be expected that students' role adjustment to online learner was intensely testing.

2.2 Synchronous Online Learning (SOL)

As explained above, much of the research on students' role adjustment has focused on planned, AOL environments. In the present study, students were engaged in both asynchronous and synchronous OL in an emergency context. To better understand students' role adjustment in SOL, we can look to the affordances and constraints of synchronous communication and thus draw comparisons between SOL and F2F learning.

SOL is implemented through teleconferencing media. Many options for communication exist; audio and video can be set to be one-way (the teacher is heard and seen by the students) or two-way (teachers and students can both hear and see each other), with both conditions usually enabling text-based chat. In synchronous communication environments, interpersonal relationships (teacher-student and studentstudent) tend to be easier to perceive, establish, and maintain than in asynchronous environments because students and teachers have the possibility to engage in realtime interactions. These real-time interactions create opportunities for students to ask questions and receive immediate feedback and support from their teacher and peers, all of which can cultivate feelings of trust and safety (Tolu, 2010) and decrease feelings of isolation (Howland & Moore, 2002). Even in cases of low-bandwidth where students can only reach their teacher and peers through written chat messages, "the conversational characteristics of chat discourse reflect face-to-face classroom exchanges that are familiar to learners and faculty, hence facilitating the transfer of formal patterns of behavior acquired in physical classrooms to virtual learning environments" (Crook & Light, 2002, as cited in Ling & Sudweeks, 2008,

p. 172). One could therefore argue that the role adjustment SOL requires is not as extreme as in the case of AOL because such immediate interpersonal interactions help to recreate the classroom conditions that students are accustomed to.

However, in contexts such as the one described above whereby students communicate solely (or primarily, as in the case of this study) through text-based chat, students still have to adjust to expressing their ideas and emotions and acknowledging others via the written word; a phenomenon which has been documented in research on social presence (e.g. Tolu, 2010). For example, in a live online class in which the teacher has their webcam and audio on but students have theirs off, when the teacher asks, for example, 'can you hear me?', students are obliged to explicitly type a response because non-verbal cues such as a smile or shake of the head are not available. Furthermore, as the teacher cannot physically see the students and cannot therefore gauge their understanding by assessing facial expressions, the onus is placed on students to inform the teacher or to ask questions if they are unsure. On top of this, as teachers must simultaneously manage multiple communication channels, some chat messages may be missed, so students may have to retype their questions. Interacting through text-based chat thus requires conscious effort (Satar, 2011).

Learning in synchronous online classes has been shown to touch on students' emotions. When reflecting on his experience of facilitating online chat activities, Ng (2004, as cited in Ng, 2007, p.3) found participants' communication anxiety to be a weighty issue. When opportunities for real-time interaction are available, students are expected to utilize them; indeed, "real-time interaction requires immediate responses" which may make some students feel anxious (Ng, 2007, p.3). In an online language class, the pressure to quickly respond may result in students making language errors (Yamada, 2009) as well, which could further exacerbate anxiety.

Finally, as in the case of on-campus, F2F lessons, students who are engaged in SOL attend scheduled classes. In virtue of having a set schedule, the skills crucial to successful AOL such as increased self-direction and time-management are less pertinent. This being said, self-discipline could nevertheless be argued to be important in SOL because students have to learn to cope with (unexpected) distractions in their immediate environment (such as family members and pets) and not get lured into using social media. Additionally, when facing internet connection issues, students need to engage in solution-oriented behavior so as not to significantly miss out on learning. Students also have to monitor their holistic wellbeing to a greater extent in OL in terms of limiting adverse effects from lengthy screen time and finding ways to socially interact with their peers.

2.3 Emotions in Learning

As discussed above, when a student transitions to an OL environment, they will experience a role adjustment process, and this role adjustment process generally instigates emotions. In a situation that is "perceived as unfamiliar and challenging, and in addition is perceived of relevance to the learner, more intense emotions arise and these may range from highly positive to highly negative (i.e., from high levels of excitement to high levels of anxiety towards the new challenge)" (Wosnitza & Volet (2005, p. 451). It is fair to assume that students perceived the COVID-19induced shift to OL as highly unfamiliar and challenging, as well as highly relevant to their educational experience, due to its impact on a multitude of areas, from daily learning routines to longer-term learning goals.

A central reason why a thoughtful consideration and further exploration of emotions is of great magnitude is because emotions can generate subsequent actions which "may range from a determination to invest mental energy in the learning process to the adoption of coping strategies to protect well-being and survive the challenge" (Wosnitza & Volet, 2005, p. 451). Experiencing positive emotions in SOL activities can increase students' participation (D'Errico et al., 2016). Even emotions commonly identified as negative can help one adapt to or persist in uncertain situations; "anxiety alerts us to potential dangers, sadness is associated with preventing loss, loneliness promotes social interaction by motivating us to regain connections with other people, and anger is useful in removing obstacles thereby restoring pursuit of an important goal" (MacIntyre et al., 2020, p. 5). Naturally, prolonged experiences of negative emotions can lead students to consider dropping out of their studies (Zembylas, 2008). In order to limit negative impacts on learning experiences, it is crucial to uncover the specific sources of emotions such as the task, technology, self, or other people because each demand different interventions (Wosnitza & Volet, 2005).

Although the current study was not explicitly designed to investigate language learning in online settings, it was deemed important to situate it within a foreign language learning context because such classrooms are notorious for negative emotions. In Resnik and Dewaele's (2021) research undertaken during the COVID-19 pandemic which compared language students' perceptions of EOL and F2F classes, lower levels of both positive and negative emotions were discovered in the former setting. Social aspects affecting students' enjoyment such as experiencing less interaction and not getting to know their peers and teachers well were what they reported missing the most. Similarly, students in Maican and Cocorada's (2021) study reported negative emotions with respect to a lack of interaction with peers and teachers. They also expressed concern about their language progress. Significantly reduced moments for interaction was indeed a common antecedent of boredom in Derakhshan et al.'s (2021), p. 8) study, and students "frequently spoke about their desire to talk face-to-face again in a physical class, and how seeing their classmates in person can lead to more genuine interaction". These recent studies point towards a possible role adjustment in that when shifting to EOL, students commonly experience differences in the types and amounts of social interactions which may adversely impact their emotions and behaviors.

Therefore, this study focuses on the following research questions:

- What kind of role adjustments did students experience during the transition to emergency online learning? What emotions were associated with these experiences?
- What are the implications of these experiences for online learning and teaching?

3 Methodology

Data were collected for the purpose of documenting and exploring students' socioemotional experiences in the COVID-19-induced emergency transition to OL. The first paper resulting from this project focuses on the types and functions of students' interpersonal interactions in synchronous online lessons (Alger & Eyckmans, 2022). The aim of the present chapter is to examine students' process of role adjustment from 'learner' to 'online learner' in an EOL context.

3.1 Context and Participants

In February 2020, a total of 75 students were enrolled on an English vocabulary course at a large university in Belgium. Three official languages are spoken in Belgium: Dutch in Flanders (the location of the present study), French in Wallonia, and German in a small part of Wallonia in the east. In Flemish-medium education, French is introduced in year 5 of primary school and is subsequently the first compulsory foreign language at secondary school, with English being taught as a second foreign language from age 12 (Mettewie & Van Mensel, 2020, p. 4). English is often considered a lingua franca in contexts of higher education.

The course in question is offered in the Applied Languages Bachelor program and has a duration of 12 weeks (with one 1-h lesson scheduled per group per week). The aim of the course is to systematically expand students' vocabulary through a combination of collaborative and independent tasks. The first 5 weeks of the course took place as planned on campus in F2F lessons, with the cohort divided into 4 smaller groups. On 13th March, all teaching activities with physical attendance of students were suspended due to the outbreak of the coronavirus. In place of the scheduled lessons, materials and independent study tasks were uploaded to the university's OL platform in weeks 6–9. Online synchronous lessons were offered in the final 3 weeks of the course via the web-conferencing tool Bongo Virtual Classrooms. While the teacher used a webcam and audio throughout the lessons, students were asked to use the text-based chat tool as the primary means to communicate with the teacher and with each other to avoid the potential chaos of overlapping audio. Furthermore, as only a limited number of student cameras could be simultaneously shared, the teacher felt it more fair for all students to be in the same condition (i.e. cameras turned off). In this study, EOL thus refers to students' experiences of a higher education course which was implemented asynchronously (independent activities) and synchronously (one-way video of the teacher, mostly one-way audio, and written chat messaging) online from March to May 2020. Students likely perceived this shift to EOL as challenging because they had expected the degree program to be largely delivered through on-campus, F2F classes (albeit with some out-of-class tasks e.g. short essays and self-tests to be completed and/or submitted via the university's OL platform).

In the first week of online synchronous lessons, all four groups were asked to join simultaneously. The purpose of this lesson was to check up on how students were coping with the asynchronous learning tasks and to discuss possible solutions to the tasks as well as logistics for the exam. In the second week, the lesson consisted of a vocabulary revision game based on the British TV gameshow *Pointless*. Upon hearing each quiz question asked by the teacher, students were put into break-out rooms in small groups to recall target words. They were then asked to present their answers in the main room. In the third and final week, students had the opportunity to take a mock exam. The aim of the lesson was a test-run not only for students, but also for the teacher to resolve any technical difficulties.

Students who had attended at least one of the three online synchronous lessons (59 out of 75 students) were contacted by email after the course and end-of-term exam had been completed in an attempt to reduce social desirability bias and so as not to add to students' stress during this difficult time. Only these 59 students were contacted due to the focus of the former study (see Sect. 4). The email contained a link to a series of broad reflection questions on Google Forms which sought to gain insights on students' experiences of the transition to OL (see Sect. 4.2). The response rate was 67%. The 40 students who voluntarily answered the questions comprised the final participants for the study. All students gave informed consent for their data to be analyzed and reported for academic research purposes in anonymized form.

At this point, it is important to mention that the first author was the teacher of the course. Having a dual role of teacher and researcher poses challenges such as personal involvement clouding judgements and leading to biased assumptions. To help counter this negative effect, the second author who was not part of the course was involved in the analysis (see Sect. 4.3). Furthermore, it could be seen as beneficial that the first author was part of the context as this offered an insider's perspective.

3.2 Data Collection

While a validated instrument (Garrison et al., 2004) exists for investigating novice online learners' role adjustment, we decided not to use it for two reasons. Firstly, we anticipated that Likert-scale questions such as "online or web-based communication is an excellent medium for social interaction" would provoke highly negative reactions. After all, the context of this study is an abrupt, forced mid-semester move to OL, rather than a planned (and potentially chosen) learning experience. Therefore, it is likely that students would rate OL as much worse than F2F. Indeed, emerging research documenting the COVID-19 education experience has generally found that "when resistant participants are moved from the classroom to online, the evaluations are less than positive" (Garris & Fleck, 2020, p. 17). Secondly, as the transition to OL happened under 'extraordinary' circumstances, an exploratory, qualitative approach with "broad open questions" (Brown, 2009) was deemed most appropriate to solicit a wide range of potential responses and also to capture unexpected

phenomena (Meulenbroeks, 2020). Such an approach "leaves all the thinking to the respondents" (Brown, 2009, p. 204).

Students' responses to the first five of a total of 11 open-ended reflection questions comprise the data for this study:

- When you found out that learning would take place online, what were your first thoughts and/or emotions?
- How did you experience the sudden shift to online learning?
- What made the transition to online learning easier and/or more difficult for you?
- Which aspects of online learning did you find surprisingly positive?
- Which aspects of online learning did you particularly struggle with?

We regarded the above questions as a suitable means for collecting and analyzing data on the role adjustment process and associated emotions because they provide an opportunity for students to demonstrate "identification of things that were unexpected or new, and the response to that newness" (Cleveland-Innes et al., 2007, p. 8). The remaining six questions focused on types and functions of social interactions, and were analyzed as part of the first paper (Alger & Eyckmans, 2022).

3.3 Data Analysis

3.3.1 Coding: Role Adjustment

The data resulted in a corpus of 6477 words (an average of around 160 words per student). Data analysis, which was performed manually, was an ongoing iterative process which involved organization, reflection, and coding. The specific steps we took during the data analysis are described as follows: first, the data were saved into a Microsoft excel sheet and arranged by student (i.e. student 1's answers to the five reflection questions were grouped together to form an entity but the boundaries between responses to each of the five questions were clearly marked; see Appendix 1). Next, the first author became familiarized with the data through repeated reading. For the coding itself, a deductive set of codes from Cleveland-Innes et al.'s (2007) research on role adjustment in AOL environments (namely: interaction, instructor role, self-identity, course design, and technology) were used as the initial basis. However, due to the present study's emergency online learning context, we were cognizant that an inductive approach was also necessary to further refine the codes and to allow for the creation of new codes. The authors discussed the proposed final codes, after which the second author performed independent coding of 25% of the data. The number of occurrences for which the coding differed between the raters was marginal (see Appendix 1). The first coder then continued to code the remaining 75% of the data. Next, the second author second-coded the same data, adding comments and disagreements with any of the first codes. Penultimately, the first author reviewed the second author's work, and finally, a negotiated agreement process was undertaken to resolve any discrepancies. Regarding the unit of analysis,

it was decided that the theme would be used because "themes are not bound by grammatical units such as word, sentence or paragraph but rather they refer to a cluster of words with different meaning or connotation that, taken together, refer to some theme or issue" (Weber, 1990, p. 37). This enabled us to break down sentences into distinct themes and thus avoided the difficulty involved in determining which category is dominant when sentences are used as the unit of analysis. Representative examples of students' comments for each role adjustment category and associated emotions are presented in Appendix 2.

3.3.2 Coding: Emotions

After the coding of specific areas of role adjustment described above, the data were analyzed from the emotional perspective. We were interested to see whether students explicitly or implicitly revealed their emotions when identifying aspects of the role adjustment process. Unlike specific, targeted instruments to investigate achievement emotions (Pekrun et al., 2002) or foreign language anxiety and enjoyment (Dewaele & MacIntyre, 2014), our broad open-response questions very much depended on students' willingness and desire to disclose their emotions.

As our data contained several discrete emotion words, we needed to find a manageable way to identify patterns and meaningfully condense the data. Like Bielak and Mystkowska-Wiertelak (2020), we (1) used Rowe et al.'s (2014) scheme to assign less prototypical emotion labels to the basic categories, (2) consulted Pekrun et al.'s (2002) list of academic emotions, and (3) also used our own data to establish the final basic emotion categories. For example, due to the greater frequency of 'frustration' in our data, we used this as a basic emotion category instead of Rowe et al.'s and Pekrun et al.'s (2002) 'anger'. Table 1 presents the basic emotions we identified in students' responses. So as not to dilute or oversimplify students' emotional experiences, we were open to assigning more than one emotion to each response. For example, the following verbatim response coded as 'course' for role adjustment contained both the emotions relief and anxiety: "Relieved that we were not supposed to do everything with self-study, but still a bit anxious about how everything would work. I was also a bit scared that we would get less languageinput in online courses and that we would therefor advance less." (Appendix 2)

4 Results and Discussion

The primary aim of this study was to explore students' adjustment to the role of online learner in an EOL context and to identify the emotions associated with specific areas of adjustment. By examining the experiences that students expressed in their responses to reflection questions, we were able to better understand which areas signaled the most significant adjustments (i.e. aspects which students

Positive emotions	Negative emotions
Enjoyment: Enjoyed, liked, loved, happy, nice, fun, " <i>you could do anything just the way you wanted to</i> ".	Anxiety: Anxious, fear, afraid, scared, terrified, worried, stressed, struggled, problem, overwhelming, very difficult, " <i>the huge work load, it never ended. We had to do so much on our own that it was difficult at times to do it all.</i> "
Interest: "I was eager to discover new ways of learning."; "I was curious to see how online learning would play out, since I feel like some classes could perfectly be given online."	Sadness: Sad, lonely/loneliness, missed, loss, discouraged, <i>"I also experienced some difficulties because I was much more alone then before."</i>
Gratitude: Appreciated, "professors were overall quick to send reassuring emails"; "our teachers really helped us through it."	Uncertainty: Uncertain, unsure, confusing, " <i>I</i> couldn't imagine how a vocabulary course could be given online"
Relief: Relieved, so glad; "I didn't have to go to class, which was a huge time saver. I was much more well rested since i could sleep in."	Frustration: Frustrating, don't like, "some teachers thought they had complete freedom to organise classes/put materials online whenever they wanted to, which was very unpractical for us."
Pride: "Also for speaking skills, working in the small groups really gave me the feeling I was making some progress."	Shame: "I spent way too much time on useless details. Consequently, I fell behind with all the courses."
Surprise: Surprised	Shock: Shocked, "I did not expect that we would have to shift so quickly to online lessons."
	Boredom: Monotonous, "the monotony of everyday <i>life.</i> "

 Table 1
 Basic positive and negative emotions (shown in bold) followed by explicit examples from our data and representative verbatim quotations of implicit emotions (shown in italics)

emphasized). We were also able to see which adjustments induced either positive or negative emotions, as well as which adjustments were discussed in a neutral way.

All 40 students depicted several role adjustment experiences in their responses, with the representative examples in the sections below being reported as verbatim. A total of 293 comments relating to the adjustment process were identified, meaning that on average, each student mentioned seven specific experiences. Each comment was assigned one of six themes indicating areas of role adjustment: social, teacher, self, course, technology, and other (i.e. adjustments which were not deemed as immediately belonging to the preceding five themes; see Sect. 5.6). These were further divided into sub-themes to aid comparison. Figure 1 provides an overview of the role adjustment areas by the number of students and the number of comments. For example, students most commonly experienced a role adjustment in 'self' (36/40), and the high number of specific comments (89) suggests that many students mentioned this more than once.

It is also important to note that, in addition to the 293 comments, 13 comments did not receive any role adjustment code. Some of these comments expressed significant (usually negative) emotional reactions ("not excited, not motivated"; "I wasn't too glad") but they were not related to a specific role adjustment experience.



Fig. 1 Overview of role adjustment areas by number of students and number of comments

Other comments conveyed information about the transition to OL as a whole and often included the vague pronoun 'it' (e.g. "I knew it would be harder than in real life"). In the absence of further elaboration, we felt it was not possible to assign a code to such comments; i.e. does the student mean that interaction would be harder online (social), or that organizing one's learning would be more difficult (self), or that changes in course delivery would pose a challenge? Many of these comments were in response to the first question, which asked students about their 'first thoughts' and/or emotions' when they found out that learning would take place online. Furthermore, five comments referred to generic experiences of the vocabulary course, and we felt that they also did not indicate evidence of an adjustment process (for example: "But especially concerning vocabulary, I guess it was that we were not really obligated to study during the year (except if you wanted to participate and do well in the weekly quizzes) so I had to study everything in the few days before the exam."). While these unclear comments could have been avoided had we had time to conduct pilot testing and validation, or they could have potentially been resolved had we decided to conduct member checking, in the majority of cases (293/306, 96%) we were able to assign one of the six distinct role adjustment themes.

As 34 of the 293 comments contained more than one emotion, a total of 331 emotion codes were assigned. Comments were associated with 13 basic emotions: six positive ones (enjoyment, relief, pride, interest, surprise, and gratitude) and seven negative ones (anxiety, uncertainty, sadness, anger, boredom, shame, and shock). 21% of the comments were coded as expressing positive emotion, while double this percentage (42%) were coded as negative. In just over a third of the comments (37%), we were not able to identify either an explicit or implicit emotion, so these were coded as neutral. However, we noted which of the five questions students were responding to in order to get an idea of how to interpret these answers.

For example, out of these 121 neutral comments, 43 were in response to the questions containing the words "easier" or "positive", while 50 were in response to the questions with the words "more difficult" or "struggle".

Figure 2 provides an overview of the role adjustment areas and emotions contained in students' responses. It clearly illustrates some of the core findings which will be expounded on in the following sections. For example, sadness was overwhelmingly associated with social adjustments. In terms of adjustments to the teacher's role, gratitude was the most frequently expressed emotion, but frustration was also most frequently linked to this area of adjustment. Despite technology being referred to the least number of times (27 comments), it appeared to be the second largest cause of frustration. While adjustments to the self – a theme described by almost every student (36/40) – were heavily associated with anxiety and identified as particularly challenging, this area was also the greatest source of enjoyment. The emotions of relief, interest, pride, surprise, shock, boredom, and shame were very infrequent.



Fig. 2 Overview of role adjustment areas and emotions

4.1 Social

Twenty-four students mentioned a social adjustment at least once. The sub-theme with the most comments (26) included issues such as not being able to see friends and a lack of social contact, interaction, and/or connection ("I was very worried about the prospect of a lack of social contact"). A closely related sub-theme contained 11 comments which indicated a comparison between OL and F2F classes, including the constraints of online interaction and a general yearning for on campus lessons. The most commonly cited emotion within these two sub-themes was sadness, indicated by lexical items such as "miss", "loss", and "loneliness". Many students either explicitly commented or implied that despite having opportunities to interact real-time with peers and teachers in SOL, "online will never feel the same". For example, students were able to see their friends' presence but were "not really able to converse with them like you did in class". Even though they were "lucky to have the internet", it "still felt as if everyone was on their own". They missed "normal discussions" and "real conversations" in F2F classes, suggesting that even SOL conditions may fail to socially and emotionally satisfy students. These admittedly anticipated findings support what was found in Besser et al.'s (2020) study; one of the largest differences detected between students' assessments of F2F learning and SOL was for reports of loneliness in SOL (p. 14). As also observed by teachers in Whittle et al.'s (2020) study, the "sudden loss of classroom social engagement" due to EOL was clearly an isolating experience for students (p. 317). Indeed, several students in our study commented that social isolation made studying "harder", with two students specifically linking it to a decrease in motivation. Aguilera-Hermida (2020) examined the motivation of 270 U.S. college students before and after the COVID-19 stay-at-home order with factors including interaction with peers and teachers, interest in class topics, completing schoolwork and "hanging out (eating, talking, studying, etc.)" and found that students were statistically significantly more motivated in the former time condition.

In contrast, another sub-theme grouped together the experiences of three students who signaled social affordances of SOL. All three students expressed the emotion of relief (or which could also be interpreted as reduced anxiety) because it was "less big a step to contact a teacher", they did not "feel as much pressure as in class" to give correct answers, and it was "less stressful to give presentations online instead of in real life for a full audience". These comments suggest individual differences perhaps relating to introversion.

Interestingly, 7 students emphasised aspects which stayed the same or things that they could still do such as seeing each other (albeit on screen) ('we still saw each other and we could still ask questions directly to our peers or the teachers'), thus indicating little to no role adjustment in some social areas. Half of these comments were associated with enjoyment, for example, "I also liked online 'live' lessons, because then it felt more as if we were really in class. Hearing and seeing the teacher was really nice then."

4.2 Teacher

Students' identification of phenomena that were "unexpected or new, and the response to that newness" (Cleveland-Innes et al., 2007, p. 8) with regard to their teacher(s) were mostly found in the answers to the two questions about things that made the transition "easier" and that made OL "surprisingly positive". Just over half of all students' (21) responses indicated (additional) teacher support, and/or illustrated the (increased) empathy shown by teachers during the initial transition to OL. While in some cases it could be argued that the teachers' behavior described by students was not new -i.e. teachers may have been equally as empathetic in precorona times - in many cases students talked about the "extra efforts" made by teachers and the "stronger connection" they felt towards them, with 19 comments being associated with the emotion of gratitude. In addition to gratitude, one student's comment also expressed enjoyment, saying that they "liked the video chats" where the teacher "acknowledged the difficulties we are all going through, and being able to see a teacher again after a long time". Some students provided information on how teachers' communication impacted their emotions and wellbeing, for example, indicating direct positive consequences; "some teachers really took it upon themselves to help in the best way possible which allowed a more open communication with them", "the more easy information we got from our teachers, the better. It was nice to not feel left alone, but cared about". It seemed that some students expected chaos and to have to "teach themselves everything", but the teacher's actions left them positively surprised or relieved; "I was also very happy that the professor...was willing to make an effort to still teach us stuff and didn't just abandon us"; the transition was "easier than expected, everything was explained really well". Only one comment contained a negative emotion; "I feel like some teachers did a really great job, but with others I felt a little on my own."

All in all, these comments contrast with a frequently mentioned observation from research on planned AOL environments; namely, that students do not get to know their teachers (Cleveland-Innes et al., 2007, p. 8). Interestingly, in a study conducted in the COVID-19 context, despite students having EFL classes in the term before courses were moved online, they nevertheless commented on not "being able to get to know their teachers" (Resnik & Dewaele, 2021, p. 28) even in SOL environments. This all points towards the important social role that teachers play in garnering a sense of community in online conditions (see Richardson & Lowenthal, 2017 for a review of the literature on teacher's social presence), with Besser et al.'s (2020) recent study uncovering more positive reactions and learning adaptability of students who reported greater feelings of mattering and belongingness.

Another sub-theme mentioned by 4 students was their observation of teachers adapting to the OL setting. One particularly interesting comment hinted at the uncertainty caused by not having an experienced role model to follow in a new learning environment; "it was weird because the professors also didn't really know what to do". Students' perceptions of teacher confidence with the pandemic-induced transition to OL are important because they have been found to positively predict factors such as enjoyment, interest, and learning (Garris & Fleck, 2020). Similarly, teacher quality, course design, and prompt feedback can positively impact students' satisfaction which in turn may positively impact students' performance (Gopal et al., 2021). Daumiller et al.'s study (2021) which explored the attitudes of 80 teachers from German universities towards the emergency shift to OL found that reports of higher perceived threat were positively associated with burnout levels and negatively related to student evaluations of teaching quality. An explanation for this relationship is that when a teacher perceives OL as threatening, they might decide to employ "safer (more controllable) and less resource-intensive passive learning activities instead of more constructive and interactive learning activities" (p. 3), by, for example, implementing more asynchronous than synchronous teaching. However, as Bork and Rucks-Ahidiana's (2013) research (see Sect. 2.1) elucidates, when teachers' and students' role-related expectations are misaligned, i.e., if students expect teachers to provide motivation-boosting and engaging online lessons but learn that they are instead expected to carry out independent tasks asynchronously, tensions are likely to grow which may ultimately impact learning.

Following on from this, a final sub-theme highlighted by 13 students grouped together teachers' actions that generated the negative emotions of frustration (9 comments) and anxiety (9 comments), with 3 comments being neutrally coded as "more difficult" or "challenging". Whereas some students commented on the "lack of good instructions and communication" and the consequent feeling of being "left behind", others emphasized communication overload; "some teachers thought they had complete freedom to organise classes/put materials online whenever they wanted to, which was very unpractical for us"; "the flood of emails...was quite overwhelming", and still others were clearly upset at teachers' unexpected changes in plans; "the first 2 weeks were great, till some professors decided to turn their classes to self-study courses and gave us 3x more work than a normal on-campus class." Again, these misalignments of role-related expectations have been documented even in planned AOL, with a student in Cleveland-Innes et al.'s (2007) study commenting that "a little more input and guidance from the instructor might have removed some anxiety and stimulated some more interaction on my part" (p. 9).

4.3 Self

Almost all students (36/40) mentioned an adjustment to 'self' learning attributes and strategies, such as self-regulation, self-efficacy, and self-discipline. Unsurprisingly, students generally saw these adjustments as a challenge, with the most frequently mentioned emotion being anxiety. Many students commented on "having to do everything on my own all of a sudden" and thus perceived a greater responsibility for understanding the material (in line with research on planned AOL), with some clearly fearing failure ("I was terrified that this would endanger my grades"). They also found it difficult to "keep up" ("I had a tendency to postpone tasks"; "I spent way too much time on useless details") and "build up a new routine" ("it's sometimes harder to organize yourself since without classes you have to be more proactive in taking time for each task"). In a sub-theme entitled 'study/life balance', seven students said they struggled to achieve this.

However, another sub-theme also documented across recent research emerged. Several students (23) highlighted the positives regarding the increased flexibility and freedom of OL, with 11 comments being associated with enjoyment. Interestingly, two students explicitly referred to a double-edged sword; it was positive that "all information is readily available and that you can watch videos/powerpoints again. However, this also resulted in a feeling that I was never done studying", a feeling also mirrored in a self-identified perfectionist's comment; "I could always study some more." In contrast, one student simply commented that they "quickly got used to the new routine". These comments reveal individual differences in students' adaptation to EOL, a specific focus of Biwer et al.'s (2021) and Besser et al.'s (2020) research.

4.4 Course

Students' perceptions of adjustments relating to course delivery were quite diverse, and despite these 55 comments by 30 students containing the widest range of emotions, there was a greater frequency of negative emotions. Some of the comments were in response to the first question enquiring about students' first thoughts. Within these comments, some students fearfully anticipated that OL would "endanger the quality of the lessons". Another student admitted that their language "deteriorated significantly" due to the course being delivered online, and that it was not a "fitting medium in Applied Linguistics, because learning a language is all about interaction", thus mirroring the findings from Maican and Cocoradă's (2021) study. Others expressed feelings of uncertainty such as "wondering whether live lessons would still take place" and being "concerned about the methods that would be used by the professor, because I didn't know how the classes would be taught". Indeed, as one student explained, "all courses had different ways of giving lessons: sometimes live lessons, sometimes just powerpoints, sometimes we had to submit exercises...". This same student expressed a preference for "a 'normal' setting in which the students have their syllabuses and the teacher gives us all the information", so the adjustment to course delivery must have been quite significant. Aguilera-Hermida's (2020) study not only found that students had a stronger preference for F2F than for OL, it also revealed that students who preferred F2F struggled with adapting to OL and had lower cognitive engagement. All in all, these observations echo findings from Espino et al.'s (2021) study, in which anxiety between the instructional format, focus, and workload were "strongly connected, indicative of the difficulties faced by students to maintain focus and balance assignments on learning activities while being at home" (p. 334).

4.5 Technology

Seventeen students alluded to issues with technology such as "wonky wi-fi connections", general "computer problems", social media distractions, "sitting and staring at my computer screen all day", and new learning platforms being "a steaming pile of horse manure". In contrast to the social affordances of SOL mentioned by three students (see Sect. 5.1), one student emphasized discomfort due to having to "type a message or switch on a microphone" to ask questions, which felt like a "barrier". Students thus mostly experienced challenging moments and indicated negative emotions of frustration and anxiety, with computer problems causing "even more stress" in already taxing times. However, one student acknowledged that "it didn't take more than two sessions to get the hang of" the new online environment, thus suggesting the rapid acceptance of and confidence with technology. In fact, comments from two students indicated little to no adjustment ("I thought it would be ok because we already used technology such as slides, Kahoot"), which highlights individual attitudinal differences. Aguilera-Hermida's (2020) study found that students who used technology before EOL had a better perception of their capacity for academic success.

4.6 Other

Other areas of adjustment included learning in a different physical environment (mentioned by 9 students in mostly positive comments such as being "happy to be able to go home" and feeling "comfortable"), not commuting (mentioned by 8 students in mostly positive comments and often consequently linked to "feeling more rested" and it being "easier to focus on classes"), and personal ramifications (mentioned by 6 students in mostly negative comments such as "the monotonous days during lockdown", which surely impacted focus and motivation, too).

5 Conclusion and Pedagogical Implications

This study sheds light on the experiences of 40 higher education EFL students in Belgium who, like millions of students around the world, were forced to undertake OL due to the coronavirus pandemic. It illuminates six areas in which students underwent a rapid role adjustment from learner to online learner, as well as various (emotional) reactions during this process. As this was an exploratory study based on the experiences of students at one university, findings cannot be generalized. However, the dual theoretical and analytical lens (role adjustment and emotions) within an EOL context provides a contribution to current EFL research and the findings can be used to build on and inform larger studies designed to investigate more precise causes and effects.

Furthermore, it has to be noted that almost half of the students enrolled on the course did not participate in this study, so we were not able to reflect on their experiences. The reflection questions were only sent out to students who had attended at least one of the three synchronous classes, and this could be argued to be a rather limited experience for students to become conscious of the role adjustment process as well as to process their emotions. This being said, as the data constituted retrospective self-reports (which also have their limitations), students had had several weeks of exposure to EOL. While students were asked to limit their reflections to the vocabulary course, many students commented on the transition to online learning as a whole (evidenced by comments that referred to other courses and other teachers), and this potentially points towards the questionnaire serving a somewhat therapeutic opportunity. It also indicates how difficult it was for students to compartmentalize their experiences of EOL.

We also acknowledge that our beliefs, values, and experiences may have impacted the fine-grained coding decisions. Despite categorizing students' comments into distinct themes based on research on role adjustment so as to better understand the process, we recognize that there are no clear-cut boundaries because these are complex phenomena which often interrelate and interdepend on each other (Cleveland-Innes et al., 2007, pp. 9–11). Indeed, by elucidating students' positive surprises and particular struggles within and between these themes, and thereby uncovering some of the crucial elements that students themselves emphasized in their adjustment to the new role of online learner, we can hone in on specific actions that teachers can take to support their students.

Firstly, upon reflection of students' responses, it seems that the earliest priority is for teachers to establish immediate contact with their students as soon as EOL has been confirmed. It is likely that much of the initial uncertainty regarding course delivery can be avoided simply by sending a speedy, clear, and positive message to students, preferably via a familiar mode such as email. Teachers can briefly explain what they do know about how the course will be implemented online (for example, whether the original schedule will be followed and which specific platform will be used). If it is not yet clear how the course is to continue online, we would encourage teachers not to be afraid to admit their uncertainty and to assure students that when they 'see' them online, they will hopefully be equipped with more information to answer questions. If it is feasible, a program-wide email providing an overview of how each course will be delivered could be distributed to students from a team of teachers to ease any logistical scheduling worries. As technology is a real cause of (additional) stress, outline the actions that students should take if they are unable to attend SOL lessons or submit assignments due to technical issues. These first steps are crucial because students likely maintain their expectation that a teacher shows the way and may consequently perceive themselves to be facing the journey alone if directions are not quickly communicated.

Secondly, based on students' experiences in this study (see also Alger & Eyckmans, 2022), and as echoed throughout other COVID-19 research, social

losses were felt especially hard in the mid-semester emergency move online. Students simply missed the comfort of having their friends, peers, and teachers physically near. As many before have said, learning – especially language learning – is an inherently socio-emotional activity which depends on socially, emotionally, and cognitively satisfying interactions which may sometimes be quite subtle and can easily be taken for granted. Drawing on expert insights from Rapanta et al.'s (2020) study,

The underlying point here is that conventional face-to-face teaching arrangements often provide opportunities for communication (especially between students) that we, as teachers, do not always recognise and which may disappear with the move to online, e.g. students in face-to-face lectures tend to read subtle cues to get a sense of whether a new idea they are finding difficult is also proving difficult for their peers (e.g. 'Is it just me who's stupid, or is this idea really complicated?'). Students' spontaneous conversations before and after class are an underappreciated strength of face-to-face/on campus education. They supplement the formal or overt curriculum. (p. 928–929)

With this in mind, we must do all we can as educators to ensure that pandemicinduced social isolation does not lead to an experience of learning in isolation. Even if students are quiet at first in SOL lessons, we should persist in applying familiar engagement strategies such as pre- and post-class "little chats" to provide opportunities for students to continue the "normal discussions" they perhaps took for granted in F2F experiences. As now widely known, group work can be successfully facilitated through breakout rooms, and also enables students to have those "is this idea really complicated?" moments together. In this study, a recurring theme in students' positive experiences of SOL was the interactive group activities such as the 'Pointless' game. Several students commented that they particularly enjoyed working together in smaller groups in the breakout rooms and that they were able to informally talk to their peers within them "instead of the whole bongo group". Emerging COVID-19 research is confirming the importance of limiting group size and using breakout rooms to maximize student engagement (e.g. Händel et al., 2022). Indeed, this engaging, low-stakes environment may have also boosted language development, evidenced in comments such as "for speaking skills, working in the small groups really gave me the feeling I was making some progress". For a small number of students, communication anxiety appeared to be reduced during EOL. Since this study demonstrates that students in a chaotic EOL context are subjected to a role adjustment across many areas, it seems that some of the negatives can be offset by the social affordances of synchronous technological tools that enable students to feel the presence of their peers and their teacher. While the first author of the present study - also the teacher of the course - assigned asynchronous tasks in the first weeks of EOL as a means to 'buy herself some time', it must be said that, upon reflection, the SOL classes were undoubtedly the most professionally and interpersonally rewarding.

Furthermore, teachers can remind students that they will stay behind at the end of the lesson for those who would prefer to ask questions one-to-one; after all, students always have this option in F2F settings. In the same way as in F2F classes and planned OL environments, students can be heartily encouraged not to 'sit quietly' before, during, and after SOL lessons but to dare to initiate conversations themselves, not only between friends in private chats, but also with peers in the public chat, because they, too, are responsible for maintaining social presence (Aragon, 2010, p. 66). However, students need to know that they should not feel compelled to immediately reply if they are focused on a task, for example, and should learn to set their own boundaries.

Finally, students in this study enjoyed the experience of getting to know their teachers better online. Teachers' "extra efforts" and "personal touches" did not go unnoticed. In fact, they likely opened doors to more informal yet more humanising connections. While students' motivation is a notoriously complex factor, teachers' small acts of encouragement can make a positive difference, as can the creation of space to discuss students' fears (Aguilera-Hermida, 2020). Indeed, the findings from our first study illustrate the importance these students placed on having inclass opportunities to express their frustrations in a trusting environment (Alger & Eyckmans, 2022). Despite widely lauding teachers' emotional support, it appeared that many students still called for additional scaffolding. For example, while many "loved" having increased access to learning materials, it was easy to get lost and spend too long on "useless details". Although greater autonomy is required of online learners, we once again underline the important role of teachers in eliminating unnecessary stress and ensuring that such a sudden increase in autonomy is manageable.

We started to write up this chapter around a year after the outbreak of the coronavirus. Following in the steps of many other researchers, we felt the time was ripe to reflect on the transition to OL which took place in such exceptional circumstances. In realistic terms "there likely will be future public health and safety concerns" (Hodges & Fowler, 2020). This sobering thought reminds us as educators that it is paramount to become better aware of students' (emotional) experiences during their adjustment from the role of learner to (fully) online learner, because by doing so, we are better prepared to help them should a similar crisis strike in the future.

Furthermore, over another year later in the relative aftermath of the initial outbreak, our findings can be viewed in a different light; one that covers a wider spectrum. Globally, we are adapting to a "new normal" in (higher) education which tends to be realized through some form of blended learning. At our university in Belgium, the majority of courses have resumed with on-campus face-to-face teaching. However, some classes and several tasks are being implemented online, either asynchronously or synchronously, with the use of various technologies. Thus, the focus of our paper – role adjustment and emotions – not only remains pertinent but also prompts new questions. What does the process of adjusting from the role of (fully) online learner to the role of a learner engaged in blended learning entail? What emotions are experienced during this process? In what ways do these role adjustments and associated emotions impact learning? How can teachers make necessary adjustments to their own role in order to support their students in the best way possible? Reflecting on the results presented in this study, we postulate that the answers to these questions primarily revolve around people. The lion's share of

positive surprises and particular struggles faced by our students as well as the solutions we posit to teachers can all be traced back to phenomena that occur within and between people: clear and timely communication of logistical and course-related information, the provision of technological support, explicit guidance on how to manage learning, and, most importantly, the cultivation and maintenance of informal interactional moments and emotionally satisfying relations. While this is not new knowledge and has been demonstrated in decades of research on online learning, the COVID-19 pandemic has truly illuminated the constant importance of – and reignited the joy to be found within – human connections in any learning environment.

Appendix 1: Example of Coding

Student 10's response

- 1. I thought that it would be very difficult to motivate myself to study. I was very worried about the prospect of a lack of social contact. I was also wondering whether live lessons would still take place.
- 2. At the time, I just started working because I was afraid I'd fall behind on schedule. For some courses that really tried to make it work, it was not too hard. Those who just gave you a ppt and left you pretty much on your own were much harder.
- 3. I'm not the world's most social person, so I think I did not miss being in a group for learning as much as other people. It was, however, much harder to quickly ask for more clarification on something, because in order to reach your classmates or teacher, you either had to type a message or switch on a microphone. That felt like a barrier.
- 4. When I had to give an answer, I did not feel as much pressure as in class to get it right.
- 5. I had an enormous problem trying to stay focused. In every lesson, I only managed to stay fully focused for half of it. The downside of working on a laptop is that you can very quickly open your social media.

		Role adjustment		Reflections from
Question	Theme	code	Emotion code	second coder
1. When you found	I thought that	SELF	Anxiety	
out that learning	it would be	(autonomous	('very	
would take place	very difficult	learning)	difficult')	
online, what were	to motivate			
your first thoughts	myself to			
and/or emotions?	study			
1. When you found	I was very	SOCIAL (lack of	Anxiety	
out that learning	worried about	social contact)	('very	
would take place	the prospect of		worried')	
online, what were	a lack of social			
your first thoughts	contact.			
and/or emotions?				

Question	Theme	Role adjustment code	Emotion code	Reflections from second coder
1. When you found out that learning would take place online, what were your first thoughts and/or emotions?	I was also wondering whether live lessons would still take place.	COURSE (comparison between F2F & OL/logistics)	Uncertain ('wondering')	
2. How did you experience the sudden shift to online learning?	At the time, I just started working because I was afraid I'd fall behind on schedule.	SELF (autonomous learning)	Afraid ('afraid')	
2. How did you experience the sudden shift to online learning?	For some courses that really tried to make it work, it was not too hard.	TEACHER (teacher support/ flexibility)	Neutral: shift	Coded as Course and Neutral. After discussion with the first coder, it was decided that the code Teacher would be used because the 'some courses that tried to make it work' implies the teacher's actions.
2. How did you experience the sudden shift to online learning?	Those who just gave you a ppt and left you pretty much on your own were much harder.	TEACHER (communication)	Anger ('thosewho just left you pretty much on your own')	Coded as Course & Neutral. After discussion with the first coder, it was decided that the code Teacher would be used due to a focus on the teacher's actions, and implicit Anger.
3. What made the transition to online learning easier and/or more difficult for you?	I'm not the world's most social person, so I think I did not miss being in a group for learning as much as other people.	SOCIAL (lack of social contact)	Neutral: easier	Coded as Self and Neutral. After discussion with the first coder, it was decided that the code Social would be used due to the emphasis on the social aspect of learning.

Ouestion	Theme	Role adjustment code	Emotion code	Reflections from second coder
What made the transition to online learning easier and/or more difficult for you?	It was, however, much harder to quickly ask for more clarification on something, because in order to reach your classmates or teacher, you either had to type a message or switch on a microphone. That felt like a barrier.	TECHNOLOGY (challenges)	Anxiety ('felt like a barrier')	
4. Which aspects of online learning did you find surprisingly positive?	When I had to give an answer, I did not feel as much pressure as in class to get it right.	SOCIAL (positives of interacting online)	Relief ('did not feel as much pressure' = reduced anxiety)	
5. Which aspects of online learning did you particularly struggle with?	I had an enormous problem trying to stay focused. In every lesson, I only managed to stay fully focused for half of it.	SELF (autonomous learning: discipline, staying focused)	Anxiety ('enormous problem') [& Boredom] ('stay fully focused')	A second emotion code was suggested: Boredom. After discussion with the first coder, Boredom was also added.
5. Which aspects of online learning did you particularly struggle with?	The downside of working on a laptop is that you can very quickly open your social media.	TECHNOLOGY (challenges)	Neutral: challenge	

Appendix 2: Representative Examples of Students' Comments for Each Role Adjustment Category and Associated Emotions

Category: SOCIAL Sub-category: not seeing friends / lack of social interaction / lack of connection with peers / being alone			
Student number	Comment	Emotion(s)	
1	It also felt a lot more lonely that going to school and seeing all your friends.	Sadness ('a lot more lonely')	
2	I felt quite down. My university friends and I are very close and constantly motivate each other to perform well. Being away from them was very difficult.	Sadness ('quite down')	
6	fear for the lack of connection and communication with my peers	Anxiety ('fear')	
23	Lack of social contact with students and professors?	Neutral: challenge	
26	Loss of real social connection with friends at university,	Sadness ('loss')	
Category: SOCIAL Sub-category: missing social aspects of F2F classes / comparison of F2F and OL / constraints of learning online			
6	I still missed real conversations in class, but there were no other options at that time.	Sadness ('missed')	
19	Despite the online interaction with other students, it still feels very lonely.	Sadness ('very lonely')	
14	Sometimes I missed being able to talk to a teacher, especially in a very difficult course when I didn't understand everything right away.	Sadness ('missed')	
Category:	SOCIAL Sub-category: fewer opportunities to find	d friends	
22	not finding friends	Neutral: challenge	
Category: SOCIAL Sub-category: positives of online interaction			
10	When I had to give an answer, I did not feel as much pressure as in class to get it right	Relief ('did not feel as much pressure' = reduced anxiety)	
12	It was less stressful to give presentations online instead of in real life for a full audience	Relief ('less stressful' = reduced anxiety)	
Category: same	SOCIAL Sub-category: little to no adjustment, for	cusing on what stayed the	
5	we still saw each other and we could still ask questions directly to our peers or the teachers.	Neutral: first thoughts	
8	I also liked online 'live' lessons, because then it felt more as if we were really in class. Hearing and seeing the teacher was really nice then.	Enjoyment ('liked', 'really nice')	
Category: TEACHER Sub-category: (additional) teacher support / empathy / human dimension / flexibility			
1	I feel like some teachers did a really great job, but with others I felt a little on my own.	Gratitude (' <i>really great job</i> ') & sadness (' <i>on my own</i> ') & anger: frustration (' <i>on my</i> <i>own</i> ')	

3	The teacher's encouragement made it easier	Neutral: easier	
4	The fact that many teachers and professors showed that they are only human after all made the online learning experience easier for me. Most of them were very caring and some even added a more personal touch to their online classes.	Gratitude ('very caring')	
32	I liked the video chats, where you acknowledged the difficulties we are all going through, and being able to see a teacher again after a long time.	Gratitude ('acknowledged') & enjoyment ('liked')	
Category:	TEACHER Sub-category: teachers adapting to O	L	
19	and I think most professors also became comfortable with online learning, which helped a lot	Relief ('helped a lot')	
28	It was weird because the professors also didn't really know what to do.	Uncertain ('weirdalso didn't know what to do')	
33	All of this was new to them too, but we felt their support. Everyone was doing the best they could.	Gratitude ('felt their support')	
Category: changing	TEACHER Sub-category: reduced communication	n / communication overload /	
21	The first 2 weeks were great, till some professors decided to turn their classes to self-study courses and gave us 3x more work than a normal on-campus class.	Anger: frustration ('gave us 3x more work')	
25	I felt left behind because of the lack of communication in a lot of courses. So I would describe it as stressful and uncertain	Anxiety ('stressful') & uncertain ('uncertain') & anger: frustration ('felt left behind')	
39	The transition to online learning was difficult, because of all the chaos. We had many courses to keep up with and many professors tried to communicate with us about certain assignments and classes on Ufora. However, this happened all at once, so it was hard to find order in all the chaos	Anxiety ('chaos')	
Category:	SELF Sub-category: study-life balance		
5	therefore there was more time left to study or do other things (sometimes not related to school)	Neutral: positive	
16	It was hard to divide my time into study time and free time	Neutral: shift	
Category:	SELF Sub-category: autonomous learning (negati	ves)	
1	Processing a lot of the course by yourself.	Neutral: challenge	
5	I felt like I had lost my "study rhythm" and I found it difficult to get an overview because I had to take into account so many different things at the same time: online classes, homework, deadlines and exams.	Anxiety (overwhelming)	
15	I don't think the experience was too bad all together, it just demanded a lot of discipline.	Neutral: shift	
30	I felt discouraged and wondered whether I'd be able to pass all of my courses	Sadness ('discouraged') & anxiety ('wondered whether I'd be able to pass')	

37	I had a very difficult time to keep a fixed schedule, and a lot of the learning happened the days before the exams and not much happened beforehand.	Anxiety ('very difficult time')	
Category:	SELF Sub-category: autonomous learning (positiv	ves)	
4	1. I absolutely loved the direct and easy access to the course materials.2. The fact that it was possible to watch a difficult class more than once was very useful.	Enjoyment ('absolutely loved')	
14	The fact that for some courses you are free to choose when you watch the PowerPoints or the recordings.	Neutral: positive	
16	I could choose to devote more time to one course and less to another.	Enjoyment ('I could choose')	
Category:	SELF Sub-category: little to no adjustment		
33	I thought it would be more difficult to pay attention to an online class, e.g. on Bongo, but it was just as fun as on-campus classes	Enjoyment ('just as fun')	
Category: comments	COURSE: comparison between F2F and OL organ related to course logistics	isation and delivery /	
5	"In normal life", I sometimes find 3 hours in class too long. Fortunately, online classes hardly ever lasted 3 hours	Neutral: positive	
8	I prefer a 'normal' setting in which the students have their syllabuses and the teacher gives us all the information.	Neutral: first thoughts	
9	Relieved that we were not supposed to do everything with self-study, but still a bit anxious about how everything would work. I was also a bit scared that we would get less language-input in online courses and that we would therefor advance less.	Relief ('relieved') & anxiety ('anxious', 'a bit scared')	
15	I was wondering if we would have online classes for all our courses	Uncertain ('wondering')	
21	Courses of which the lectures were cancelled were a struggle. I learn and remember new information better in class, from the lecturer's notes and the way they say them. Everything is a bit more monotonous online.	Anxiety ('struggle') & boredom ('monotonous')	
40	No more course specific days for example [language] practice used to be on Tuesdays only, now deadlines of that course on Monday, Thursday, Friday, Saturday	Anger: frustration (more deadlines to meet)	
Category:	COURSE Sub-category: little to no adjustment	1	
34	The emotions I felt varied from course to course. For this course in particular, I didn't really feel worried or stressed. We had just finished the phonetics part of the course and I was quite confident that the speaking and vocabulary part would not really be affected by the online learning module. After all, I felt the main focus was on using our skills and perfecting them rather than learning new ones.	Neutral: first thoughts	

Category: TECHNOLOGY | Internet connection, computer problems, non-acceptance of working with computers

2	I also really don't like working with computers, but	Anger ('don't like',	
	now I did not have a choice which was quite	frustrating')	
0	I usualing at times.	A	
8	connection would not be good enough etc.	Anxiety ("scared")	
26	I had a lot of problems with my computer and Wi-Fi, which caused even more stress	Anxiety ('stress')	
Category:	TECHNOLOGY Sub-category: little to no adjust	nent	
27	I thought it would be ok because we already used technology such as slides, Kahoot,	Neutral: first thoughts	
Category:	OTHER Sub-category: Physical environment	1	
8	The last thing I liked about online learning was the fact that I was at home, and could for example take a break by going for a walk, or even just lay on my bed (things we could not do on campus). I was studying in the comfort of my own house, so I could always go to the toilet, take something to eat or drink etc.	Enjoyment ('liked', 'comfort')	
25	At first I was excited to be at home with my family. But only after one week I realised that it could be very stressful and I was confused a lot especially for not knowing how things would go on.	Interest ('excited') & anxiety ('very stressful') & uncertain ('confused')	
Category:	OTHER Sub-category: No commute		
16	I didn't have to go to class, which was a huge time saver. I was much more well rested since i could sleep in.	Relief ('huge time saver', 'more rested')	
26	It was easier because :I didn't have to travel from home to [city] and vice versa	Neutral: easier	
Category: OTHER Sub-category: Personal ramifications			
11	how will it affect our personal lives	Uncertain	
30	The monotony of everyday life, not going outside, the uncertainty	Boredom (<i>'monotony'</i>) & uncertain (<i>'uncertainty'</i>)	

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