

Article

Contextual Changes and Shifts in Pedagogical Paradigms: Post-COVID-19 Blended Learning as a Negotiation Space in Teacher Education

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Abstract: This study investigates a post-COVID-19 curricular change in the blended learning (BL) academic timetable of a teacher education college where, pre-COVID-19, most academic courses were taught face-to-face (F2F) on campus. At present, the meetings are F2F for three weeks, followed by a week of remote learning, combining synchronous and asynchronous pedagogies. This study explores these two aspects of the online component and the considerations for their implementation. In a mixed-method approach, the data were collected using a closed questionnaire and two focus groups involving 76 lecturers and 553 students altogether. Of the wide range of pedagogies identified, the highest success rating was accorded to synchronous frontal lectures via Zoom by the students and to integrating MOOCs, YouTube, and Podcasts by the lecturers. Moreover, compared to the lecturers, the students rated the success of asynchronous self-directed learning considerably higher. Qualitative analysis revealed that pedagogies slated for the online module were frequently negotiated between students and teachers. Findings suggest that a structural change in the curriculum could be a first step in rethinking pedagogies in the post-COVID-19 education arena. The next step should focus on narrowing the gap between lecturers' and students' perceptions regarding the success of the various pedagogies.



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1. Introduction

In the wake of the recent COVID-19 pandemic, scholars have increasingly come to regard blended learning (BL) as the new normal in higher education [1,2]; while in and of itself, BL is not a new educational approach [3,4], it is only during the pandemic that it became, as Zhao and Watterson [5] put it, “the de facto method of education provision for varying periods” (p. 2). Today, post-COVID-19, academic staff go to great lengths to sustain the BL competencies that the pandemic had compelled them to master.

The current study explores a structural, BL-related change introduced during the pandemic to the curriculum of an Israeli teacher education college. The overall aim is to endorse what Zhao and Watterson [5] consider as one of the positive elements brought to higher education by the force of harsh circumstances.

The college timetable pre-COVID-19 comprised two twelve-week semesters, with three to four days of learning per week. With very few exceptions, all academic college-based courses were conducted on campus in face-to-face (F2F) sessions. The new timetable, constructed in the wake of COVID-19, comprises three weeks of F2F on-campus sessions followed by a week of remote learning at the discretion of teacher educators (TEs), who are given full autonomy to arrange the module. To implement the BL design, the college rector asked all TEs to modify their syllabi, detailing the online components of their respective courses. In this task, the TEs were offered the assistance of techno-pedagogical experts, albeit with no infringement of their academic autonomy, including the mode of teaching:



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they could teach synchronously via Zoom or upload asynchronous assignments to the course website on Moodle. According to [6], these changes in the timetable may be viewed as two critical success factors for BL implementation: the educational institution's strategy and receiving organizational support.

A preliminary study (Biberman-Shalev et.al, submitted) found that both TEs and student teachers (STs) were highly satisfied with this new BL timetable. Gauging the extent of their satisfaction, however, is only a starting point in understanding BL as a promising post-COVID-19 change.

Of the various elements of BL as an educational context of curriculum design [7], the current study focuses on the pedagogical aspect of the online module, based on the new BL timetable of the college sampled as a case study. Following Megahed and Ghoneim [8], this study operates with a wider definition of the concept of pedagogy, incorporating not only the technicalities of teaching but also the instructors' rationales and values, as well as the theoretical foundations and evidence base of their teaching choices and practices, and the relevance of the latter to the real world. All these aspects are explored with reference to STs' evaluations regarding the success of the pedagogies implemented.

Examining both TEs' and STs' attitudes and evaluations regarding the success of the pedagogies may help promote this new, post-crisis educational approach [9]. At the same time, a closer look at the pedagogies as such will enrich the hitherto sparse and inconclusive evidence as concerns the online module of the new BL modality—a need identified and highlighted by Rasheed and colleagues [10].

2. Literature Review

2.1. BL in Teacher Education

During the COVID-19 pandemic, all schools implemented substantive changes, the foremost of which was switching to remote learning, thus necessitating and precipitating modifications in teacher education. BL was empirically found to support an effective teaching–learning process for different kinds of learners by increasing interaction between teachers and their students, offering flexibility, boosting learning engagement and motivation, and more [10]. However, the corpus of studies on integrating BL in teacher education is still deplorably small [11]. Howard [12] describes how general education faculty staff, for all intents neophytes of BL, navigate the contextual shift from F2F to BL and negotiate their professional identities. She found that attitudes toward BL among the staff are largely negative, owing to a sense of ineffectiveness, uncertainty, personal disharmony, and devaluation of their pedagogical worth. This mindset resulted in the erosion of their professional identity, which in turn reduced their self-efficacy and caused them to underutilize subject expertise, while at the same time increasing administrative roles and widening divisions between faculty and students. On a more optimistic note, other studies point to the unique opportunity created by the pandemic to embrace positive changes in the education systems, including teacher education institutions [1].

2.2. Considerations in Activating BL

The potential of BL, defined as the “organic integration of thoughtfully selected and complementary F2F and online approaches and technologies” [13] (p. 148), lies in creating rich learning opportunities for diverse students to actively engage in shaping their learning [14].

While, as of late, BL has occupied a center stage in teacher education as a viable means of rendering teaching practices more flexible, relevant, and attractive, its implementation in practice is still a matter of trial and error [15–18]. As challenges, studies highlight course management, workload, overlaps, and achieving harmony between the two modules, in terms of media and technologies, on the one hand, and the design and learning approaches on the other [19].

As cautions that blended course developers should be aware of, Graham [20] identifies six points: “(1) the role of live interaction, (2) the role of learner choice and self-regulation,

(3) models for support and training, (4) finding balance between innovation and production, (5) cultural adaptation, and (6) dealing with the digital divide” (p. 14).

Graham’s findings [19] largely dovetail with those of Gedik et al. [19], who investigated instructors’ experiences in designing and implementing a blended course in teacher education. These authors propose three main categories: (1) considerations regarding the pedagogical approach: creating harmony between the F2F and online components; promoting learner-centered and authentic learning; (2) considerations regarding course organization and preparation of materials: balancing the F2F and the online portions of the course, gathering the F2F and online materials, uploading and organizing the online documents and links for further group discussion and reflection, and preparing the F2F meeting for important new content; (3) considerations regarding interaction and roles: instructor–student interactions took place mostly in F2F meetings via question–answer and discussion sessions; the only online venue where the students could actively interact with the content and their peers was an online forum. The instructor’s aims were to make the students active participants, facilitate discussions, arrange course activities, provide information, coordinate group work, etc.

Like Gedik et al. [19], Oliver and Stallings [21] also present three broad considerations behind BL implementation: (1) contextual considerations: such as the suitability of topics and subjects for blending; learner challenges; and available scaffolds; (2) instructional strategy and teaching considerations: the right mix of student-centered, project-based instruction and collaborative activities that are well supported by BL; and (3) technology considerations: appropriate resources for best support.

Conceptually, all the above-listed considerations regarding implementing BL in education are based on fundamental learning principles such as meaningful learning, activation, collaboration, and connections between content-based knowledge learned with the instructor F2F and its application in online environments.

2.3. *The Role of Context in Curriculum Development*

In its broader definition, a curriculum encompasses ideological, cultural, and contextual facets. Moreover, structurally affected by technological, economic, and social transformations, it is necessarily dynamic. Cahapay [1] defines a curriculum as “a plan that has elements” (p. 1), which he identifies based on Tyler’s [22] classic model of curriculum studies and proposes as lenses for curriculum development in any circumstance or context: (1) goal, (2) content, (3) approach, and (4) evaluation. Exemplifying these elements in the post-COVID-19 arena, Cahapay [1] suggests examining curriculum contents for the possibility of reduction and integration, focusing approaches on shifting to the online mode, and ensuring that the evaluation is cohesive and logical. As surveyed in the previous section, research into BL deals mainly with the rationale for designing the curriculum. Since pedagogy is a major aspect of a curriculum, pedagogical concerns in BL are related to the context, content, and learning environment. In keeping with these guidelines, any examination of BL should first and foremost address the question, Which of the above core facets of a curriculum does it target and in what way?

Saavedra and Steele [23] likewise advocate a broader definition of a curriculum that incorporates conditions of time, space, and methodology, arguing that these aspects have an explicit impact on how a curriculum is designed and realized. The situational context is also central to Fullan’s [24] conception of a curriculum, whose implementation, he argues, is largely determined by the available means to accomplish desired objectives, and therefore it needs to be translated to classroom practices. In a similar way, in discussing the interface between curriculum and context, Luke [25] regards the idea “[t]hat curriculum sits within context [as] a central axiom of curriculum theory, development and implementation” (p. 145). In such an understanding, “context”, as a key concept in curriculum implementation, encompasses all the conditions in which the educational process takes place. This approach takes count of the diversity and complexity of cultural contexts embedded in school life, in teacher education, and in instruction in general. It is thus not incidental that

the discourse on curriculums is central to the post-COVID-19 agenda. In the current study, BL is perceived as the new context of the post-COVID-19 curriculum design in the teacher education college's timetable. In particular, this study focuses on the pedagogical aspect of this curriculum design, i.e., the TEs' preferences and their considerations for instruction in the synchronous and asynchronous modes of the online module.

Zhao and Watterston [5] argue that today's uncertain and rapidly changing reality requires a reconceptualization of curriculums at their core. Although it is important to define a curriculum framework at the system level, it should be sufficiently flexible to afford autonomy to schools to introduce changes. In teacher education, this would entail that TEs and STs should jointly rethink the purposes of teaching within the new curriculum design, and where and when learning should take place. The focus should thus be put on preparing teachers and lecturers for a new role, no longer as deliverers of content and skills alone, but as educators, consultants, and resource curators. In this regard, three research questions were phrased as follows:

1. What pedagogies do TEs opt for in the online component of the new BL timetable?
2. What considerations guide TEs in activating these pedagogies?
3. How did TEs and STs evaluate the success of these pedagogies?

3. Materials and Methods

3.1. Research Design

This study used a methodological-triangulation research design to assess TEs' and STs' attitudes, considerations, and evaluations of the success of various pedagogies, which were activated across the online component of the new BL timetable. The concept of data triangulation refers to the use of multiple data sources in the same study for interpretation and validation purposes. Hussein [26] views triangulation as a "classical type of combining qualitative and quantitative methods in studying the same research phenomenon" (p. 106). The current study is based predominantly on quantitative data, with qualitative input used to support the interpretations thereof, with the main object of uncovering TEs' considerations for activating the various teaching tools.

The new BL timetable was integrated post-COVID-19 into the 2021–2022 academic year. The attitudes of both TEs and STs regarding the new BL timetable were gauged based on a non-probability convenience sampling. At the end of the first semester of the academic year, after experiencing structural changes for at least three months, all the TEs and STs in the college received a link to an anonymous Google Form online questionnaire. To keep more ethical aspects, the filling of the questionnaire was voluntary.

3.2. Participants

Two populations were targeted: the entire academic staff and all STs in the college, of all levels and affiliations. The survey was completed by 76 TEs and 553 STs, with a return rate of 25% for TEs and 28% for STs—a relatively large percentage considering that TEs and STs typically do not cooperate in filling out surveys. The gender distribution among both TEs and STs is representative of the college as a whole.

Of the ST respondents, 90% were native Hebrew speakers; 5% were native Arabic speakers; 3% were native Russian speakers, and 2% did not specify their native language. Of the B.Ed. STs, 43% were in their second academic year; 26% were in their first year; 18% were in the third, and 13% were in their last academic year. Of the M.Ed. STs, 62% were in their second year and 38% in their first year. The main demographic data for STs and TEs are demonstrated in Table 1.

Table 1. Main demographic characteristics of the ST and TE participants.

Characteristics	Frequency (%)	
	STs (N = 553)	TEs (N = 76)
Gender		
Female	509 (92)	63 (83)
Male	44 (8)	13 (17)
Academic program		
B.Ed.	357 (65)	59 (78)
M.Ed.	77 (14)	6 (8)
Career changers	119 (21)	11(14)
Disciplinary Specialization (B.Ed.)		
Mathematics and Science	75 (14)	14 (18)
Humanities	134 (25)	17 (22)
Art and Music	195 (35)	9 (12)
English (as a foreign language)	52 (9)	6 (8)
Special education	58 (10)	12 (16)
Pre-school education	39 (7)	18 (24)

The mean number of years on the job for TE participants stood at 12 years (S.D. = 8.4); only 7% of the TEs were lecturers in the M.Ed. programs, while 68% lectured in the B.Ed. programs, and 25% were pedagogy instructors in the practicum (kindergarten and schools).

In addition to the survey, 10 TEs participated in two focus groups, 5 in each. These TEs were selected using a snowball convenience sample, such that each of the three researchers, who work at the same college, approached colleagues whom they knew personally and who reported having filled out the survey questionnaire, and suggested they participate in the focus groups. Seven of these TEs were lecturers in the B.Ed. and M.Ed. programs, teaching courses and research seminars in education, mathematics, science, and Hebrew literature, and three were pedagogy instructors. All 10 participants gave their informed consent for inclusion before participating in the focus groups. This study was conducted in accordance with the Helsinki Declaration, and the protocol was approved by the Ethics Committee of the college sampled (ethics approval code 2023010401).

3.3. Data Collection

Adopting a mixed-method approach, this study used a questionnaire and two focus groups. The questionnaire was based on a unique survey that was developed by the Institutional Research Authority of the college. The main aims of the survey were to evaluate the TEs' and STs' extent of satisfaction with the new college timetable and to explore the participants' needs and concerns. This survey was validated by four scholars who work in the college. The validation of the assertions included in the questionnaire was approved by a full agreement. Assertions that were not received a full agreement were removed from the questionnaire. The survey to assess the TEs' and STs' attitudes towards the pedagogical aspects of the online component of the new BL timetable was structured as follows. The first part comprised demographic items adjusted to each target population (e.g., training program affiliation and seniority). The second part contained a list of six pedagogies, to be rated in terms of their frequency in the online component of the BL timetable, and success (using a 3-point scale, ranging from 1: not successful to 3: extremely successful). In addition, the version presented to the TEs included two additional items. One targeted the time allowed for completing an asynchronous assignment, based on four answer options, e.g., "one to two days before the ensuing F2F course meeting" and "by the end of the semester". The second item was likewise categorical, gauging the way the above asynchronous assignment was assessed based on six answer options, e.g., grading some assignments and marking down the rest as submitted/unsubmitted, and discussing the assignment F2F in the upcoming course meeting.

The aim of the two focus groups was to shed light on the TEs' considerations and preferences in activating the various pedagogies in the online component of the BL timetable.

Accordingly, the discussion revolved around two main questions: (1) What pedagogies do you opt for in the online component of the BL timetable? and (2) What are your considerations in activating these pedagogies? Each group discussed these issues for 60 min, and then for 10 more minutes, summarized the issues and ideas during the discussions.

3.4. Data Analysis

First, data were analyzed quantitatively using the SPSS 24th version. The quantitative analysis was based on descriptive statistics and T-tests measuring the differences between the evaluations by TEs and STs of the success of the pedagogies on the list. Next, TEs' considerations discussed in focus groups were subjected to a thematic analysis [27], and the reliability of the themes that emerged therefrom was confirmed by researchers' independent interpretations. Any minor differences were resolved through discussion [28]. The purpose of the qualitative analysis was to illuminate the quantitative results and to ensure their reliability.

4. Results

Regarding the six pedagogies targeted in the online component, 86% of the TEs reported utilizing asynchronous self-learning based on reading theoretical resources; 84% utilized asynchronous meetings integrating MOOCs, YouTube, Podcasts, and gamification; 74% utilized synchronous lectures via Zoom; and 67% utilized synchronous group learning on Zoom. TEs' and STs' evaluations regarding the success of the six pedagogies are presented in Table 2.

Table 2. Descriptive analysis of TEs' and STs' evaluations regarding the success of the six pedagogies targeted.

Pedagogies	Extent of Success	
	STs N = 553 M (S.D.)	TEs N = 76 M (S.D.)
Synchronous lecture via Zoom	2.59 (0.67)	2.66 (0.55)
Integrating MOOCs, YouTube, Podcasts, and gamification	2.56 (0.72)	2.73 (0.57)
Asynchronous self-learning based on theoretical resources	2.48 (0.76) *	2.20 (0.73) *
Synchronous group learning via Zoom	2.36 (0.77)	2.51 (0.74)

Scale: Low = 1; High = 3; * $p < 0.01$

With the exception of asynchronous self-learning based on reading theoretical resources $\{t(627) = 2.87; p = 0.004\}$, all the differences between the mean scores of the t -tests for TEs and STs emerged as non-significant. Overall, the results indicate that the pedagogy regarded as more successful among TEs was integrating MOOCs, YouTube, Podcasts, and gamification, while among the STs, it was synchronous lecture via Zoom.

The results for the item gauging TEs' preferences regarding the time for completing an asynchronous assignment geared for the distance module are presented in Table 3.

Table 3. Distribution (%) of the time ranges allowed by TEs (N = 76) to complete asynchronous assignments.

The Time Range for Completing Asynchronous Assignments	Frequency (%)
	TEs N = 76
Finishing the assignment one to two days before the upcoming F2F meeting	58 (76)
Finishing the assignment by the end of the semester	15 (20)
Finishing the assignment by the end of the current meeting	3 (4)

The above results indicate that, overall, TEs were flexible and allowed STs to take charge of and manage their workloads. They may also point to a connection between the remote and the F2F module, as the replies of most TEs imply that STs managed to finish the assignments close to the upcoming F2F meeting.

TEs' responses as to the ways they evaluated the asynchronous assignments are displayed in Table 4.

Table 4. Distribution (%) of TEs' (N = 76) preferences in evaluating asynchronous assignments.

Ways to Evaluate the Asynchronous Assignments	Frequency (%)
	TEs N = 76
Grading some assignments and marking the rest as submitted/unsubmitted	31 (40)
Discussing the assignment F2F in the upcoming meeting	17 (22)
Grading all assignments and weighing them in the final course grade	14 (19)
The assignments' solutions were uploaded to the course MOODLE website, but were neither graded nor discussed	7 (9)
The assignments were not evaluated but only marked down as submitted/unsubmitted	5 (7)
The assignments were neither graded nor registered in any way	2 (3)

The above results suggest that TEs saw the importance of evaluating tasks and assignments, but were flexible as to the proportion of assignments they graded in every given case. Only a few TEs reported assigning a task without any follow up.

Data from the two focus groups attest to a variety of synchronous and asynchronous pedagogies implemented in the online component, following a range of rationales. The pedagogies and considerations for using them are presented in Table 5. It is noteworthy that the same rationale could govern the use of more than one pedagogy. For example, the one-on-one consultation and group project pedagogies were motivated by the same consideration of shifting learning responsibility to the STs. Furthermore, most of the activated pedagogies were guided by STs' needs—a finding that sparked stormy discussions in the focus groups. It is evident that, essentially, the process of selecting the pedagogies for the online module was negotiated jointly by TEs and STs—a circumstance that TEs described as a new and unfamiliar phase in their relationship with their STs, ascribing it to the post-COVID-19 shift to BL. They further relayed that STs had expressly inquired about the pedagogies slated for the online component and had often debated with the TEs whether to opt for synchronous or asynchronous learning, and how much time should be allocated for the asynchronous assignments.

Some of the TEs reported that, to better cater to their STs' needs, they usually asked them at the end of a F2F meeting if they preferred the next session to be synchronous or asynchronous. For example, one of the TEs said, "I ask them [the STs] if other TEs will teach them via Zoom and if they prefer that I upload an asynchronous assignment to the course Moodle. I am worried that the STs will be overworked in the distance module and that the week's learning will be ineffective and also annoying." Other TEs mentioned the importance of modeling: "When I take into account their [the STs] preferences, I think that this is good modeling, and hope they will be attentive to their future students' needs"; and "I think it is important to model for them how to design an effective asynchronous meeting in case they will need to teach their students remotely." These examples elucidate the quantitative results in which most TEs rated integrating MOOCs, YouTube, Podcasts, and gamification as the most successful remote pedagogy. In this, however, they differed from STs, who preferred synchronous meetings via zoom by a large margin.

Moreover, some TEs stated that, in a F2F meeting, they always previewed the next asynchronous assignment and informed their STs if it would be graded. In the next F2F session, they asked them if they had found the assignment useful and/or fair. These TEs

felt that expressing interest in the needs and attitudes of their STs contributed to a congenial learning climate, boosted motivation, and improved the continuity of the course. These qualitative findings are in keeping with the quantitative data to the effect that most TEs requested that the asynchronous assignments should be completed a couple of days before the ensuing F2F meeting.

Table 5. TEs’ considerations for activating synchronous and asynchronous pedagogies in the online component of the new BL timetable.

Considerations	Synchronous Pedagogies				Asynchronous Pedagogies			
	Frontal Lecture via Zoom	Breakout Rooms via Zoom	One-on-One Consultation	Presentation and Drill Activity	External Media Resource and Posting in a Blog or Forum	Activity Based on Relating Theory to Practice	Group Project	Reading Theoretical Resources
STs’ needs								
Focused uninterrupted learning			+	+	+	+		+
Ventilating the meeting		+					+	
Decreasing the workload	+		+	+	+			
Perceiving long Zoom meetings as not effective			+	+	+	+	+	+
Understanding the relation between theory and practice				+	+	+		
Experiencing integration of media in teaching and learning				+	+			
Practicing the material taught F2F when and where deemed convenient				+	+	+	+	
TEs’ needs								
Lecturer’s convenience	+	+			+	+	+	+
Allocating time for TEs’ pedagogical/academic development					+	+	+	+
Avoiding bad experiences in STs’ self-directed learning	+							
Responsibility for the academic institution’s timetable	+	+						
Disciplinary content needs								
Material outcome	+			+				+
Course content can be learned only through frontal teaching	+			+				
Pedagogy approaches and Roles								
Shifting learning responsibility to the STs		+	+	+	+	+	+	+
Fostering TEs–STs relationship		+	+		+			
Advancing differential teaching		+	+				+	
Modeling of scaffolding, communal learning, and social interaction in online spaces		+			+		+	
Developing critical thinking and a multi-perspective orientation		+			+		+	+
Flipped classroom	+			+	+	+	+	+
	7	9	6	11	15	9	12	9

Other TEs in the focus group argued that, to the extent that pedagogies applied in F2F sessions are not negotiable, the ones used in the online module need not be discussed with STs either. The online component is not a “marketplace,” they quipped, and enabling STs to decide which pedagogies to use may cause chaos and undermine the importance of the distance module. These TEs claimed that a pedagogy should be suited to the course contents (e.g., “Mathematics can be taught only frontally via Zoom”). Several TEs contended that a pedagogy must necessarily be contingent on the character of the course (i.e., introductory course, seminar, or workshop), e.g., “In my science course, I have no choice but to meet them via Zoom as I need to cover the course contents. But in my seminar course, I am more flexible: I can utilize the distance meetings to personally guide the STs who need this, and instruct the rest to continue independently.” A TE who teaches quantitative research methods shared, “At the beginning, I didn’t think that the course could be taught online; I only knew that I had to find the best way to do it for my STs.” She described designing a 25 min presentation and drill activity—a pedagogy whose success, according to her, was manifested in the STs’ grades: “Their grades were higher than when only F2F sessions had

been offered." She argued there was no room for negotiating: "I explain the character of the online component at the beginning of the course—and that's that!"

5. Discussion

This study investigated a new BL academic timetable designed and implemented post-COVID-19 in a teacher education college. A prior investigation found that both TEs and STs were highly satisfied with this timetable (Authors, submitted). Most research hitherto has explored BL as a whole; the current study adopted an innovative approach in isolating the online module and focusing on its pedagogical aspects, in an endeavor to better understand how to effectively integrate BL in post-COVID-19 education [10]. Using a teacher education college as a case study, the current research used a combination of quantitative and qualitative analyses to identify the pedagogies TEs activated in the distance module, their considerations in selecting them, and evaluations of both TEs and STs regarding their success.

A variety of synchronous and asynchronous pedagogies were identified. Of the synchronous pedagogies, the three most common were as follows: (1) frontal lecture via Zoom, (2) breakout rooms via Zoom, and (3) one-on-one consultations. The five most common asynchronous pedagogies were as follows: (1) presentation and activity, (2) reading external media resources and posting responses in a blog or forum, (3) drill with the object of relating theory to practice, (4) group project, and (5) reading theoretical resources. The asynchronous pedagogies utilized the most frequently were (1) self-learning-oriented assignments based on reading theoretical resources and (2) integrating media resources. The most frequent synchronous pedagogy was frontal lecture via Zoom. Overall, both TEs and STs rated the success of the pedagogies implemented in the online component as medium-high.

It is noteworthy that TEs and STs diverged in their perceptions of the most successful pedagogy: for TEs, this was the asynchronous integration of media resources, while for STs, a synchronous frontal Zoom lecture. This finding could be attributed to the perceptions of the two populations regarding their roles. It stands to reason that, in teaching the online module, TEs feel that they should act as role models for their students, while the students focus their efforts on mastering the material. Thus, the differing pedagogies rated as the most successful by TEs and STs may indicate the absence of a shift in STs' perceptions of their traditional role as passive learners. On the other hand, TEs' choices regarding the most successful pedagogy, as well as their objective to promote self-directed learning (see Table 5), suggest that, in the new post-COVID-19 educational arena, they recognize the need to prepare STs for online teaching. Furthermore, TEs' responses point to a degree of ambivalence about the online component. On the one hand, their ratings reflect an emerging understanding that the distance module can be marshaled to self-directed learning, while on the other, in their lower ratings of asynchronous pedagogies compared to STs, one discerns skepticism as to whether STs will be able to learn remotely.

Most of the TEs' considerations in selecting and implementing the various pedagogies were anchored in the classic precepts of curriculum planning: (1) STs' needs, (2) TEs' needs, (3) content requirements of the discipline, and (4) pedagogical approaches and roles. These underpinnings are in keeping with the classic model of curriculum development proposed by Tyler [22]. According to Tyler's framework, curriculum development is mainly influenced by society, students, and the subject specialist. In teaching remotely, TEs' considerations were primarily guided by their perceptions of STs' needs. Their responses may also suggest that TEs judged self-directed learning as the uppermost of such needs. Indeed, the most common synchronous and asynchronous pedagogies they reported implementing were motivated by the consideration that we categorized as shifting learning responsibility to the STs; the one exception, frontal lecture via Zoom, was related to TEs' bad experiences as concerns STs' self-directed learning, stemming in large part from misgivings that STs' difficulties in understanding complex material taught online might result in low teacher evaluations and complaints.

TEs' perceptions of STs' needs may have also shaped their understanding of the learning process in the online component of BL. The relevant considerations pertain to STs as learners (e.g., learning without interference), on the one hand, and as future teachers, on the other (e.g., experiencing the integration of media in teaching and learning). In the area of teacher education, these two dimensions in TEs' perceptions of STs' needs are apparent in their rating of the asynchronous pedagogy of integrating MOOCs, YouTube, Podcasts, and gamification as the most successful. STs' orientation as learners rather than teachers, on the other hand, can be inferred from their rating of the synchronous pedagogy of frontal lecture via Zoom as the most successful. Yet, this finding may also imply that STs believed TEs performed better when lecturing via Zoom, a traditional and familiar mode of teaching F2F, thus pointing to a need for professional pedagogical development.

TEs' views on the link between the two BL components can be inferred from their responses about asynchronous online assignments. Most TEs required their STs to finish such assignments one to two days before the ensuing F2F meeting. Moreover, most TEs graded some of the assignments while marking down the rest as submitted/unsubmitted; several TEs did not grade online assignments but only discussed them in F2F meetings. These findings suggest that TEs saw the two BL components as mutually complementary—consistent with Graham's [3,20] argument that, through their pedagogical choices, BL instructors should harmonize the F2F and the online modules. The TEs' grading styles may also reflect the flexibility afforded by the BL timetable, an advantage for both TEs and STs [18]. The flexible evaluation style may also alleviate TEs' and STs' overwork, thus meeting the needs of both populations. Singh et al. [28] advocate the use of formative assessments to supplement other assessment methods in BL, as they offer more flexibility and support tracking students' progress, as well as teachers' efficacy, during the semester. As considerations of time figured prominently in TEs' perceptions of STs' needs in the distance learning module, flexibility must necessarily be of importance. All in all, with the advent of BL, a shift seems to have occurred in TEs' understanding of curriculums, with the questions of when, where, and how teaching can and should be carried out increasingly gaining prominence [5].

Consistent with this change, a sizeable proportion of TEs seemed to regard the online component of BL as a negotiable space. While some of the TEs refused to negotiate with STs over the pedagogies for online learning, most felt this to be essential in the BL context. The attitudes of the latter group dovetail with Tyler's [22] argument that curriculum development is affected by both teachers and students. Those TEs who objected to such negotiation likely held onto traditional hierarchical and teacher-centered paradigms, still entrenched in academia [29].

As stated, a number of TEs felt that negotiating with STs over pedagogies is essential for promoting meaningful learning. Such a stand attests to a shift towards a more progressive pedagogical paradigm that focuses on the learner's growth and on making the learning experience meaningful to learners as individuals by allowing self-expression [30]. For many TEs, heeding STs' voices in an endeavor to understand their needs, be it the workload, the level of difficulty, or pedagogical preferences, was a key factor in making BL successful. In remote learning, the physical distance between TEs and STs may encourage TEs to shift to more student-centered pedagogies and move away from the traditional hierarchical conception of their roles. This idea is shared by Howard [12], who focused on the change in lecturers' roles and professional identity in online learning. Howard [13] defines "role" as "the framework of what a teacher is required and expected to do in the execution of their professional responsibilities" (p. 656). She cites several empirical studies which support her conclusion that, in remote learning, teacher roles tend to shift from imparting knowledge to raising learner autonomy, thus becoming facilitative-collaborative. She emphasizes, however, that the move to online learning does not automatically entail the adoption of a more progressive student-centric constructivist approach; moreover, there is evidence that lecturers may implement this approach also in the F2F component.

Insofar as context plays a substantive role in curriculum development, the perception of the distance module in BL as a negotiating space may also be a function of a contextual change, specifically, a transition from the pre- to the post-COVID-19 reality. Pre-COVID-19, STs learned mostly in F2F meetings, with no possibility for negotiation to speak of, as TEs determined what would be learned, how, where, and when. However, their experience in distance learning during COVID-19 may have revealed to both TEs and STs its advantages, such as flexibility and TE availability [31]. It may also have been conducive to negotiating some curricular aspects in the new, post-COVID-19 arena. If this tendency continues, it could put STs in a more equal position in developing the curriculum and deciding on the learning process [32].

This study has several limitations. First, teacher education is an area with distinctive characteristics in which TEs also act as role models in selecting and implementing various pedagogies, an aspect manifested by such thematic rubrics as modeling of scaffolding, communal learning, and social interaction in online spaces. One may argue that, in other academic contexts, the activation of pedagogies may be governed by different or additional considerations (see, for example, Attarbashi [33] and Orji et al. [34] regarding online components of BL in vocational and technical education, and in lab-based courses). In fact, this supposition is borne out by the insights derived from the focus groups, in the sense that the various courses in the same academic department or program may act as micro-contexts within the context of BL. This insight reinforces a conclusion of the current study that pedagogies for the online component, or indeed a judgment as to whether a course can be meaningfully taught online, are contingent on TEs' perceptions of their respective courses and how they should be taught.

Another limitation is related to the ecological context of this study. All the participating TEs and STs had direct access to requisite technology and the internet. Yet, investigating developing South Asian countries where such access is limited, Ahmed et al. [35] found that students who used mobile internet preferred offline classes, whereas students with access to broadband internet preferred studying online. Finally, a methodological limitation of this study is related to using existent survey data that were not directly related to the TEs' consideration for activating pedagogies. Thus, future research should develop a questionnaire that directly examines this important aspect.

Policymakers and stakeholders who advocate for and promote BL as a constructive post-COVID-19 curricular change need to take count of distance learning models implemented in a wide range of higher education areas. The online component of the new BL timetable discussed in the current study acted as a negotiation space in which learners' needs are put at the center. It is important to realize, however, that such negotiations can be narrowed down to instrumental and/or pragmatic issues, and raise the following question: why is it important to learn a particular material F2F if it can be learned remotely, saving time and money? The current study addressed TEs' considerations regarding pedagogy, including more questions that are raised, such as the following: what content in a course should be learned F2F and which online, and why? What are the advantages of learning specific content online? How can scaffolds be provided in online modules? What kind of scaffolding would promote self-directed learning of a given content? How can course continuity through appropriate sequencing of the two BL components be achieved?

Promoting meaningful negotiations over the above and a realm of other issues requires rigorous scrutiny of multiple pedagogies implemented in remote learning and of their contribution to the learning process. Such investigations can address a combination of generic curricular elements such as what, why, how, and the situation-specific aspects of where and when. However, the two related overarching considerations in any given case should be as follows: whether or not to resort to BL and what aims can be achieved by doing so. The current study focused on the reasons for the move to BL that was undertaken in a specific pedagogical paradigm.

Overall, within a new BL academic timetable inaugurated in education institutions following the transition to the post-COVID-19 era, the use of both synchronous and asyn-

chronous pedagogies has been motivated by a variety of considerations, the uppermost of which were those pertaining to contextual changes. In the case study examined in this research, the context in which BL—and particularly its online component—took place was found to contribute substantively to a shift in pedagogical paradigms and roles.

In sum, this study may present two main contributions: (1) when exploring the pedagogies activated in BL, one should refer to ‘pedagogy’ as a wide concept, i.e., not just practices or strategies, but rather the rationale and considerations that facilitate practices, and (2) understanding the significant role of context in shaping pedagogy, in its broad sense. In the current study, BL, as an educational context shift that was unprepared and mandatory, was still found to encourage a positive change in pedagogies, i.e., TE’s practices and the considerations to activate them.

6. Conclusions

The current study investigated a new BL academic timetable designed in a teacher education college following the transition to the post-COVID-19 reality. The findings lend themselves to four main conclusions: (1) in college courses, the choice and application of pedagogies are responsive to changes in the curricular structure of the college timetable (2); a gap may arise in the perceptions of lecturers and students regarding the success of pedagogies implemented in the online component of BL; (3) the distant learning module may serve as a negotiation space for lecturers and students to discuss pedagogies and the rationales thereof; and (4) the design of the online component of BL should support students’ positive and meaningful experience of self-directed learning, thereby tempering their preferences for pedagogies endorsing passive learning.

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