

FINAL TECHNICAL REPORT_INTERNATIONAL EDUCATION ASSOCIATION -FRANCE

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TIMES OF CRISIS IN LEBANON AND TUNISIA*

Final Upskilling Technical Report

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Executive Summary

This research project was designed and implemented between 2020 and 2022, as a response to the Covid 19 pandemic, to upskill teachers and create resilient learning systems, based on the prevailing assumption that teachers lacked pedagogical skills for high-quality, equitable, and resilient online learning and assessment. The research design consisted of the upskilling online course for teachers and a training-of-trainers for facilitators. The teacher course focused on evidence-based strategies and required teachers to show evidence of implementation in practice. The training-of-trainers course focused on facilitating the course and supporting teachers. The process required participants to successfully complete the teacher course before taking the training-of-trainers' course. The course was iterated 9 times with a total of 87 participants consisting of 47 public-school English language teachers (n=42) and inspectors (n=5) in Tunisia and 45 public and private-school teachers (n=25) and coaches (n=20) of diverse subjects in Lebanon. Teachers were selected from schools representing the social, economic, and regional diversity of each country.

The research was implemented by the International Education Association (IEA) in partnership with the Tunisian Education and Resources Network (TEARN) in Tunisia and in collaboration with the Ministry of Education and Higher Education in Lebanon. During the span of the research, the two countries, Lebanon and Tunisia experienced their worst political, social, and economic crisis to date. In Lebanon, the crisis was further exacerbated by a decade of the Syrian refugee influx, the collapse of its economic and financial systems, and the 4th of August Beirut Port blast, all of which had put severe strains on its already struggling education system.

The research was designed as a cyclical multi-case studies that incorporated, to a certain extent, action research principles and methods by engaging in a participatory manner following a Community of Practice (CoP) approach with participants. The participatory approach was supported by pre-and post-questionnaires, course unit-feedback and interviews. The teacher course was adapted after each iteration based on participants' feedback and ministries of education regulations, to teach entirely online, in person or in a hybrid mode. The course was also translated in French and Arabic based on the request of participants.

The research showed that the upskilling course increased quality, equity, and resilience in both countries. The course impact included enhanced teaching and learning, intrinsic motivation, and increased professional growth, agency, relatedness and well-being for teachers and learners. Relatedness was experienced in various ways by participants and appeared to be a vital part of

professional growth and learning. Furthermore, the professional development strengthened the education system by building the capacity needed to support teachers at the grassroots level, emphasising the importance of local ownership and adaption to context. The research revealed insights into the potency of action-oriented online teacher professional development to upskill teachers and the potential of its participatory approach to scale quality and equitable learning particularly in remote areas where it is needed most. Teachers in Lebanon and Tunisia, who took the course past the pandemic found that the course was relevant to their professional needs and helped them to put theory into practice. Most importantly, the impact of the course was highlighted by the request from officials from the ministry of education in Tunisia, teachers, and educational institutions in Lebanon respectively, to build on, localise and expand the scale of the course. Thus, the team in Tunisia is further planning the adaptation of the course to all subjects while in Lebanon, the team is adapting it for the integration of STEAM strategies in teaching.

Objectives

The objective of the research was to contribute to improving the resilience, quality and equity of learning and well-being of girls and boys in Lebanon and Tunisia by providing a professional learning course focused on pedagogies of online and distance learning and assessment during the prolonged school closures of the COVID-19 crisis. The specific objective was to deepen understanding of good practice for resilient, equitable and quality delivery and assessment of online education in Lebanon and Tunisia.

The main research question was: **How, why, for whom, to what extent, and in which contexts does the upskilling course improve the resilience, quality, and equity of continued learning of girls and boys in Lebanon and Tunisia?**

The sub-questions were,

Quality Questions

- a. How and to what extent are teachers using online platforms to make learning relevant for their students? How and to what extent are capacities being built and how and to what extent are pedagogical approaches changing and being implemented?
- b. What indicators of quality are emerging (or not) in the process of how educators are planning, teaching, and assessing online?

- c. Where can we find best examples of quality? Where can we find the worst examples of quality - how and why?

Equity Questions

- d. Who has access, how and to what extent are they engaged? What support and interventions help to increase equity and inclusion, particularly for those that have no access to technology or who have a minimal access on a shared family device? How have these worked (and not worked) and for whom? Key challenges? Areas of further support?
- e. How and to what extent are students included into the process and how does this differ across gender and ethnic backgrounds?
- f. What are other barriers or constraints to access for teachers, coaches, and students?

Resilience Questions

- g. How and to what extent are educators adapting their practices as they plan, teach, and assess learning online?
- h. How and to what extent are the capacities of different facilitators to support teachers changing, building resilience to the present crises to offer high quality teaching/learning?
- i. How and for whom is the course building confidence and relational quality between coaches, teachers, and the students?

Those questions guided the research framework and required combining quantitative and qualitative methods. Quantitative methods included pre-and post-questionnaires and questions following the completion of each unit to unveil the extent of the impact of the course on participants and on learning. Qualitative methods included consultations with teachers before starting, ongoing conversations with participants during webinars, semi-structured interviews after each iteration and regular meetings between the implementing partners to gauge the progress of participants learning. Qualitative methods contributed to understanding the process, how teachers learnt and implemented in practice and contributed to ascertain the data resulting from the questionnaires. The combination of those methods enabled to unveil *how, who, to whom, to what extent and to whom* the course increased equity, quality, and resilience and to select four case studies from underserved and remote schools. The research was conducted in Lebanon and Tunisia, which were facing challenging circumstances described hereafter.

Context

During this research which extended between 2020 and 2022, Lebanon and Tunisia were undergoing a series of crisis which contributed to creating a complex situation succinctly explained below.

Tunisia

Overall, Tunisia's education system faces many challenges, and there is a need for significant professional development opportunities to improve the quality of education and address the inequalities and problems faced by students and teachers. **The challenges include political instability, social inequalities, outdated pedagogies,** and educational problems such as **school dropout and illiteracy.**

Politically, the country has been experiencing instability, particularly in the past decade, which has had a significant impact on education. The lack of a stable government and reforms has led to a crisis in the education sector, with teachers being underpaid, talent drain and frequent strikes.

Socially, the education system faces inequalities between urban and rural areas, with rural schools lacking experienced teachers. Private schools have become more popular, particularly during the COVID-19 pandemic, which has exacerbated the situation.

Pedagogically, traditional frontal teaching is still dominant, and there is a lack of appropriate teacher training and professional development. New curricula have been drafted but not yet applied, and technology is still not integrated into education.

Educationally, the country is fragmented in so many parts that it lacks a strategy to develop a long-term vision of education. The country faces high school dropout rates and illiteracy with a child out of 3 being illiterate after having spent 3 years in primary education. To address this, the government has partnered with UNICEF and the UK Embassy to provide opportunities for dropout students to develop their skills and find a job. Additionally, civil society organizations have become increasingly involved in education and associations are now partnering with the ministry.

Lebanon

For the past 3 years, Lebanon has faced its worst **political, social, and economic** crisis in its modern history. The crisis was exacerbated by the 4th of August 2020 Beirut port blast and has affected all sectors of society, including education, energy, and the economy.

Socio-economic: The complexity of the problem is better understood considering the financial crisis that started in October 2019 when the Lebanese pounds started losing its value leading to

the collapse of the economy. The fact that more than **80% of people in Lebanon are estimated to be living below poverty line** is particularly concerning, as it affects not only teachers but also students and their families. The high level of multidimensional poverty, including limited access to health, education, and public utilities, further exacerbates the situation.

Education: The devastating effect has been sensed by the entire education sector, with teachers experiencing a loss of more than 90% of their salary value over the last three years. This has led to teacher union strikes and talent drain, with many teachers leaving the country to work abroad. The **inequities** between public and private schools, with the latter generally perceived as higher quality, have also contributed to disparities in education access and outcomes. The shift in the student population from private to public schools during the crisis, and then back to private schools, has further complicated the situation with students dropping out of the system to start working. The **slow pace of curriculum reform**, combined with the **loss of experienced teachers**, means that the education system is facing significant challenges to upskill new teachers, maintain and provide quality learning to students.

A fragmented landscape: Teacher professional development follows a fragmented **cascade model** with up to 6 days of training per teacher in a school year. Generally, content is compartmentalised and fragmented into topics conveyed by trainers. Coaching is conducted by a different department with little to no collaboration between trainers and coaches. During the pandemic, efforts were deployed to train all teachers to use TEAMS and a platform for online learning resources was created for teachers.

Activities

The activities of this design-based research were essentially around the teacher and training of trainers' course and include the development of the course timeline, visuals, motivation scheme with badges and certification, adaptation after each iteration, translations into French and Arabic and completion of the iterative process.

Teacher Course

The teacher course implementation timeline was adapted after the first and second iteration as a preparation time appeared to be necessary for teachers, who had no previous experience in technology, to familiarize themselves with the platform and the tools.

Module Number	Module Title		Week	Average hours
0	Preparation		0	2 – 3
1	Getting Ready		1	4 - 6
2	Plan		2-3-4	16
	Part 1	Online learning teaching introduction		1
	Part 2	Strategies and instructional approaches		12
	Part 3	Lesson planning		3
3	Go live		5	2 - 3
4	Assess		6	6 - 8
Implementation in practice			7 & 8	8 – 10

Table 1: Teacher course timeline

In addition to the above timeline, weekly webinars were held for an average of 60 minutes in Lebanon and 90 minutes in Tunisia.

Badges and Certificates

Badges and certifications were developed based on participants' request. They included four levels encouraging teachers to go the extra mile, complete all strategies and implement their designed lesson in practice. Teachers could gain two main types of certificates depending on the number of strategies completed: the *certificate of completion* for those that complete 5 strategies and the *silver certificate of completion* for those that complete 10 strategies.

- The minimum requirement to earn a “Course Completion” certificate with an “*Online Educator badge*” was to complete all the course activities and 5 strategies. This level

required an average of 7 weeks and approximately 35 hours of learning past the preparation week.

- The Silver certificate with the “*Curious Online Educator*” badge required that teacher complete all 10 strategies and submit a lesson plan.

Teachers were given the option to upgrade their certificates to a *Bronze, Silver, and Gold* certificate depending on the number of challenges implemented in practice.

- The Bronze certificate with the “*Experienced Online Educator*” badge required that teachers complete 5 strategies with the corresponding activities and evidence of implementation practice.
- The Golden level with the “*Leading Online Educator*” required teachers to complete all strategies and to show evidence of implementation in practice. This level required 2 additional weeks totalling to 36 - 45 hours of learning.

Here are the course badges,



Figure 1: Upskilling Course Badges & Certificates

Visuals

A set of visuals was created for the course to strengthen and enrich **the process and content as follows:**

Icons were created and used throughout the course to guide teachers through the type of content, activity, and the engagement required from them. Here is the set of icons.



Figure 2:Course Icons

Additionally, visuals were created to reinforce the concepts and to outline the strategies and approaches. Amongst the concepts that required visuals were the journey companion, safeguarding and including all children, planning within the limitation of the technology and processes such as how to get organized and take in consideration the limitations of technology. Those visuals are presented hereafter.



Figure 3:Concepts

Further visuals were created to illustrate the strategies and approaches. Those included visuals for the interpersonal relationships, maximizing the home environment, project and problem-

based learning, collaborative learning, communication, role play, peer review, assessment. They are presented hereafter.



Figure 4: Strategies & Approaches

Translations

The course was developed in English, but teachers – except English language teachers – asked if the course was available in either French or Arabic. In Lebanon, translations to French were needed as almost 50% of schools in Lebanon are francophone and Arabic was needed to enable all teachers of Arabic language and subjects taught in Arabic to enrol and benefit from the course. The Arabic and French translations went through a process of revisions by language experts. In Lebanon, the Arabic version was added in the same course to allow teachers to read both versions.

Teacher Course

The course aimed at enabling self-paced learning and was provided with weekly webinars delivered via Webex and MS TEAMS. The course was hosted on the IEA MOOCit Learning Management System (LMS) platform. The course included four modules: Prepare, Plan, Go Live, Assess. Each section had clear objectives, structured content, links to resources, case studies and templates. The sections covered topics including transitioning to online teaching, evidence-based instructional strategies, engaging students in learning and online learning assessment. Across the modules, a section was added on well-being with practical exercises that teachers could

implement with their peers while learning before implementing them with students. In addition, the course pedagogy was woven around teachers' narrative and storytelling engaging teachers in creating their own stories before using the concept to develop their lessons using the strategies they had learnt. Based on the request of English language teachers, a workshop on storytelling was added during the first iteration and the course was adapted subsequently with additional content around storytelling and narratives in learning.

The webinars were conducted with experts from each country, and participants were asked for regular feedback on their engagement in the course during their experience. Participants were asked to identify at least one journey companion while taking the course. Following is the outline of the sections:

1. **Week 1, Prepare:** included guidelines on how to prepare for the course in addition to tutorials for those that needed technological support. Guidance was given on how to organize one's work and identify one or several learning companions.
2. **Weeks 2-3-4, Plan:** The module exposed teachers to the pedagogy used, well-being exercises and various strategies which they had to combine in a lesson plan to submit at the end of the module. The pedagogy was about narratives in teaching and learning and the well-being exercises were implemented first with teachers who subsequently implemented them in practice. The 10 evidence-based instructional strategies and approaches included authentic learning, interpersonal relationships, maximizing the home environment, self-regulation and reflective thinking, project and problem-based learning, collaborative learning, communication, role play, peer review, assessment. Each strategy followed the same format with thinking activities, examples and case studies that enabled them to engage with the content.
3. **Week 5, Go Live:** enabled teachers to engage students effectively in learning.
4. **Week 6, Assess** provided evidence-based methods of online learning assessment with tools, rubrics, and case studies.

The course evolved and was refined after each iteration.

Training-of-Trainer's Course

The requirement to take the training of trainers' (TOT) course was to successfully complete the teachers' course. The TOT course consisted of 8 modules that were process oriented with supporting resources and working sessions. The working sessions were held weekly and prepared facilitators for their role. They included details about mentoring and supporting teachers, how to

handle webinars, follow-up on teachers work and participation in the course and support them to develop their own plan. The sessions also included collaborative reflective processes, the use of media, visuals, and collaborative tools. On a weekly basis, the team of trainers met twice online with the IEA team, in addition to local meetings amongst facilitators and the team at TEARN. The trainers co-facilitated the course with the IEA team once and facilitated it independently the second time with the IEA team observing the facilitation of the course and the webinars. Meetings were held regularly with the Upskilling project coordinator at TEARN to discuss the facilitation and teachers' progress. In addition, debrief sessions were planned with the team in Tunisia at the completion of the course. Each week focused on a specific area, from technical skills to engagement strategies with a clear progression toward preparing teachers for assessment. Following is the outline of the 8-week course activities.

- **Week 0:** Discuss roles and responsibilities, technicalities of the platform, teacher registration, and progress tracking.
- **Week 1:** Develop technical skills with the Miro board, agree on dates, and divide teachers into groups.
- **Week 2:** Discuss good facilitation, motivating teachers, and support for latecomers. Ensure engagement and use of the Miro board.
- **Week 3:** Engage teachers in rural schools without Internet and prepare activities for them.
- **Week 4:** Prepare additional strategies and engage teachers in discussions with breakout rooms.
- **Week 5:** Focus on lesson planning facilitation, constructive feedback, and peer review.
- **Week 6:** Teach digital storytelling and enable student production.
- **Week 7:** Reflect on facilitation and plan for teachers' lesson plan sharing.
- **Week 8:** Prepare assessment module activities, review the timeline, and reflect on the process.

Iterations

Throughout the iterative process, participants feedback was used to adjust the course. The process was participative and involved all participants, mostly teachers and trainers, and the Tunisian coordinator of the Upskilling course. This ensured that the course met the needs of teachers and trainers, and that it was effective in achieving its learning objectives. The iterative

process involved repeated cycles of adaptation to the original design, translations, development, and evaluation. Hence, this process allowed for adjustments to be made based on participants feedback, and for the course to evolve and improve over time. For example, in the second iteration of the teacher course, trainers were involved in defining the collaborative tools that teachers would use, determining the course timeline with minor changes to its structure, and assessment methods.

In addition, participants were involved in discussing the evaluation of the course and provided feedback on the effectiveness of the course toward their professional growth with suggestions for further improvement in future iterations.

The Iterations table gives an overview of the number of iterations, the number of participants and their completion rates:

Date	Course	Participant	Iteration s #	LB	TU	Participants #	Participants completion	Completion %
Nov 2020 Feb 2021	Teacher	Teachers	2	6	4	10	6	60%
May- Jun 2021	Teacher	Coaches Inspectors	2	20	4	20	20	100%
Dec 2021 Jan 2022	TOT	Teachers Inspectors	1		5	5	5	100%
Dec 2021 Mar 2022	Teacher	Teachers	2	13	18	31	14	45%
Jun-Sep 2022, TU Oct- Nov 2022, LB	Teacher	Teachers	2	6	15	21	13	62%
Total Number of Participants			9	45	46	87	58	67%

Table 2: Iterations

Methodology

The design-based research was a cyclical multi-case studies that incorporated principles and methods of action research and depth of engagement with participants taking account of their own learning through continual reflective feedback processes. The case studies provide in-depth investigation of teachers' experience and resilience when adapting to online learning, and insights into the quality and equity of learning provided by those teachers in Lebanon and Tunisia. The cyclical process involved continuous reflections and feedback with participants which enabled the research team to convey teachers and trainers' voices and perspectives on their own professional growth. It also enabled to adjust the course based on participants' feedback. This action orientation was accompanied by methods including pre- and post-questionnaires, course unit-feedback, webinar participation, consultations before starting, and interviews with participants. The research brings to light four cases selected purposefully to enrich and gain understanding of what is possible, and contributed to developing indicators that embody quality, resilience, and equity in such contexts during and beyond the pandemic.

Methods

Pre- and post-course questionnaires: The pre- and post-questionnaire were administered before and after the teacher course. Participants were asked to fill the pre-questionnaire at the start of the course and were reminded to fill it after completing it. The pre-questionnaire gathered information about participants' prior knowledge, expectations, and needs. The post-course questionnaire was administered online upon completion of the course. It was sent by email to participants who had to be reminded to fill it. The post-course questionnaire assessed participants' satisfaction with the course, its effectiveness in meeting their expectations, and its impact on their knowledge, skills, and attitudes. The pre- and post-questionnaire are available for reference in Appendix A.

Unit feedback: In addition to the pre- and post- teacher course questionnaires, participants were asked to complete a unit feedback form upon completion of each unit. The feedback forms were designed following a, 1 to 5 Rickert scale, with 1 being the lowest and 5 the greatest. Those unit feedback were important to gauge participation, real time engagement, and completion of units. They also allowed to identify strengths and weaknesses of the course content and delivery and are available for reference in Appendix B.

Observations during webinars: regular webinars were held for the teacher and TOT course. On average, 8 webinars were held per iteration thus reaching a total of 72 webinars. The webinars lasted on average 1:30 hour.

- **The teacher course webinars** were held invariably with 30 min reflective feedback from participants, followed by instructors presenting the module concepts and engagement in activities. They ended with discussions and reflections of participants. In addition, one of the webinars was dedicated for teachers to share their stories, lesson plans and implementation.
- **The TOT webinars** lasted two hours and enabled in-depth planning with facilitators. The process included time to reflect individually and collectively, voice their opinion, provide feedback on what was happening in-person, what was working or not working so well, and explore facilitation issues. The extended time of the webinars came naturally as participants were deeply engaged in reflective practice and instructors preferred to maintain and encourage the flow of communication.

Interviews: All course participants were invited by email to participate in the interviews. Those were held consistently immediately after each iteration enabling researchers to adjust the course delivery before the next iteration. When course completion was delayed because of exams, strikes or holidays, mid-way interviews were held with teachers giving further insights into what worked and how teachers were adapting to the situation. All facilitators and on average of 80% of teachers joined the interviews which were held online and lasted around 1:30 hour. All interviews were semi-structured with open-ended questions enabling participants to share and reflect on their experience, providing in-depth information about implementation in practice and perspectives on the course. The Table: Methods provides an overview of the number of participants who filled the questionnaires and participated in consultations, webinars, and interviews.

Period	Methods	Numbers
Pre-	Consultations	8
	Pre-course questionnaires	24
During	Questionnaires: Unit-feedback	34
	Observations during webinars	72
Post-	Post-course questionnaires	18
	Interviews	58

Table 3: Methods

Sample

Teachers in Lebanon and Tunisia were primarily from underserved and remote public schools. In Tunisia, the focus was on High School level English language teachers and in Lebanon the course was open to all teachers of all levels. Working with Secondary English Teachers was justified by the local partner to remain focused and enable a productive exchange of information between teachers of the same subjects. In Lebanon, the justification of making the course accessible to teachers of different disciplines and levels was to enrich the conversation and encourage collaboration between teachers across subjects within the same school. In Tunisia, teachers were reached through TEARN, the partner local organization who worked in close collaboration with the Ministry of Education. In Lebanon, IEA reached out to underserved private school teachers through the school leadership and public-school educators through the Department of Orientation and Pedagogical Support (DOPS).

Coaches and inspectors work at the Ministry of Education in each country. In Lebanon they were part of DOPS and their role was to coach teachers. They were selected by the Head of the DOPS Department to participate in the course. In Tunisia, the course was presented by the coordinator of the project in Tunisia to the English Department inspectors and those willing to register joined the course. There was a high interest in the course, yet only 5 could join because of conflict due to previous commitments and other courses offered by the Ministry of Education.

Schools in both countries were all underserved and included remote and rural schools that had no internet. In Lebanon, due to the crisis, and the need for private schools to upskill a younger, freshly graduated population of teachers, the course was open to underserved private schools. Four underserved schools reflecting the diversity of Lebanon were invited to join through the school leadership who shared the opportunity with teachers.

Data Collection

Participants were encouraged, yet left free, to contribute to the research. Out of the total number of participants (n=87), coaches and inspectors (n= 25), and teachers (n=62), 24 teachers filled the pre-questionnaire, 35 filled the unit feedback, 18 filled the post-questionnaires and 58 participated in the interviews. Approximately 20% of teachers completed the post-questionnaire, 40% completed the unit-feedback and 67% joined webinars and participated in the interviews. Emails were sent systematically to all participants to fill the questionnaires and join webinars and interviews. The data collected was anonymized and kept in a password protected space.

Results

The results include the data extracted from the methods, the pre-and post-questionnaire, the unit feedback, the webinars, and the interviews. The pre, post and unit questionnaire were compiled and analysed. The results of the quantitative data, pre-post and unit feedback were triangulated with the data of the webinars and interviews. Four cases were selected and developed giving insights into the research questions. The later were recorded, transcribed, anonymized, and kept on the Notion platform for the research team to discuss. After several readings, the research team extracted and analysed the recurrent themes which appeared across the multiple iterations and the case studies.

Pre-questionnaires

Participants' background

Participants' teaching experience ranged between 4 and 36 years with various academic qualifications including Teaching Diploma (10%), Masters (20%) and Bachelor (20%) with three coaches having PhDs. Almost all participants were permanent employees (96 %) which means a deeper commitment to the institutions where they work. In Lebanon, participants were taught various subjects - Language, math, and sciences – with most of them being science teachers, while in Tunisia all participants were essentially English language teachers.

Gender

Participation shows an overall **gender balance in terms of access and engagement** in the course with 58% female versus 42% male while the post-questionnaires were most filled by 90% female teachers. This almost equal access shows **equal interest for males and females** yet a **deeper commitment** from female teachers toward their professional growth.

Use of personal devices

Almost all participants **96% used their personal computers** to access and engage in the course **relying on home Internet access**. In Lebanon, it was a time of extreme power outages and internet shortages, hence it required considerably more efforts from teachers to work around those challenge. This shows extreme **resilience** from teachers with a drive to learn.

Equity

The course was available to all teachers, even those with low tech skills, which made the opportunity to access and engage in professional growth more equitable for all teachers. Additionally, the course did not include videos that required high bandwidth and participating in webinars was not compulsory, making it possible for everyone aspiring to learn and grow to enrol and engage in learning irrespective of prior technological skills, Internet bandwidth while breaking barriers of entry for those working in remote schools. Those measures showed to be important as on average, 30% of teachers had low tech skills and were willing to engage in the course. In addition, all teachers without exception, used their personal computer as a main device to teach, prepare and demonstrate lessons and share resources with students.

Use of technology

All participants were **extremely familiar with low tech tools** (100%) such as WhatsApp the Internet and using emails. Their familiarity and use of more sophisticated technology appeared to be inversely proportionate to the complexity of the tool. They were mostly familiar with social media such as Facebook (75%) and or creating videos (67%) or photo editing (58%). All of them were proficient to a certain extent using Microsoft office tools such as word, PPT and excel, and to a certain extent, video-conferencing tools such as Zoom (75%), Skype (54%) and Webex (13%).

Online learning experience

Almost all participants had participated in training to learn how to use TEAMS (96%) or Google Classroom (87%) and 83% of them reported that previous training(s) focused on learning how to use online platforms or software (Microsoft Teams, Classera, Camtasia). Hence, the Upskilling course appeared to be amongst **the first pedagogical course** around online learning and assessment that the teachers engaged in at the start of the pandemic.

Online teaching experience

Since the beginning of the pandemic, almost all of them (96%) mentioned that they were teaching online whether they used **Microsoft Teams platform (91%)** or **WhatsApp (39%)**. Most of those using TEAMS gave (83%) **live video conferencing** classes supported by emails and to a certain

extent used the whiteboard (30%) during sessions. Teachers relied, to an extremely high extent, on **unidirectional** teaching approaches with **91%** of them **explaining the lesson** to students, sending them **worksheets (91%)**, and playing part of **a video** during the session (**78%**).

Perspectives about online teaching: Generally, teachers' perspectives about online teaching varied from **interesting** (65%) to **frustrating** (9%) and requiring **too much preparation (43%)**. They found that **engaging students** online was **challenging** (57%) and **complicated** (9%) with only 17% finding it possible to engage students online. They also found **students' online behaviour challenging** (57%) but **respectful** (48%) with only 22% of them selecting productive. In addition, 26% of teacher reported that students were generally motivated to learn online as compared to 71% of them being somewhat (61%) and rarely (13%) motivated to learn online.

Challenges to teach online.

When asked about the challenges that they faced to teach online, aside from **technical issues** such as low internet, lack of power, and access to computer, participants listed a range of psychological and pedagogical issues including **lack of confidence**, **psychological stress** due to uncertainty, and the lack of **economic and social security**. In terms of teaching, most of them mentioned that they lacked **knowledge and experience** to teach online, to create videos and referred to a range of issues such as **inefficiency**, **lack of quality resources** and activities, and the reliance on **tools**. They found that **students lacked motivation** because there were a lot of distractors. They also faced challenges to manage **their time and work**, having **a private space** to teach during lock-down, and **communicating effectively**. They addressed these challenges by spending a lot of time searching the internet to prepare lesson and learn how to manage online learning. A recurrent statement was time spent on learning how to record, share videos and sharing pdf files with students when they had internet problems.

Participants' expectations

Participants expected to learn **online teaching strategies**, enhance their online teaching approach, and learn about **online assessment**. Some of them stated that they would experience what it is to learn online. They expected to learn **by doing** (88%), **discussing** (83%) with other participants, **watching** videos (54%), **reading the posts** of others (**42%**) and the **course reading (38%)**.

Participants' feelings

Participants appeared to have mixed feelings about learning, including **excitement** (71%) to take the course, feeling **overwhelmed** (42%) due to work pressure and **worried** (8%) to learn online. In

addition, a feeling of **powerlessness** was expressed by a few participants considering the challenging circumstances that the country (Lebanon) was going through particularly the level of poverty and the ability to reach all children (particularly those that have no devices and no internet).

Unit-Feedback

After each module, participants were asked 3 to 4 questions, to know how much time each module required, if they faced any challenge to join the course or the webinars and have feedback at the granular level on what worked or not for them. An average of 40% of participants responded and the following is an overview of responses. The tables are presented in Appendix C.

The time spent working on the unit: Participants worked an average of 2 to 3 hours a day for around 8 weeks on the course. Clearly, the module that took the longest working days was module 2 with an average of 12.5 days and 2.6 hours per day which is normal since it required 3 weeks to complete.

Help needed to get started: Most participants reported that they needed, to a small extent, help to begin the course and join the webinars which explains that potentially a few participants dropped before even starting without communicating with instructors. This could be explained by the various tools that they had to use in addition to the platform (e.g., Miro, Webex or TEAMS). Each tool required different login credentials which confused participants and the learning curve to become familiar with Miro appeared to be high, particularly for those that had low tech skills. All participants, who requested help, sustained their participation in the course, had a positive attitude towards learning, and reported that the instructors were helpful and communication with them was fluid.

Course content clarity, interest, and ease of understanding. As for the course content, all respondents fully agreed that the module were clear, interesting, and easy to understand with a total average of 4.3. They found the readings were beneficial, and most of them were able to apply what they were learning in the course's activities with students.

Course structure.

- **Reading and Thinking Activities:** all the participants benefited from the readings and the thinking part of each module reporting that it helped them to better understand the modules.
- **Templates:** The lesson plan checklist and the lesson plan template in module 2, were also important for participants to engage and complete the module.

- **Course Discussion Forum:** Participants benefited, to a large extent, from the experience of others in the discussion. Yet, engagement in the module forum was not consistent across the modules. Thus, average of answers to the same question varied from 4.0 to 3.8 between the modules.
- **Journey Companion:** The concept of having a companion through the learning journey appeared to be effective. Those that applied the concept were better able to understand each module. This is reflected in the answers ranging between 4 and 5. Clearly, those who had not chosen a journey companion couldn't experience its benefits. Their answers to this question were between 1 and 2. The difference between them explains the average of 3.7 for this section.
- **Strategies:** Obviously, the examples given in each strategy in module 2 helped the participants to understand and implement them.
- **Activities:** The activities that had to be submitted in modules 3 and 4, enabled participants to practice and better understand how to plan and assess their lesson.
- **Feedback:** The feedback process, either from peers or from the facilitators. helped participants to better understand the modules.

Participants' motivation

Even though participants had to go over 5 strategies to complete the course, teachers appeared to be highly motivated to explore all (n=10) of them (Average 4.4). They were extremely motivated to continue learning after each module, to apply and share what they had learned, and to plan a kick-off session. In addition, they were highly motivated to explore digital assessment platforms and tools.

The strategies

Participants had to develop a lesson plan and explain how they combined the different strategies they had engaged with. Most of the participants (31) who answered this question combined collaborative learning in projects and or problem-based learning approaches.

Which of the following online learning strategies did you select? (Multiple select)			
Strategies		Number of participants who chose each strategy	% of participants
1	Collaborative learning	27	87%
2	Problem-based learning	23	74%
3	Project-based learning	21	68%
4	Self-regulation and reflective thinking	20	65%
5	Interpersonal relationship	20	65%
6	Role-play	20	65%
7	Picture analysis	19	61%
8	Communication and online discussions	19	61%
9	Maximizing the home environment	17	55%
10	Digital Storytelling	12	39%

Table 4: Selected Strategies

Areas of improvement in the course:

- **Additional resources:** generally, participants requested additional subject related resources (particularly in sciences), in addition to lesson plan examples. In addition, participants had mixed requests regarding videos: Most of them (54%) requested videos but a few participants preferred to have additional text resources.
- **Downloadable PDF:** Those who facing Internet and power outage requested to have the course provided as a downloadable PDF with general titles to the checklists.
- **Language:** Another area of improvement was having a copy of the content in Arabic or French. After the lock-down was eased, teachers said that the whole course could be devoted to online learning and assessment strategies.
- **A course dedicated to assessment:** They also proposed to have an entire course dedicated to assessment instead of it being the last module in the course.

- **Community of practices:** The collaborative aspect of the course with the journey companion was appreciated but having more collaboration online was proposed in addition to providing space to meet facilitators face-to-face when possible. This was later discussed with participants who proposed more time within the course to share experiences.
- **Process:** Other interesting feedback included,
 - inviting participants to join online sessions conducted by experienced teachers and constructive feedback on sessions conducted by them.
 - receiving follow-up support on implementation in practice the next academic year.
 - make the course about strategies of teaching and learning with technology integration and STEM.
 - There was also a proposition to provide the course face to face in remote areas that lacked Internet.
- **Additional time** to practice using the tools before starting for teachers with less experience in technology. This would allocate extra time at the start of the course to practice digital tools before diving into the strategies.

Post-Questionnaire

Out of the 58 participants who completed the teacher course, 18 teachers, **almost all females** (89%) filled the post-questionnaire. It's worth mentioning that filling the questionnaire was emphasized but it was not mandatory to be able to get the certificate. On average, teachers worked 5 to 8 hours per week, which is more than the average mentioned in the Unit feedback form; and it took them 8 weeks to complete the course. Most of the participants (61%) worked on the course during weekdays and even on weekends. When asked, teachers said that they worked after completing schoolwork and taking care of their families. Almost all teachers accessed the course through their laptops (96%) rather than their mobiles.

Expectations

All the participants mentioned that course met their expectations, 50% found that it completely met their expectation and 10% found that it exceeded them. They enjoyed all the parts of the course. What they enjoyed were grouped into two main categories:

- **The course structure and activities:** Being able to customize the online lesson planning and the strategies. The discussions during webinars and in the forums, sharing

experiences with colleagues, their feedback, and the collaboration with their journey companion. The hands-on aspect and the feedback. The well-being, the thinking and contemplation activities. The rich online resources and digital tools, and the reflection sessions. Digital storytelling strategy and the process of digital story making.

- **Learning and implementing in practice:** Learning about the importance of feedbacks throughout the process of teaching. Being able to improve communication and motivate learners. Learning new information, making new friends, and using new tools. Knowing the importance of putting conduct norms for the live sessions.

What teachers enjoyed least were:

- Graded activities and the imbalance between the length of module 2 compared to the other 3 modules.
- Submission issues, although this was only mentioned by a few teachers.
- The module about live sessions when schools reverted to hybrid learning.
- Lack of time to practice what we have learned.
- MIRO, a respondent mentioned *“I did not find the Miro platform very effective, and many participants did not adhere to it, but at least we got to know our colleagues”*.
- Ability to implement at the end of the school year, a respondent mentioned *“I could not apply all the activities with the learners or even with the learning companion because it was carried out at the end of the school year.*
- More examples of online lessons: a respondent mentioned *“I needed examples of online lessons to watch and learn from or even to online lessons to analyse together and reflect upon.”*

The parts of the course that impacted most teachers were:

- The strategies and their practical side
- The course journey companion and the well-being.
- *“All course parts and strategies were very interesting and helped me to improve my teaching.”*
- The support of instructors and the exchange with colleagues
 - **A respondent from Lebanon wrote:** *the relationship between reflective thinking and self-regulation urged me to think of activities that can allow students to give their own reflections... I am fascinated with the idea that class activities can make*

students think in a better way which will more probably help them succeed not only in school but in life...

- **A respondent from Tunisia wrote:** *Implementing self-assessment, preparing rubrics, peer review among students, preparing a lesson in an untraditional way, raising questions, and posing problems at the beginning of the chapter.*

What would teachers adopt and adapt from the course? Teachers will adapt many things from the course in their teaching. They mentioned:

- The lesson planning.
- The active learning strategies, collaborative learning, and most parts but mainly digital storytelling and picture analysis
- The most important part I will adapt is how to assess students.
- All the content especially focusing on teaching students how to be responsible for their own learning.
- I have already started adopting much of the course in my online teaching especially lesson planning and project-based teaching.

What challenges teachers faced during the course?

- **Technical issues:** Electricity, low internet connection, lack of time, and not having the materials as PDF.
- **Designing learning:**
 - Online assessment, designing project work rubrics and rubrics for pair work.
 - Planning an online lesson without examples.
 - Creating a digital story from scratch.
- **Access and Equity:**
 - Most of my learners do not have access to internet and so it was challenging to integrate technology in teaching.
 - How to implement fair assessment taking into consideration that students do not have equal opportunities to online learning or to using tech tools.
- **Language:** Participants would have liked to take the course in Arabic and French language
- **Collaboration:** Persuading the learning companion to apply some strategies and exchanging opinions about them.
- **Course Logistics:**

- **Time:** implementation of the course at the end of the academic year and implementation in practice the first term of the new academic year.

What helped them to mitigate those challenges?

- **The support** from the facilitators, their feedback and encouragement.
- **The flexibility** of the facilitators to provide support for implementation at the beginning of the school year.
- **The content:**
 - The examples given and the structure.
 - The strategies helped me go deeper into the purpose of planning a lesson and using strategies that reach the student making them think deeper about the objective...
- **Perseverance:**
 - Conviction that I must complete the course.
 - The desire to be able to cover the whole course and learn new ways of effective teaching/learning.
 - Going the extra mile and additional reading
 - Organizing how to work and creating a file for the course where I keep the most important documents and notes.
- **Collaboration**
 - The discussions with my journey companion and with colleagues at work and feedback.
 - Working on the assignments in collaboration with other trainees
- **Enjoying learning:** I loved the course and that helped me a lot.
- **Implementation:**
 - The students themselves
 - Students' enthusiasm and enjoyment in carrying out the activities - helped me to meet these challenges.

What motivated learners to complete the course?

Getting a certificate seemed important but not as important as learning new things. Feeling being part of a community of practice and making a difference in the lives of students was equally important. However, participants appeared to be mostly motivated to **grow professionally**, learn and **increase their knowledge**. They found that the course was interesting and that they were benefitting from it and learning new things.

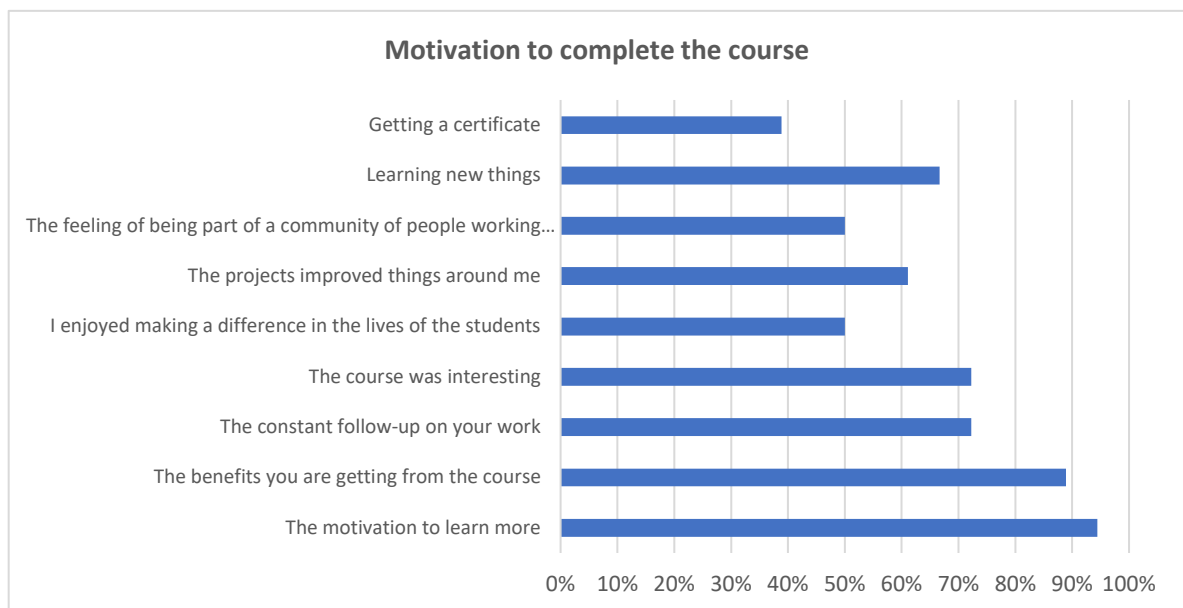


Figure 5: What motivated participants to complete the course.

Knowledge and relevance to practice

In addition, they all agreed that the course increased their knowledge about online teaching and learning with strategies and new approaches to online assessment and 83% of them engaged their students to activities connected to learning goals. The majority (94%) have learned new approaches to online assessment including self-assessment and peer review and have planned active & authentic learning to implement in practice with students.

Assessment

All the participants added a variety of assessment tools to their online teaching including creating rubrics. Self-assessment and reflections forms were used to a lesser extent. They reported that they need more practice on self-assessment, the development of rubrics and peer-review and reflective feedback. As mentioned earlier, they thought that assessment deserved to have a course in and by itself.

Implementing a challenge in practice

78% of the participants were able to complete more than one challenge in practice. The chosen challenges were project-based learning (71%) combined with picture analysis. Problem-based learning (64%), storytelling and maximizing the home environment. Peer-review assessment (43%). The reasons behind choosing to work on challenges included participants beliefs in the benefit of project and problem-based learning to meet learning objectives and to motivate learners. Teachers who had experience in project-based learning emphasized that it was important to nurture life skills, while those that did not have previous experience wanted to try them, *“I want to try them in my classes’*.

Which activities contributed to enhancing teachers’ skills?

89% mentioned that designing a project or a problem and creating a digital story improved their teaching and 83% stated that observing the home environment enhanced it while 94% of them mentioned role-playing activities and pictures analysis. This is understandable as most of them designed projects in which they included several strategies.

Benefit and Impact of the course of teaching and learning?

All teachers without exception said they were more **confident** to teach online and were **encouraged and able to implement** what they learnt in practice. Participants (89%) found that designing lessons relevant to students’ interests enhanced considerably their teaching. All teacher agreed that the course helped them to **design lessons** more **relevant** to students, create **motivating** activities and **engage** students in **active** and **authentic** learning. It helped them to **organise** their lessons and make teaching more **fun**.

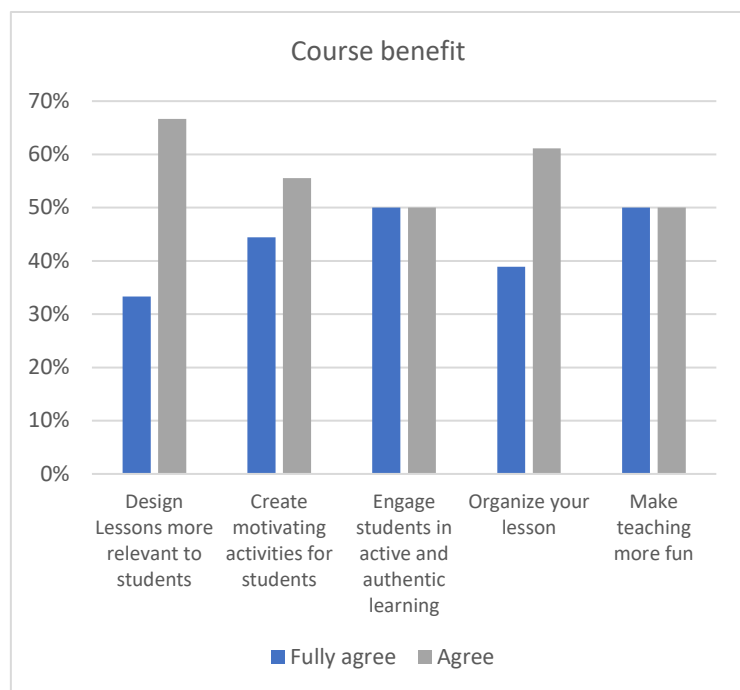


Figure 15: Impact of the course on participants’ teaching

The things that teachers added that were not mentioned in the questions included that the course helped them to **relate** to students by being closer to them and to **assess** students according to clear rubrics.

Impact of the course on students:

- **Enhanced engagement in learning:** Almost all participants (95%) answered that the course helped to enhance engagement and participation in learning. The tools that helped more than 66% of them included the **community agreement**, the **code of conduct** rubric, the **contribution to class discussion** rubric and the **self-assessment** checklist. Teachers mentioned that applying them with their students enhanced their ability to nurture **self-regulations** and **self-assessment**.
- **Students' voices:** Additionally, more than 62% of participants reported that after taking the course they were able to have students express their own thinking and views online and have them give peer feedback and lesson feedback.

What contributed most to teachers' learning?

- **The relational aspect** contributed most to teachers' learning. This includes the relationships nurtured through conversations in the course during the webinars (94%) with facilitators and peers, and at school with their journey companions (83%) and with colleagues in the course discussion forum. In addition, 50% of them referred that the course enhanced how they relate to their students.
- **Course activities** All the participants agreed that the course's activities helped them to enhance the communication with their students. More than 88% of them stated that the course's activities helped them to better know their students and engage them in collaborative teamwork. This reflects on the importance of **relatedness** nurtured between teachers and instructors, amongst teachers in the course, with their journey companion at school, and with students.

Adaptation and transformation in teaching

Participants (89%) considered that the course transformed their online teaching and that they were able to adapt what they learnt in practice. They explained it as a mind shift, a change in perception and a gain in self-confidence which changed how they **plan, engage learners, and assess** learning. They now perceive online learning as **interactive, collaborative, and authentic**, and **assessment as a practical** activity that needs to **engage** students. They viewed themselves being more **patient, positive, confident, organized** and **caring** about their students' well-being. They also reported being able to **motivate** students, **communicate** and "*transform the **mode of interaction** with pupils*". They saw online teaching "*as much **interactive** as in person teaching*" with students being more self-regulated and able to engage in self-assessment.

Another positive transformation that they reported is their ability to always **think about solutions** and to observe and be more **critical** about the learning and surrounding environment. Here, they referred to **maximizing the home environment** and mentioned their determination to use problem and project-based learning. The things that fostered the change was implementing the lesson they designed using the strategies, tools and resources made available.

Recommendations

All the participants agreed that they would recommend the course to someone else. If they can take the course again, the things that they would do differently were:

- **Putting into practice the journey companion** and involve them in planning project work and implementation with students:
 - *I would find a companion since, in many topics, I needed to discuss issues with another teacher.*
 - *I would involve my journey companions more in the challenges.*
- **Communicating and sharing work:**
 - *I would not be the first one to answer I would wait, for other teachers' feedback because I was the first one to finish many activities and I sometimes received feedback, but I moved on and was far then.*
 - *Giving more feedback to colleagues*
- **Changes to their lesson plans or stories:**
 - *I will design my story in a video instead of a digital book.*
 - *I would use another way for my digital storytelling.*
 - *The lesson plans.*
- **Being more relaxed about online learning:**
 - *I wouldn't be so stressed for not being able to submit tasks on time. I know, now, that it's all about good organization and planning.*

Other more general comments included:

- Completing all the course or taking the bits I skipped.
- Honestly, I like to focus more on digital stories.
- I would do more challenges.
- Sharing more online lessons done.
- Providing more feedback.

- Implementing many of the learning strategies that I gained in this course with my colleagues.
- I would devote more time per week for the assignments and I would make sure that I have the possibility to implement what I am learning directly in my online class.
- The time management and the mixture between theory and practice.
- Teachers also mentioned that they would change nothing, that they tried their best, *I did my best.*

Webinars and Interviews

Discussions during webinars and interviews were transcribed and analysed highlighting four cases of presented below. They emphasise the themes extracted and show how the course enabled teachers in different context to become more **resilient**, nurture **professional growth**, **relatedness**, and the **awareness** around issues of **equity**, and develop a sense of **local ownership**.

Four Cases

The cases of individual teachers were selected to illuminate the research question and to demonstrate the impact of the course on participants and what is possible in the various contexts. All four cases highlight the potential of Teacher Professional Development (TPD) to empower teachers to improve their teaching practices and enhance student learning outcomes. The cases are summarised hereafter and are presented with more details in Appendix C.

Case 1: Teacher well-being

“In one sentence, the course has revived my soul and renewed my teaching... I'm back, I'm back from long, long darkness.”

Case 1 describes Samira's story who was able to overcome the challenges of long COVID, caregiving responsibilities, and difficulty concentrating generally. She completed the course and improved her teaching. The course structure and activities were designed to support Samira's well-being and professional growth. The emphasis on well-being activities, self-assessment, and storytelling seems to have resonated with her and helped her engage her students in their own learning process. In addition, the role of the facilitators and colleagues in providing support and encouragement also highlights the importance of a supportive learning community, especially during challenging times. The course was able to nurture a sense of community that had a positive impact on her. It is a demonstration of the power of education to help individuals be resilient to overcome difficult circumstances and grow both personally and professionally.

Case 2: Quality of learning

“I never thought I could engage students this way in learning. Their feedback is helping me to improve my teaching”.

This case describes the experience of two teachers, Samar and Maha, who benefited from the upskilling course and enhanced the quality of teaching and learning. The course fostered collaboration and sharing among teachers and required teachers to find a journey companion with whom they could share and plan the course content and activities. Samar and Maha became journey companions. Samar studied the content which she explained to Maha and they regularly discussed the course concepts as they adapted the tools to their teaching. They tested and implemented the tools in their lesson plans and reflected on the process. Samar's lesson plan focused on having grade 8 students discover the relative position of a line and a circle, while Maha's lesson plan used picture analysis to engage students around the themes of tolerance, poverty, and hunger. Both teachers were able to engage their students in new ways, make learning relevant to them and get to know their students better. They were proud of the impact they had on their students and felt fulfilled to have benefited from the course.

Case 3: The Loner

This case describes Carine's experience who provides a contrasting perspective to all the other teachers. Carine preferred to work individually and asynchronous mode of communication which allowed her to work at her own pace and connect with peers when it suited her. She found that the course forum was a useful tool for communication and learning, and she received constructive feedback from both peers and instructors. Her perspective contrasted with the perspective of the other teachers who had all found the webinars to be instrumental in their learning process. Carine's perspective emphasises the potential of online forums as an effective tool for communication, collaboration, and community building among learners. Indeed, while webinars may be useful for some learners, others may prefer a more self-directed and independent approach. Most importantly, Carine's case stresses the potential of increasing access by breaking entry barriers for all those who lack connectivity and are not able to join webinars.

Case 4: Local Ownership

This case is about Jamil and highlights the potential of TPD to foster local ownership and transform teaching practices as evidenced by Jamil's journey from course participant to facilitator and localizer. Jamil's passion and commitment to learning are notable, as is his proactive

feedback and willingness to go above and beyond in using course content to teach his colleagues and expand the course's reach. His emphasis on the course's structure as a strength suggests that the course design was effective in supporting his learning and that of his peers. Jamil's investment in the training of trainers and his ability to have feelings of reciprocity, establish trust relationships and guide teachers without judgment reflect a deep understanding of the importance of interpersonal skills in TPD. His appreciation of the course's development in the Global South and its flexibility and adaptability to local contexts suggests that TPD can empower teachers to become agents of change and promote sustainable, context-specific pedagogies.

The Themes

The themes that emerged include **professional growth and agency, relatedness, resilience, equity, and local ownership**.

Professional Growth

Results of the post-questionnaires and the interviews show that the upskilling course contributed to teachers' **professional growth** and enhanced the **quality** of teaching and learning. Professional growth and agency emerged strongly across the data and in the case studies. Teachers showed evidence of **agency** as they took action, designed, and implemented learning incorporating the strategies they learnt in the course. Quality was observed in teachers' action to design, share, and review student-centred learning and in their reflections about the challenge(s) that they implemented with students. They were able to stimulate and engage students in the learning process moving away from unidirectional teaching toward critical and respectful discussions around different points of view (eg Case 2). Teachers were able to engage students in collaborative and creative productions such as creating their own stories and involved students in self-assessment and in giving them feedback about their lesson. Evidence of relevance was seen in the way the course shaped teachers' practice and spoke to them. In the questionnaires, all teachers reported gaining knowledge and positive attitude including self-esteem and confidence, being better organised and using, to some extent, formative and self-assessment tools. Teachers adopted new approaches and nurtured a more **open and collaborative learning culture** between educators with conversations around learning. Similarly, facilitators were engaged in a more open and supporting working culture. They found that the course was transformative, changing the culture of teaching, learning, working and professional development. Below are excerpts from the questionnaires, webinars, and interviews,

- *“I think this course is really transformative, because I have seen a new way of working together and this is not a habit really between teachers or between supervisors/inspectors. Generally, these people want to work on their own and it is very hard to bring them together and to have them work and think critically together and develop their new ways of working”. Program manager Tunisia.*
- *“Teachers feel safe questioning. We have learnt to guide people without hurting them or assessing their work (e.g., digital stories) using the descriptors without value judgement. We have established trust relationships”. (Case 4I)*
- *“Quality matters, it is not a question of quantity, e.g. the lesson plan session in which we worked with teachers, giving them feedback and working with them on details. I have gained confidence with every webinar. (Reflections of facilitators, Tunisia)*
- *“I enjoyed creating a story about me for the 1st time, this is the first time I do something about professional growth, it took a lot of time, but the results are worth it.” Interview, teacher, Tunisia*
- *“It is really great, and you know the teacher needs a hand, we need to renew ourselves. I feel that it helped me a lot to renew myself, my teaching. I learned the new techniques that I'm going to use in my teaching, like rubrics, self-assessment, picture analysis... All these are amazing ways to teach and to renew your teaching.” Interview, Teacher Tunisia.*
- *“This course changed my way of teaching; I benefited a lot from the strategies. The webinars were fruitful and informative.” Interviews, teacher, Lebanon*
- *“I'm proud really that I'm part of this course that's great really, because I have seen other courses and it shows that we can produce, we can not only be consumers of knowledge we can produce knowledge.” Interview, teacher, Tunisia*

Relatedness

Relatedness was observed in the extent that educators were able to establish and maintain connection with colleagues, instructors, facilitators, and students. Relatedness appeared to be a vital part of professional growth and emerged as a central element strengthening learning and nurturing communication and binding interpersonal between teachers, students, facilitators, instructors, and researchers. The results from the interviews and post-questionnaire, show that relatedness, **between facilitators and teachers**, contributed to a large extent, to enhance learning through reciprocity and trust relationships. The same applied to relatedness **amongst teachers** with almost all participants (95%) saying that the enhanced relationships in the course

and with journey companions contributed to improvement in learning (case 2, post-questionnaire and interviews teachers). Similarly, relatedness between **teachers and students** contributed to quality learning with teachers saying that by making learning authentic and collaborative they got to know students better and relate to them. **Relatedness amongst students** was also reported with enhanced collaborative learning and more productive and respectful discussions. More than 62% of them reported that after taking the course their students were better communicators and able to relate, express their own thinking and views online, give peer feedback and feedback to their teacher about the lesson. Thus, relatedness seemed to nurture a safe learning environment where participants could grow professionally. Here are a few of the excerpts taken from teachers' questionnaires, reflections, and the cases.

- *There is reciprocity with teachers, how we have grown and how we see teachers grow, how they ask questions, work together, (Case 4)*
- *"I learned from this course on the technical level on the pedagogical level and on the interpersonal level, Teacher reflections, Tunisia.*
- The course enhanced relatedness at all levels, there is more respect and constructive discussions between teachers and facilitators, teachers and teachers, teachers and students, students and students.

Motivation

Intrinsic motivation appeared clearly in the questionnaire with participants being mostly motivated to grow professionally, learn new things and make a difference in the lives of their students. The emphasises the importance of providing professional development that is relevant to the professional needs of teachers. Excerpts from the questionnaires, and interviews follow,

- *"I am reading things with new eyes, and I am more enthusiastic this year towards the course. I am learning in more depth and discovering it again Looking at it more critically. I learnt a lot. I love the course. Teachers found it very fruitful. We are also learning from our mistakes". Interview Teacher, Tunisia*
- *"It is motivating to see them wanting to learn more, eager to have perfect lesson plans. I gained confidence and am enjoying the course". Facilitators' reflections, Tunisia*
- *"When I start, I say to myself I want to sit for 1 hour, but once I sit in front of the laptop, I forget myself, once you get engaged, you go through it. You feel that you want to know what's coming next? what's waiting for you?" Interview teacher, Lebanon*

Resilience

The results show evidence that the course contributed to teachers' resilience increasing their psycho-social and emotional well-being. The well-being activities contributed to alleviate the extreme stress and anxiety that they experienced from Covid and the requirement to teach online. Resilience was observed in how they externalised their emotions when sharing their personal stories and how they adapted their pedagogical practices to integrate the proposed strategies. It appeared in teachers' reflections, mostly during the webinars, as the course increased their ability to cope with the demands and challenges of their job and increased the fulfilment and satisfaction in their personal and professional lives. As a result, the culture of learning was transformed toward more openness and teachers were able to share the challenges that they were facing. The strongest statement that reflects teachers' resilience is Case 1 with the teacher describing how she gained confidence and self-esteem and was back from a long dark place. Through learning, she gained self-confidence, revived her soul, and renewed her teaching. More general statement, such as the one hereafter, depict teachers' resilience and how learning impacted their perspectives and well-being,

- *"I'm so happy I found the impact of the course, it's there, I can see it...of course you will learn a lot about teaching strategies...new techniques that's professional, but on the way, you will also learn or acquire skills, life skills that will help you in your personal life as well."* Reflections, Teacher, Lebanon.

Equity

The course promoted and raised awareness around equity issues which emerged as teachers with low tech skills and those with no internet at school questioned if the course was addressed to them. The discussions with participants around breaking barriers to make access and engagement possible for all teachers, seem to have increased teachers' awareness around students' access and engagement. They became more aware and open to discuss issues of absenteeism from their online course and found that the course pedagogy – particularly self-regulation and maximizing the home learning environment- helped them to find solutions, be more flexible and alleviate the barriers preventing them from accessing and engaging in learning. In addition, Carine's case shows the potential to increase access by making the course available without webinars to further break entry barriers for all those who lack connectivity.

On the other hand, gender equity was in favour of females with more long-term engagement to complete the course. This is interesting as most females mentioned working on the course late in the evening after taking care of their children and families.

Local Ownership

Local ownership emerged as a theme and appeared to be important to enable facilitators in Tunisia to adapt some elements of the course to the Tunisian context. They invested time and energy in facilitating the course and supporting teachers. This led to incorporating local culture into the learning process which was especially important in situations that appeared challenging for teachers. Facilitators for example created local meetups to work with teachers and support their lesson planning. This seemed to foster a sense of empowerment and agency among facilitators and teachers who were more motivated to engage with local instructors. This led to better learning outcomes, including improved increased social and emotional well-being. The following are excerpts that show local ownership,

- *What is important in this course is that it is local and shows that we are capable.*
- *"I really find it necessary for us to create a library in the course or outside the course or anywhere you want, a library where we can publish, or we can store. For example, like the lesson plans we can store them and make them accessible for everybody."* Facilitator, Tunisia

The research questions below are answered considering the qualitative and quantitative data that emerged from the research.

Quality Questions:

A. How and to what extent are teachers using online platforms to make learning relevant for their students? How and to what extent are capacities being built and how and to what extent are pedagogical approaches changing and being implemented?

The use of the online platform for teachers' learning

Almost all teachers (94%) had personal computers to engage with the learning platform, take the course and prepare their lesson and all of them showed evidence of making learning relevant to their students. Yet, all of them engaged with the course content mostly offline to read and work on assigned activities which they uploaded again on the course learning platform. This allowed them to make efficient use of their time and reduce connectivity costs. Working this way was possible because the course content was self-paced and mostly asynchronous - except for the

webinars - enabling those with low connectivity to access and engage in learning. In addition, journey companions were involved in their own professional growth and benefited from the course without engaging in any online platform.

The use of online platforms for teaching

On the other hand, during school closure, participating teachers used TEAMS or Google Classroom) to teach their students and used platforms that provided tools, such as padlets, Miro and others. Despite the attractive features that all of them offer, teachers generally found that online platforms had limitations (interviews teacher, Lebanon). Those limitations included equity and quality,

- **Equity:** In most remote schools, access to internet was scarce and learning through online platform required access to devices and a connection to the Internet while learning. In Lebanon for example, access to learning for 87% of students was through a shared family mobile with siblings. This made it complicated for parents with three children for example to have the 3 of them join online learning platforms to learn. Furthermore, even if parents shared a mobile device between children, connectivity was also expensive and power outage frequents.
- **Quality:** Before taking the upskilling course, teachers perceived online learning requiring real time engagement through an online platform. The course widened their understanding about online learning and teaching and empowered them to focus on pedagogy rather than on technology. All teachers (100%) who responded to the unit-feedback (40) and the post-questionnaire (18) reported that the course pedagogical content shaped their practices. They planned active and authentic lesson plans that do not require students to constantly use online platforms. Instead, it promoted them to maximise the home environment and acquire strategies that promote self-directed learning and assessment.

B. What indicators of quality are emerging (or not) in the process of how educators are planning, teaching, and assessing online?

The indicators of quality that emerged in the process as educators were planning, teaching, and assessing learning included:

- **Agency** and taking action to improve teaching and learning.
- **Intrinsic motivation** to learn and grow professionally.

- **Reciprocity** between facilitators and teachers as explained by facilitators and between teachers and students for all those who created their own stories. Creating their own stories enabled teachers to relate more deeply to students' creative expression and productions (Interview teachers, Tunisia). This led to more **open communication, working and learning culture** at all levels, between teachers and facilitators, and between teachers and students who enabled and made space for students to express their mind and voice.
- **Authentic and collaborative learning** were visible in teachers' lesson plans transforming entrenched practices of telling toward active learning.
- **Relatedness** to others emerged as an indicator of quality. However, not all teachers experienced relatedness in the same way. All of them except one teacher preferred to communicate asynchronously and to work individually.
- **Self-regulation, self-assessment, and peer feedback** appeared as transformative in teachers' feedback on how they used the tool - rubrics and checklists.
- **Critical and creative expressions and productions** appeared particularly important for students' engagement in learning whether they were creating their own stories as reported in English language teachers' reflections or participating in class activities.
- **Equity** emerged to be linked to quality with the ability to make learning relevant and accessible to all students.

C. Where can we find best examples of quality? Where can we find the worst examples of quality - how and why?

The best examples of quality were found,

- When learning was open and collaborative, and teachers questioned previous assumptions and practice. It allowed teachers to try out new ways of doing, to feel safe and confident and raise their self-esteem.
- When teachers' lessons were inclusive of all those that shared devices.
- In schools where leadership was following through and supportive of teachers' growth.
- In situations that were complex and sometimes excruciating for teachers. Some of those were personal and are not shared for confidentiality and ethical purposes.

The worst examples of quality seem to appear,

- When participants (n=4) surfaced the content without investing themselves in the course and unpacking the concepts.

- This was also visible in a few cases when 4 teachers in Lebanon lacked intrinsic motivation and did not demonstrate ownership of their own professional growth. This could be a cultural issue where experienced teachers think that they already know the content of the course.

Equity Questions:

A. Who has access, how and to what extent are they engaged? What support and interventions help to increase equity and inclusion, particularly for those that have no access to technology or who have minimal access on a shared family device? How have these worked (and not worked) and for whom? Key challenges? Areas of further support?

Educators' access

The teachers who had access to the course were mainly public-school teachers or teacher working in underserved private school. Coaches and inspectors were invited by their respective Ministry of Education in Lebanon and Tunisia. All educators who decided to join the course were deeply engaged in learning. Particular attention was made by the two organisations to reach teachers who had little access to technology or were teaching in remote areas. This was done via the school leadership who reached out to its teachers. All those that showed were invited to register and enrol in the course. It turned out that there was a higher interest and commitment from female teachers with 58% female versus 42% male registration and 89% commitment and completion of the post-questionnaire by females.

Students' access

The key challenges to provide equitable learning was students' lack of access to devices and the high cost of connectivity. In Lebanon, structural barriers of interrupted power cuts complicated the problem. Sharing devices within families meant that often children had to wait for parents to get home in the evening to access their work on parents' mobile. This explains the low turn-out rate of students in online learning platforms and the efforts that teachers had to make to communicate with the school administration and parents to engage students. Teachers' ability to design active learning using low-tech tools enabled them to provide quality learning reaching those students who otherwise would not have been engaged in learning. Almost all teachers who completed the course, similarly to Samar, combined using low tech tools and asynchronous modes of engagement to reach all students. In addition, almost all teachers in Lebanon showed a deep commitment to provide equal access to their students reaching out to their parents when they were absent from the online platform.

B. How and to what extent are students included into the process and how does this differ across gender and ethnic backgrounds?

Generally, the students that were reached were engaged to a large extent in their learning. Evidence of students' engagement was visible in teachers' reflections on implementation, particularly in creating their stories and in picture analysis. On the other hand, student gender engagement was not reported by teachers, hence it would not be possible to say how engagement differed between boys and girls.

In Tunisia, students were all included in the same manner. However, In Lebanon, it was more complex for refugees as they were not registered on the TEAMS platform and teachers had to follow regulations by sending them daily, via WhatsApp, lessons, and worksheets. This clearly created a situation where learners were recipient of information with limited engagement in the learning process (Teacher consultations).

C. What are other barriers or constraints to access for teachers, coaches, and students?

As mentioned in the previous paragraph, the main barrier for participants was access to technology and the main constraints for all participants were **emotional fatigue, stress, and frustration**. This was evident across the data, interviews, questionnaires, and conversations. Indeed, facilitators and teachers reported increased stress and considerable heavier workload to cope with the demands of online learning. This appeared even heavier for teachers who had little to no prior knowledge of technology. For learners who had State exams teachers reported that the uncertainty around official exams caused stress and fatigue.

Resilience Questions

D. How and to what extent are educators adapting their practices as they plan, teach, and assess learning online?

Teachers have clearly adapted their teaching toward more active student-centred and authentic learning. All teachers who filled the post-questionnaire reported implementing the strategies they learnt in their online teaching and continuing to use them when schools resumed to in-person learning. On the other hand, the use of self-and peer-assessment tools appeared to a smaller extent and teachers proposed to have a course dedicated to assessment. As reported by educators, a transformative culture started with more openness amongst all participants and at all levels. Arguably, integrating the course in a school-based approach could widen and deepen this transformative culture of learning and embed it, to a larger extent, sustainably in practices.

E. How and to what extent are the capacities of different facilitators to support teachers changing, building resilience to the present crises to offer high quality teaching/learning?

The design-based research provided a structure that enabled, to a large extent, adaptation to change at the level of teachers and facilitators. The process has clearly empowered facilitators and created a synergy between them to support teachers changing and help them build resilience. According to facilitators, the structure of the teacher course and the participatory approach of the training-of-trainers course enabled them to gradually gain confidence and take on their role. They gained confidence by taking local ownership and responsibility and developing relatedness through reciprocal feelings with teachers. They invested themselves in the course and “*read it with new eyes*” (interviews, facilitators). In addition, they created local in person meetups to help build resilience and supported the development and implementation of their lesson plans. The fact that the course was “*entirely facilitated locally*” was mentioned several times by participants and shows the importance of locally owned solutions toward empowering facilitators and educators.

F. How and for whom is the course building confidence and relational quality between facilitators, teachers, and the students?

The course was able to build confidence and relational quality by fostering a culture of open communication, encourage collaboration, personalize learning, provide ongoing support, and celebrate learner successes (with the certificates). All those elements have generated relatedness at the following levels:

Relatedness between facilitators and teachers

The course has gradually built confidence and relational quality in all facilitators and teachers nurturing reflective conversations around learning. It encouraged participants to engage in open, honest, and respectful communication. This was done through reflective conversations, group discussions, and feedback sessions. Facilitators and teachers emphasised the impact of the course on professional relationships amongst facilitators and between facilitators and teachers. The relationship between them was described as *reciprocal, trustworthy, reliable, open, collaborative, and supportive with a readiness to share* (post-questionnaire and interviews). Facilitators were able to provide ongoing support to teachers, both during and after the course. This ongoing support arguably helped to sustain the relationships built during the course. Furthermore, celebrating successes and sharing their stories appeared to increase confidence and provide a sense of accomplishment. After cofacilitators, course, facilitators and teachers reported feeling

extremely confident to facilitate and support teachers and teachers were highly confident to teach online.

Relatedness amongst teachers

The research emphasises that relatedness amongst teachers was a vital element toward improving learning for almost all participants (95%). This took place in the course and away from it for journey companions (post-questionnaire, interviews, case 2). This was achieved by providing opportunities for participants to work collaboratively on projects, assignments, and activities.

Relatedness between teachers and students

Almost all teachers said that the pedagogical process encouraged them to better know their students and to understand their interests, needs, and preferences. It enabled them to make learning more relevant and engaging. Moreover, they (62%) reported that after taking the course they had enhanced relatedness with students who were able to express their own thinking, give peer feedback and feedback to their teacher about the lesson.

Relatedness amongst students

Teachers reported enhanced relationships between students learning, improved collaboration and more productive and respectful discussions between students.

Conclusion

The objective of the research was to improve the resilience, quality and equity of learning and well-being of girls and boys in Lebanon and Tunisia, during the COVID-19 pandemic, by providing a teacher professional development course focused on pedagogies of online learning and assessment. During the span of the design-based project (2020-2022), the two countries, experienced a series of political, social, and economic crisis. The compound effect of those crisis added considerable stress on teachers in addition to the anxiety generated by the prolonged schools' closure. In Lebanon, the situation was further exacerbated by the collapse of its economy throwing 80% of its population below the poverty line and teachers were particularly affected with a 90% devaluation of their salary.

At the start of the pandemic, the key challenges to learning, included lack of access to technology, low internet, power outage, psycho-social and emotional anxiety, unidirectional teaching, lack of confidence, knowledge, and experience to teach online, and the lack of economic and social security. Generally, teachers found it challenging to plan effectively, motivate students and communicate effectively online and almost all of them had undergone basic training to use online tools and platforms.

The research design included 9 iterations with a total of 87 participants 42 English language teachers and inspectors in Tunisia, 25 Lebanese public and private teachers and coaches of diverse subjects. The teacher course focused on evidence-based strategies and required teachers to plan a lesson and show evidence of implementation in practice. The training-of-trainers course focused on building the capacity of educators who had completed the course to facilitate and support teachers.

The research was designed iteratively incorporating participatory action research principles and methods supported by consultations with teachers, pre-and post-questionnaires, course unit-feedback and interviews. Interviews with participants were transcribed, themes were extracted, and four case studies were developed – 2 from each country - providing insight on participants' experience and resilience when adapting to online learning. The four cases were selected purposefully and embody quality, resilience, and equity.

The design-based research impacted positively the quality and equity of learning and the resilience of the education systems. Furthermore, the course structure, content and approach showed to be effective and valuable toward professional learning past the pandemic. Teachers provided evidence of professional growth, agency, confidence, and intrinsic motivation to teach and learn. Relatedness appeared to be a vital element of professional growth and learning and emerged as an indicator encompassing quality, equity, and well-being for all participants. The course was made accessible to teachers in remote areas who were enabled consequently to reach more students through low tech tools, thus, making learning more equitable. Additionally, to providing equal access, enabling different modes of engagement - synchronous and asynchronous - showed the readiness of teachers to overcome hindering constraints and their appetite for professional development growth. Such constraints include lack of time, access to internet at school, low bandwidth, being remote and feeling anxious, stressed, and isolated from professional learning communities.

Furthermore, teachers in Lebanon and Tunisia, who participated in the professional development past the pandemic found the upskilling course extremely relevant to their professional learning needs. This was emphasised by the younger generation of teachers who found that the course helped them to put theory into practice. An argument was made to increase access, equity and efficiency through asynchronous communication coupled with local in-person professional learning communities. It would make professional growth accessible to all teachers in a self-paced mode. The course could thus be a steppingstone to upskill all teachers particularly those in

remote schools. However, additional research would be needed to study how such efforts can be deployed while maintaining quality and impact. This balance or trade off could be leveraged by empowering local facilitators to nurture local communities of practice and further build on the concept of journey companions which showed to be successful.

Finally, the research revealed insights into the potency of action-oriented participatory approach to nurture and instil local ownership. The professional development course and its approach strengthened the education system by building the capacity of facilitators to support teachers. It nurtured local ownership at the grassroot level and supported the initiation of the first steps to adapt and localise the content. The team in Tunisia is enthused and is planning to further adapt of the course to all subjects while in Lebanon, the focus is on integrating STEAM strategies in learning. Most importantly, the impact of the course was highlighted by the request from officials from the ministry of education in Tunisia, teachers, and educational institutions in Lebanon respectively, to build on, localise and expand the scale the course in practice.

References

- Baden, J., (2020), The economic crisis has pushed 40,000 students to join public schools, <https://www.lecommercedulevant.com/article/29627-the-economic-crisis-has-pushed-40000-students-to-join-public-schools>
- Blaise, L., (2021), En Tunisie, la crise politique atteint un nouveau sommet, *Le Monde*, URL, https://www.lemonde.fr/afrique/article/2021/07/26/en-tunisie-la-crise-politique-atteint-son-sommet_6089547_3212.html
- Dahan, M., Creidi, I., (2018) School's out for good? Lebanese teachers flee as financial crisis builds, *Reuters*, URL, <https://www.reuters.com/world/middle-east/schools-out-good-lebanese-teachers-flee-financial-crisis-builds-2021-07-08/>
- Economist Intelligence (2021), Crisis-hit Lebanon hikes fuel prices in de facto end to subsidies, <http://country.eiu.com/article.aspx?Country=Lebanon&articleid=861569669&subsubtopic=Economic+growth&subtopic=Forecast>
- Saleh M., (2023) Education in Tunisia - statistics & facts, *Statistica* <https://www.statista.com/topics/8718/education-in-tunisia/#dossier-chapter1>
- Sallon H., (2021), « Liban, au cœur du chaos », sur France 5 : une génération en rupture avec le système https://www.lemonde.fr/culture/article/2021/11/26/liban-au-c-ur-du-chaos-sur-france-5-une-generation-en-rupture-avec-le-systeme_6103789_3246.html
- Save The Children, (2021) Food, heat or education?: Exorbitant school costs leave families in Lebanon with an impossible choice, *Relief Web*, <https://reliefweb.int/report/lebanon/food-heat-or-education-exorbitant-school-costs-leave-families-lebanon-impossible>
- Smali D., (2021), Education in Tunisia: Past progress, present decline and future challenges, *Arab Barometer*, URL, <https://www.arabbarometer.org/2021/03/education-in-tunisia-past-progress-present-decline-and-future-challenges/>

Appendix

Appendix A :

- Pre-questionnaire
- Post-questionnaire

Appendix B

- Unit 1 Feedback
- Unit 2 Feedback
- Unit 3 Feedback
- Unit 4 Feedback

Appendix C

- Teacher well-being
- Quality learning
- The loner
- Local ownership

Appendix A : Questionnaires

Pre-questionnaire

Background about the Project and its goals

« Rapid upskilling of educators to transition to online learning » is an initiative created as a response to COVID-19 to provide teachers with essential skills needed to deliver quality online learning. The initiative consists of a course for educators and design-based research to support ministries of education with models of online and blended learning. The objective of the research is to improve the quality, equity, and resilience of learning for girls and boys in Lebanon and Tunisia.

About the Questionnaire

This questionnaire is addressed to the teachers participating in the project. Its objective is to understand the online teaching and learning experience, knowledge, skills, and attitudes of the teachers engaged in this project.

The pre-questionnaire is divided into the following sections: I) Teachers' profile; II) Access to technology and learning opportunities; III) Technology skills; IV) Online learning experience; V) Expectations

Time

The pre-questionnaire is conducted at the inception of the project and will contribute to inform the research situational analysis. It will take approximately 20 minutes to fill.

Participants

This questionnaire is addressed to all teachers participating in the project.

Confidentiality

All data will be confidential and anonymized.

The questionnaire includes the following:

- Teacher's Profile
- Access to technology and learning opportunities.
- I-Technology
- II -Professional Learning Opportunities
- Technology Skills
- Online Learning Experience
- Expectations

Teacher's Profile

1. Gender:
 - ☐ Male
 - ☐ Female
2. Years of experience: _____ years
3. Which subject(s) do you teach?
 - ☐ English language
 - ☐ French language
 - ☐ Arabic language
 - ☐ Math
 - ☐ Biology
 - ☐ Chemistry
 - ☐ Physics
 - ☐ IT
 - ☐ Computer
 - ☐ Civics
 - ☐ Philosophy
 - ☐ Humanities
 - ☐ Geography
 - ☐ Art
 - ☐ Other
4. List your academic qualifications.
 - ☐ Bachelor's degree
 - ☐ Master's degree
 - ☐ Teaching Diploma
 - ☐ Other (please specify) _____
5. What's your current employment status?
 - ☐ Permanent employee
 - ☐ Fixed term contract for more than 1 year
 - ☐ Fixed term contract for less than 1 year
 - ☐ Other (please specify) _____

Access to technology and learning opportunities.

I-Technology

6. Do you have a personal computer?
 - ☐ Yes
 - ☐ No
7. Do you have Internet at home?
 - ☐ Yes
 - ☐ No
8. Do you have a personal mobile?
 - ☐ Yes
 - ☐ No

9. If you have a personal mobile, are you subscribed to mobile data service?

- ☐ Yes
☐ No

10. What device do you generally use to teach your online classes?

- ☐ Computer
☐ Tablet
☐ Mobile

11. What device are most of your students using during their online learning?

- ☐ Computer
☐ Tablet
☐ Mobile

II -Professional Learning Opportunities

12. Did you take any online courses in the past 2 years?

- ☐ Yes
☐ No

If you answered “yes”, list the latest courses you have taken.

Title	Institution	When? (month/year)	Type (webinar, course, training, videos)	Period unit (hour/day/week)	How did you find out about it? (your school, your colleagues, social media)

Technology Skills

13. What social media & communication tools do you generally use?

- ☐ Whatsapp
☐ Facebook
☐ Twitter
☐ Instagram
☐ Signal
☐ Other (please specify) _____

14. How would you rate your proficiency in the following, (Level of proficiency: 1, Never used it; 2, Beginner; 3, Advanced; 4, Competent; 5, Expert)

	1	2	3	4	5
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Microsoft Teams					
Google Classroom					
Skype					
Zoom					
Webex					
Moodle					
Microsoft Word					
Microsoft Power Point					
Microsoft Excel					
Internet & Email					
Creating videos					
Photo editing					

Online Learning Experience

15. Since the start of the Covid pandemic, have you taught your lessons online?

- ☐ Yes
☐ No

If yes, please answer the following questions referring to your experience of teaching online:

16. Which applications do you use to teach online? List them

17. You teach online by:

- ☐ Giving video conferencing
☐ Sending links and materials to students
☐ Sending students work via “WhatsApp” or other means.
☐ Other (please specify): _____

18. In your online session, you:

- ☐ Explain the lesson to students.
☐ Share explanatory videos of yourself speaking to your students.
☐ Send links of videos created by others.
☐ Play part of a video during the session.
☐ Ask your students questions about the lesson.
☐ Send worksheets to students.
☐ Other (please explain): _____

19. How would you describe your online teaching experience?

- ☐ Confusing
☐ Frustrating
☐ Fun
☐ Interesting
☐ Needs too much preparation.
☐ Other (please specify) _____

20. Engaging students in the online class has been

- ☐ possible
- ☐ Challenging
- ☐ Complicated
- ☐ Effective
- ☐ Easy
- ☐ Other (please specify) _____

21. How would you describe your students' behavior online?

- ☐ Easy to manage
- ☐ Challenging
- ☐ Productive
- ☐ Noisy
- ☐ Respectful
- ☐ Disrespectful
- ☐ Other (please specify) _____

22. List the online learning and assessment strategies that you are using.

Online learning strategies	Online assessment strategies

23. Which of the following assessment tools have you used before?

- ☐ Forms (a quiz)
- ☐ Self-assessment checklist
- ☐ Self-assessment reflective form
- ☐ Peer-review
- ☐ Rubrics

24. To what extent is the communication with your students effective? (*Level of effectiveness: 1, Not at all; 2, Needs development; 3, Somewhat effective; 4, Effective; 5, Very effective*)

25. To what extent are your students motivated to learn in your online class? (*Level of motivation: 1, Not at all; 2, Rarely motivated; 3, Somewhat motivated; 4, motivated; 5, highly motivated*)

26. List the top 3 things (by order of importance), that motivate your students in your online class:

1. _____
2. _____
3. _____

27. Besides low internet and access to computer, what do you think are the 3 most important challenges that your students are facing to learn online?

Challenge 1: _____

Challenge 2: _____

Challenge 3: _____

- 28.** Besides low internet and access to computer, what are the 3 most important challenges that you are facing to teach online?
Explain how you are addressing these challenges.

Challenges faced in your online teaching	How are you addressing them?
1.	1.
2.	2.
3.	3.

Expectations

- 29.** What do you hope to get out of this course?

- ☐ Experience what it is to learn online.
- ☐ Enhance your online teaching approach.
- ☐ Learn about online teaching strategies.
- ☐ Learn about online assessment.
- ☐ No expectations
- ☐ Other (please specify) _____

- 30.** How would you expect to learn in this course?

- ☐ By reading texts
- ☐ By doing activities
- ☐ By watching videos
- ☐ By reading posts of others
- ☐ By discussing with other teachers
- ☐ Other (please specify) _____

- 31.** To what extent do you agree with the following (*Level of agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree*)

	1	2	3	4	5
I'm excited to take this course					
I'm worried to learn online					
I'm overwhelmed due to work pressure					

If you have other feelings regarding taking this course, please list them:

Post-questionnaire

Background about the Project and its goals

« Rapid upskilling of educators to transition to online learning » is an initiative created as a response to COVID-19 to provide teachers with essential skills needed to deliver quality online learning. The initiative consists of a course for educators and design-based research to support ministries of education with models of online and blended learning. The objective of the research is to improve the quality, equity and resilience of learning for girls and boys in Lebanon and Tunisia.

About the Questionnaire

This questionnaire is addressed to the teachers participating in the project. Its objective is to understand the impact of the course on the knowledge, skills and attitudes of teachers engaged in the project.

The post-questionnaire is divided into the following sections: I) Teachers' profile; II) Access to technology; III) About the course; IV) Knowledge; V) Skills; VI) Recommendations

Time

The post-questionnaire is conducted after completing the course and will contribute to inform the research situational analysis. It will take approximately 20 to 30 minutes to fill.

Participants

This questionnaire is addressed to all teachers participating in the project.

Confidentiality

All data will be confidential and anonymized.

Teacher's Profile

1. Gender:

- ☐ Female
☐ Male

2. Which subject(s) do you teach?

- ☐ English language
☐ French language
☐ Arabic language
☐ Math
☐ Biology
☐ Chemistry
☐ Physics
☐ IT
☐ Computer
☐ Civics
☐ Philosophy
☐ Humanities
☐ Geography
☐ Art
☐ Other (please specify) _____

3. On average, how many hours per week, did you dedicate to complete this course? And for how many weeks?

_____ hours per week for _____ weeks

4. Generally, you completed most of those hours in the:

	Morning	Afternoon	Evening	Late at night
Weekdays				
Weekends				

Access to technology

5. You worked on this course from:

- ☐ Your computer
☐ Your school's computer
☐ Your tablet
☐ Your mobile
☐ Other (please specify) _____

About the course

6. To what extent did the course meet your expectations (Level of expectations: 1, Did not meet expectations; 2, Somewhat met expectations; 3, Met most expectations; 4, Completely met expectations; 5, Exceeded all expectations)

	1	2	3	4	5
The course met my expectations					

7. What are the three things you enjoyed most in the course?

1. _____
2. _____

3. _____

8. What are the three things you enjoyed least in the course?

1. _____
2. _____
3. _____

9. What part(s) in the course helped you change your way of teaching?

10. What part(s) in the course will you adapt for your own teaching in the future?

11. What are the 3 most important challenges that you faced?

1. _____
2. _____
3. _____

12. What helped you to face these challenges?

13. What motivated you to complete the course?

- ☐ The motivation to learn more
- ☐ The benefits you are getting from the course
- ☐ The constant follow-up on your work
- ☐ The course was interesting
- ☐ I enjoyed making a difference in the lives of the students
- ☐ The projects improved things around me
- ☐ The feeling of being part of a community of people working together
- ☐ Learning new things
- ☐ Getting a certificate

Knowledge

Tell us about what you learnt in this course:

- 14. To what extent do you agree with the following, (Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)**

	1	2	3	4	5
The course increased my knowledge about online teaching & learning					
I have learnt new online learning strategies					
I have learnt new approaches to online assessment					
I have planned active & authentic learning for my students					
I have designed activities that are relevant to students					
I engaged students in activities connected to learning goals					

- 15. Which of the following assessment tools did you add to your online teaching?**

- ☐ Forms (a quiz)
- ☐ Self-assessment checklist
- ☐ Self-assessment reflective form
- ☐ Peer-review
- ☐ Rubrics

- 16. Which concept(s) do you wish to learn more about? Why? Explain briefly**

- 17. Did you skip any part(s) in the course? If yes, which one(s) and why?**

- 18. Were you able to complete the challenges?**

- ☐ Yes
- ☐ No

- 19. If “Yes”, which of the following challenges did you choose?**

- ☐ Maximizing the home environment
- ☐ Project-based learning
- ☐ Problem-based learning
- ☐ Picture analysis
- ☐ Peer review assessment
- ☐ Storytelling

- 20. Explain briefly, why you chose these challenges.**

Skills

21. From the activities that you completed, which ones helped you most to enhance your teaching?

(Level of help: 1, Did not help at all; 2, Somehow helped; 3, Mostly helped; 4, Completely helped; 5, Extremely helped)

	1	2	3	4	5
Observing the home environment					
Designing lessons relevant to students					
Engaging students in activities that they can implement with things around them					
Developing activities that promote self-regulation and reflective thinking					
Designing a project or problem					
Analysing pictures					
Role-playing activities					
Creating a digital story					

Now that you have successfully completed this course,

22. To what extent are you confident to teach online? (Level of confidence: 1, Not at all; 2, Needs development; 3, Somehow confident; 4, Confident; 5, Very confident)

23. To what extent are you encouraged to apply what you learnt in the course with your students? (Level of encouragement: 1, Not at all; 2, Rarely encouraged; 3, Somewhat encouraged; 4, encouraged; 5, highly encouraged)

24. To what extent do you agree with the following?

(Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)

The course has helped you to,

	1	2	3	4	5
Design lessons more relevant to students					
Create motivating activities for students					
Engage students in active and authentic learning					
Organize your lesson					
Make teaching more fun					

Other, please specify _____

25. To what extent has the course helped you to engage students in

(Level of help: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

	1	2	3	4	5
Critical and creative thinking					

Solving problems					
Thinking about what they are learning					
Collaborative learning					
Connecting learning to students' lives					
Connecting learning to their home environment					
Self-regulating their own learning					
Project work					

26. To what extent has the following helped to enhance your students' engagement online

(Level of help: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

	1	2	3	4	5
Applying a community agreement					
Using a code of conduct for group work					
Self-assessment checklist					
Contribution to class discussion rubric					

27. To what extent did you benefit from each of the following

(Level of benefit: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

	1	2	3	4	5
Discussions with other teachers in the course					
Discussions with your journey companion(s)					
Discussions with your students					
Webinars					
Other, (Please specify)					

28. To what extent has the course activities helped you to?

(Level of help: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

	1	2	3	4	5
Enhance the communication with your students					
Know your students better					
Engage students in teamwork					

29. To what extent are your students better able to

(Level of ability: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

	1	2	3	4	5
Give feedback to each other					
Give feedback about the lesson					
Express their own views					
Express their thinking					

30. To what extent are you able to adapt what you have learnt to your teaching?

(Level of ability: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

31. To what extent has this course transformed your online teaching?

(Level of transformation: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

32. What are the 3 things that have changed?

33. To what extent has this course changed your attitude towards online teaching and learning?

(Level of changed perception: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

What are the 3 things that have changed?

Thank for your feedback,

Recommendations

34. How likely are you to recommend this course to someone else?

(Level of recommendation: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)

35. If you were to take the course again, what would you do differently?

Appendix B

Unit feedback:

- Unit 1
- Unit 2
- Unit 3
- Unit 4

Appendix B: Unit-Feedback

Unit 1 Feedback

1.	How many days did you spend working on this module?		_____ days					
2.	How many hours a day, on average, did you spend learning this module?		1 h/day	2 h/day	3 h/day	More than 3 h/day		
3.	To what extent did you need help? (Level of help needed: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)							
Rating			1	2	3	4	5	
1	To complete the module?							
2	To join the webinars?							
To what extent do you agree with the following? (Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)								
Rating			1	2	3	4	5	
4.	1	The module was clear	Understand this module?					
	2	The module was interesting	Rate extent; 4, To a large extent; 5, To					
	3	The module content easy to understand	1	2	3	4	5	
	4	I have benefited from the readings						
	5	I was able to apply what I have learnt in the activities						
6.	To what extent (Level of encouragement: 1, Not at all; 2, Rarely encouraged; 3, Somewhat encouraged; 4, encouraged; 5, highly encouraged)							
Rating			1	2	3	4	5	
1	Were you able to communicate easily with the facilitators during this module?							
7. What could we do to improve your learning experience?								

Unit 2 Feedback

1.	How many days did you spend working on this module?	_____ days				
2.	How many hours a day, on average, did you spend learning this module?	1 h/day	2 h/day	3 h/day	More than 3 h/day	
3.	To what extent do you agree with the following? (Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)					
	Rating	1	2	3	4	5
1	The module was clear					
2	The module was interesting					
3	The module content easy to understand					
4	I have benefited from the readings					
5	I was able to apply what I have learnt in the activities					
4.	Which of the following online learning strategies did you select? (multiple select)					
	Strategies	Strategies chosen				
1	Maximizing the home environment					
2	Self-regulation and reflective thinking					
3	Interpersonal relationship					
4	Communication and online discussions					
5	Collaborative learning					
6	Project-based learning					
7	Problem-based learning					
8	Picture analysis					
9	Role-play					
10	Digital Storytelling					
5.	What could we do to improve your learning experience?					

Unit 3 Feedback

1	How many days did you spend working on this module?	_____ days					
2	How many hours a day, on average, did you spend learning this module?	1 h/day	2 h/day	3 h/day	More than 3 h/day		
3	To what extent do you agree with the following? (Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)						
	Rating		1	2	3	4	5
	6	The module was clear					
	7	The module was interesting					
	8	The module content easy to understand					
	9	I have benefited from the readings					
	10	I was able to apply what I have learnt in the activities					
	11	I have benefited from the experience of other participants in the discussion section					
4	To what extent has each of the following helped you to understand this module? (Level of help: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)						
	Rating		1	2	3	4	5
	8	The readings					
	9	The thinking activities					
	10	The activities you had to submit					
	11	The posts of the participants					
	12	The feedback from your journey companion(s)					
5	What could we do to improve your learning experience?						

Unit 4 Feedback

1	How many days did you spend working on this module?	_____ days					
2	How many hours a day, on average, did you spend learning this module?	1 h/day	2 h/day	3 h/day	More than 3 h/day		
3	To what extent do you agree with the following? (Level of Agreement: 1, Fully Disagree; 2, Disagree; 3, Neither agree nor disagree; 4, Agree; 5, Fully Agree)						
	Rating		1	2	3	4	5
	1	The module was clear					
	2	The module was interesting					
	3	The module content easy to understand					
	4	I have benefited from the readings					
	5	I was able to apply what I have learnt in the activities					
	6	I have benefited from the experience of other participants in the discussion section					
4	To what extent has each of the following helped you to understand this module? (Level of help: 1, Not at all; 2, To a small extent; 3, To a moderate extent; 4, To a large extent; 5, To an extremely large extent)						
	Rating		1	2	3	4	5
	1	The readings					
	2	The thinking activities					
	3	The activities you had to submit					
	4	Giving feedback to your colleagues					
	5	The feedback from facilitators					
	6	The webinars					
5. What could we do to improve your learning experience?							

Appendix C: The 4 Cases

Case 1: Teacher well-being

“In one sentence, the course has revived my soul and renewed my teaching... I'm back, I'm back from long, long darkness.”

This case is about Samira, an English teacher from Tunisia who joined the third iteration of the teacher course which was entirely facilitated by the Tunisian facilitators who had completed (TOT) training-of-trainers' course. The team of researchers attended the webinars and conducted the final interviews.

Samira was suffering from long COVID, which is a condition some people experience after being infected with the COVID-19 virus with long-term effects of the illness many weeks or even months after having COVID-19. She had headaches, brain fog and imbalance issues. In addition, she oversaw her elderly parents with whom she was living, so she had very little time for herself. After the lock-down, she continued to teach from home because she was unable to go physically to school and to concentrate for long periods of time. She enrolled in the course and was able to carve time, mostly late into the evenings to study. She joined all webinars, successfully completed the course and participated in the interview.

During webinars, she shared her reflections about what she was going through and reiterated that taking the course and participating in the weekly webinars were a “breather” because that time was dedicated for her professional growth. It became her time which she respected throughout the course. Her strongest statement was, *“In one sentence, the course has revived my soul and renewed my teaching... I'm back, I'm back from long, long darkness”*.

In her reflective statement, she explained the gradual change and how the structure of the course activities concomitantly contributed to bringing her back from this long dark place. She regularly implemented the well-being activities herself. She invested herself in the strategies and was drawn by the storytelling. She found that learning with others in the course was a relief and she looked forward to the webinars which she found skilfully facilitated by the team in Tunisia. Rather than unidirectional learning, she engaged her students in the learning process starting with the well-being activities. She applied what she learnt in the course and engaged students in self-assessment. She used the tools provided in the course and started adapting the self-assessment rubric for her class. Gradually, her students' behaviour improved, and she shifted toward engaging them in assessing their own work and being more responsible of their learning.

She focused on having them create their own story. During the webinars, Samira explained how surprised she was by her students' stories and their self-confidence expressing themselves. As she worked her way through the course, she struggled because of her low concentration span and spent sleepless nights working through the course to complete it. When she did not understand the assignments, the facilitators supported her and encouraged her. She said, that while working on the lesson plan, her memory failed her, and she couldn't remember how to make an online exercise anymore. The well-being activities that were distributed across the modules helped her to ease the unbearable pressure. She persevered and kept going and was ever so proud when her students shared their stories.

The role of the facilitators and the conversations with colleagues were instrumental to overcome the problems she was facing and to complete the course. She said that the course itself enabled her to *regain self-esteem and confidence and to continue teaching with colleagues*. During the interview, she repeated several times, *that the course had revived her soul and renewed her teaching...she described herself as someone returning from a dark space saying... I'm back, I'm back from long, long darkness...* and thanking the facilitators for the opportunity and support they provided her.

Case 2: Quality of learning

"I never thought I could engage students this way in learning. Their feedback is helping me to improve my teaching".

This case study was selected because it is a demonstration of how quality teaching and learning emerged in online learning. It involves two Middle-school teachers in a remote school in the North of Lebanon: Samar, a math teacher and Maha, her journey companion and English language teacher.

The concept of journey companion was developed and nurtured in the upskilling course and required from teachers enrolled in the course to find at least one colleague at school interested in what they were learning and to share and plan with them the course content and activities. The purpose is to break the isolation of teachers learning online in a self-paced course and to nurture collaboration and sharing amongst teachers.

Samar enrolled in the course and joined all webinars. She regularly shared what she was learning with Maha and they made time to discuss the course concepts and how to adapt the tools to their teaching. They implemented the well-being activities and discussed the strategies. As an English teacher, Maha was intrigued by the storytelling but attracted by the picture analysis. Together, they tested the tools, designed, and implemented their lesson plans. After the implementation, the two teachers reflected on the process in writing and Samar shared Maha's reflections. Maha was therefore included in the research without participating in it in person.

On the other hand, Samar's lesson plan focused on having grade 8 students discover the relative position of a line and a circle. She invited students to observe their surroundings and to look around them in their homes for cases where they could see a line and a circle in any possible position. Students were asked to take photos and share them in class. She prepared her students with the community agreement and shared the criteria for group discussions. At the end of the lesson, she engaged students on giving feedback about the lesson. She found that the tools she applied her to better prepare and manage her online class. Yet, she was concerned about the high number of online absenteeism (50%) and followed-up on absents via WhatsApp calls with their parents. Most parents explained the challenge of having one mobile device to share amongst children who had conflicting schedules. This was attended to when children were in the same school but was not always the case for all her students. She planned all her lessons and sent them also via WhatsApp with directions for students to join and participate. The course helped her to plan activities using asynchronous low-tech tools and to keep her students engaged in learning by giving them more time to complete assigned activities. She also tried to connect peers together creating a support mechanism between students. It required one-on-one follow-up and so much more work than regular face-to-face classes, but she felt responsible for her students and worked all day, in the evening and very late at night.

In her reflections, Samar mentioned that *"with this course she [I] felt that she [I] got all what was missing me to make her [my] sessions more alive, her [my] activities more relevant and her [my] assessment more authentic...but also to maintain and engage activities for those that were not joining the online class.* She also emphasized that she discovered how challenging it was for students to observe their surroundings. *"I have realized that it sounds easy, but it is not easy for students. Many students couldn't find anything related to what was required so many created situations such as putting a pencil on a balloon or a pen tangent to an apple. This opened a discussion about 2 and 3 dimensional shapes (sphere) and the difference between a balloon, an*

apple, and a circle...The discussion was productive, students were puzzled and listening actively, they respected each other and questioned politely and constructively... Engaging them in the process has changed the dynamics of learning and am doing things that I did not do before like discussing the lesson for example. Their feedback is important to me as well. It helps me a lot. At the end of every session, I ask students to respond to 5 quick questions about the session. The teacher shared screen shots and gave examples of their online engagement. "Their behaviour is better, and they feel important. I am listening to them, and they are more motivated. The many strategies, tools and applications that I learnt; I can use after we go back to school."

The impact of the journey companion conversations and collaborative work was also emphasised in Samar's reflections with positive effect on the two teachers. She mentioned that *"Having a journey companion helped her [me] throughout the course but when she saw [I see] the impact on her [my] colleague's class, she was [I was] proud because, she saw [I see] that she benefited also without taking this course.*

In-deed, her colleague focused on picture analysis, they discussed and developed three activities to engage students around the themes of tolerance, poverty, and hunger. Those themes were generally abstract and difficult to make relevant to students.

Maha selected three thought provoking pictures – one for each of her classes - and asked students to observe the picture for three minutes without talking. While doing that, they had to think about the details they saw in the picture, such as the colours, shapes textures, and the position of people and objects. Then, they were asked, "What questions they had about the picture? They were then asked to analyse the questions by relating it to the situation of the people in it.

In her reflections, Maha emphasized that her students were able to *"think critically and to express their emotions and feelings"*. She found that the process *"created a magical scene"* around difficult themes otherwise abstract and difficult to teach not online but also face-to-face. She *"was startled by some answers that revealed maturity"* and depth of thoughts. She was very proud and overwhelmed to hear students make connections, and *"raise questions around gender equality and culture"*. She was able to engage all her students in new ways and to *discover their ways of thinking*. She was happy to have all students voice their ideas freely and to have created an online environment where students could express different opinions without negative comments from peers. Maha was feeling fulfilled to have benefited from the course without

formerly taking it since she could not commit to complete it. Yet she benefited from it through her colleagues which helped her to enhance her teaching. She realised her students' capacities and found ways to engage them in learning that was much more relevant to them.

This shows a win-win situation which extends professional development opportunities to teachers from the same school. At the same time, it can transform the isolation of online self-paced learning and promote the development of school-based communities of practice. The concept of journey companion worked when companions taught different disciplines, it seems that the exchange was rich and beneficial, and they were able to plan projects together.

Case 3: The loner

This case is highlighted because it provides a contrary experience to all the others. It is what Yin would refer to as the “rival case” (Yin, 2018).

Carine is a Middle School English language teacher working in a remote school in the South of Lebanon. She was attracted by the self-paced aspect of the course and the fact that participating in the webinars was not compulsory. She preferred to study alone without a journey companion. She received the course weekly newsletters, completed, and submitted all activities on the platform. She also communicated with peers through the forums and said that the asynchronous mode suited her best. She liked to connect at her own discretion and always checked the course discussion forum. She said that all her questions were answered and received constructive feedback from peers and instructors. She also read through her colleagues work which helped her to situate herself. She implemented her lesson plan with students and said that if she would take the course again, she would not change anything, nor join webinars.

While all the other teachers emphasised that webinars were instrumental to promote a sense of community, remain on track and have conversations around learning, Carine insisted that they were not necessary. In her opinion, webinars take too much time and need a high Internet bandwidth. Her recommendation in the final interview which was exceptionally held face-to-face was to encourage more teachers to use the course forum. Being aware of this case sheds light on the potency of the course running without webinars to reach a much larger number of teachers.

Case 4: Local ownership

This case is important because it shows how TPD can develop a sense of local ownership and develop transformative practices. It is the case of a teacher who completed the teacher course

and continued his learning journey to become one of the 5 facilitators providing the upskilling course independently. Jamil has also joined the team working with IEA's partner in Tunisia to localise and expand the course. He is an English teacher who showed his passion and commitment to learning throughout his learning journey. He provided pro-active and sometimes unsolicited feedback such as correcting typos in the course for example. He went the extra mile and used the content of the storytelling material to teach his colleagues and expand the reach of the course to others. He completed his own story, unpacked the storytelling process before implementing it with students. Jamil's recurrent feedback was, *"the strength of the course is in its structure"*.

Jamil's investment in the training of trainers was similar, he was extremely supportive of colleagues facilitating the course and supported local meetups for teachers who had no internet. In his reflections he emphasised his *"feeling of reciprocity with teachers"* and his ability to *"establish trust relationship,"* making it *"safe for them to question"*. He said, that *"he [I] learnt to guide people without hurting them was able to put into practice the knowledge gained without value judgement"*. Jamil was active in another pedagogical course and in the interview mentioned that he was deeply appreciative that the upskilling course was designed in the Middle East and mentioned that his motivation towards the course is that it is developed in the Global South, is flexible and has shown to be adaptable locally.