Digital summer school programme

Design and implementation how-to guide

Contents

1. Overview

The following manual is presented as a step-by-step guide for designing and implementing a digital summer school programme, comprised of lessons learned from a pilot implemented by the "New Perspectives through Academic Education and Training for young Syrians and Jordanians" (JOSY) project[1]. JOSY is a scholarship programme for Syrian refugees and socially disadvantaged Jordanian students which partnered with Kiron, a social start-up that provides online learning and higher education to refugees, to implement this pilot. The summer school programme pilot was designed to improve job prospects and the future outlook of its students through training in academic courses and life skills.

This guidance manual is framed within four phases (inception, design, implementation, and evaluation) and ten key steps for designing and implementing a digital summer school programme. Learning from the JOSY pilot is drawn into relevant sections, and checklists for programme managers are included throughout this manual. The manual closes by offering concluding remarks and relevant resources are provided in Annex A.

2. Background

The JOSY pilot combines two emphases of German development policy: refugees' access to education and digitalisation. The combination of these two areas potentially offers a scalable solution to address access and equity gaps in the provision of quality education for refugees and provides an effective approach to contribute to both lines of policy through simultaneous delivery. In 2017, the BMZ endorsed its digital strategy which sets out how challenges can be tackled and how digital opportunities can be leveraged. The topics of displacement and migration are important pillars of this strategy, particularly as forced displacement reaches unprecedented levels (65.3 million people worldwide[2]). This has created a significantly challenging environment to provide sustainable access to higher education for young refugees. A wide range of digital initiatives have emerged in the refugee higher education field that offer online or blended learning[3] to address this challenge. It is increasingly recognised that blended learning offers a unique opportunity for refugees pursuing higher education to access internationally recognised programmes while also being part of a local student community[4]. In addition, digital approaches to education for refugees can offer increased flexibility for study time, access location, and options to determine the preferred depth of learning depending on goals and priorities. In addition, a greater number of participants can be reached, data can be monitored easily and used to make immediate improvements to the programme content and structure, and there can be substantial cost savings[5].

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1   The JOSY project is funded by the German Government through GIZ within the German Federal Ministry of Economic Cooperation and Development (BMZ) special initiative: 'Tackling the root causes of displacement, reintegrating refugees'. The implementing partner for the digital summer school programme is Kiron Open Higher Education gGmbH.

2   UNHCR (2016). Missing out: Refugee education in crisis. Retrieved from: http://www.unhcr.org/57d9d01d0

3   Blended learning is a combination of online digital media with traditional classroom methods.

4   Ferede, M. (2016). Virtually education: The case for and conundrum of online higher education for refugees. UNESCO Global Education Monitoring Report World Education Blog. Retrieved from: https://gemreportunesco.wordpress.com/2016/05/24/virtually-educated-the-case-for-and-conundrum-of-online-higher-education-for-refugees

5   Toolkit – Digitalisation in Development Cooperation and International Cooperation in Education, Culture and Media. Retrieved from: https://www.giz.de/fachexpertise/downloads/bmz2016-en-toolkit-digitalisation.pdf

In this context, providing evidence of the outcomes of digital education programmes designed for refugees becomes critical to inform the evidence base for 'ICT4Refugees'[6]. GIZ endorsed the Principles for Digital Development[7] in March 2018 and is therefore committed to a systematic process by which to ensure quality and rigour specific to digital programmes in developing contexts. Similarly, BMZ has a strong strategic approach to digitalisation in development partnerships, with the explicit aim to improve the digital inclusion of people in developing countries. To this end, the BMZ is committed to the increased use of innovative digital approaches and partnerships with social start-ups.

JOSY pilot

Overall pilot goal:
Improved job prospects and future outlook of Syrian refugee and Jordanian university students through training in academic courses and life skills.

Target beneficiaries:
• Syrian refugees and socially disadvantaged Jordanians recruited from JOSY's student population and by Kiron
• Balanced gender ratio of 50/50

Student number breakdown:
• 46 students active and received a certificate of completion (29 male, 17 female)
• 9 students inactive (4 male, 5 female)
• 5 students did not complete

MOOCs provided to students:
• Computer science
• Political science
• Mechanical engineering
• Business and economics

Projects provided to students:
• Business plan writing (offline)
• Programming (online)
• Business English (online)

Skills trainings provided to students:
• Academic writing (online)
• Job application skills (offline)
• Digital skills (online)
• Design thinking (offline)
• Life skills (offline)

Support and social activities:
• Help desk and FAQs
• Kiron forum
• Study hubs
• In-person guidance office hours
• Social events (e.g. networking events, cultural dinners, art exhibitions)

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6   Mason, B. & Buchmann, D. (2016). ICT4Refugees: A Report on the Emerging Landscape of Digital Responses to the Refugee Crisis. GIZ publication. Retrieved from: https://regasus.de/online/datastore? epk=74D5roYc&file=image_8_en
7   The Principles for Digital Development (https://digitalprinciples.org) are nine 'living' guidelines to help practitioners integrate established best practices into technology-enabled development programmes. See Annex A for further information.

The JOSY pilot was three months in length, running from June to August 2017 in Amman, Jordan. The pilot was designed to enable students to acquire additional life skills to serve as proof of qualifications for the job market, as well as build competencies related to individual vocational and academic pathways. The specific courses were chosen by the students individually, following the inception phase according to their learning needs. These classes were offered through a blended learning format, with the online element delivered through massive open online courses (MOOCs[8]), developed by renowned universities and hosted on the Kiron online platform. Additional projects and skills training were offered to students in physical spaces in Amman called study hubs, which also provided computers and internet access to students.

While blended learning approaches are well-established as an educational model, blended learning in Jordan is new and not yet widely used. The JOSY pilot encouraged students to develop coping strategies and life skills as part of a blended learning approach to broaden the perspectives and aspirations of students. Digital summer school programmes offer a rare opportunity for students to engage in relevant modules with a low-level commitment of only a few months. The blended learning format adds value to this opportunity by allowing students to access course materials from anywhere, while also being able to participate in offline projects, skills trainings and social activities to build their networks and feel a sense of inclusion in a student body.

The following manual draws on the learning from this pilot and presents guidance for designing and implementing digital summer school programmes.

3. Summer school programme inception to evaluation in ten steps

This section is framed within four phases and ten broad steps for researching, designing, implementing and evaluating a digital summer school programme. The four phases and associated steps are interrelated and may often overlap. Considerations for these phases draw on the learning from the JOSY pilot, but activities within each phase will of course vary depending on the unique operating context of the programme.

Each step is described in detail below, and incorporates insights from the JOSY pilot programme through an analysis of pre- and post-programme data, course usage data, as well as interviews and focus groups with programme stakeholders. Relevant checklists for programme managers have been included throughout. While the timeline of these activities will vary depending on the programme context, a sample timeline for programme activities is included below for each phase.

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8   MOOCs are online courses aimed at unlimited open and global participation via an online platform (e.g. Coursera (https://www.coursera.org), edx (https://www.edx.org), Futurelearn (https://www.future-learn.com)).

Inception phase	• Step 1: Map students and other stakeholders • Step 2: Conduct a needs assessment • Step 3: Explore other summer school programmes
Design phase	• Step 4: Define programme objectives and assess resources • Step 5: Design online and offline summer school programme activities • Step 6: Establish clear programme learning cycles
Implementation phase	• Step 7: Course facilitation and tutor and trainer coordination • Step 8: Support and follow-up • Step 9: Monitor and track progress
Evaluation phase	• Step 10: Conduct post-processing

3.1 Summer school programme inception phase

The objective of the inception phase is to approach potential participants, tutors, trainers, and key stakeholders, identify the learning needs and interests of the students, explore other similar programmes to learn from, and design the concept of the programme.

Month 1 Month 2	Month 3 Month 4 Month 5	Month 6 Month 7 Month 8	Month 9 Month 10
Inception phase: *Focus groups, question-naire, needs report*			
	Design of content & structure		
		Implementation of pilot	
			Evaluation of pilot

A participatory and iterative approach should be used from the beginning of the inception phase. Designing the programme *with* the beneficiaries and not *for* the beneficiaries is an element of design that will aid in making the programme components more relevant to user needs and more applicable to the operating context. Remember that the more involved key stakeholders are in the programme design, the more likely the outcomes are to be appropriate and sustainable. See resources in Annex A for further guidance on participatory approaches.

In addition, during the first steps within the inception phase, a steering committee should be formed to direct the programme and discuss challenges and areas of opportunity as a consortium. The JOSY pilot consortium found that having a steering committee ensures an accurate representation of perspectives when decision-making and defining the programme objectives and activities.

Indicators for this phase (as taken from the JOSY pilot) can include:

• A minimum of (insert appropriate sample size based on the programme) students, tutors and trainers participate in the needs assessment.
• The summer school programme course areas are defined.
• A concept for implementation is developed.

Step 1: Map students and other stakeholders

The inception of a summer school programme should begin by identifying the problem that the programme intends to solve. This will inform the target beneficiaries, the unique programme objectives, and the specific activities intended to reach those objectives. For digital programmes it is important that the problem comes first and not the technical solution. For a digital summer school programme for refugees, this problem statement will likely consider ways to solve obstacles to future learning or career pathways. In addition, it may consider such problems as equitable access to modularised and relevant courses to contribute to students' future education or career trajectory.

Checklist A: Stakeholder mapping and analysis

- List stakeholders in a visual diagram that indicates their relationships, where applicable. While there may be many, focus on the most important. Include the tutors and trainers.
- Estimate the influence that each stakeholder may have on the programme (high, medium, low).
- Estimate the attitudes the stakeholders have towards the programme (positive, negative, neutral).
- Identify strategies for engaging with each stakeholder
  - Determine who will make contact and how.
  - Define the messages to be communicated.
  - Decide on how follow-up will take place.

A stakeholder[9] analysis should then be conducted to identify targeted beneficiaries[10] and document each stakeholder group's interests and challenges or barriers. By identifying and analysing the stakeholders, this will ensure that the programme is aligned with their needs and capacities, creating realistic conditions by which to design a relevant and effective programme. This is also useful for planning the communications strategy. It should be noted that stakeholder mapping and analysis need not be limited to the research phase of the summer school programme, but can be done frequently as part of the monitoring plan to track changes in stakeholder needs and attitudes over time. Further resources for conducting stakeholder mapping and analysis have been included in Annex A.

Step 2: Conduct a needs assessment

A comprehensive needs assessment should be conducted to better understand the operating environment. The aim of the needs assessment is to explore the potential deliverables of online and offline learning components and student activities in accordance with:

- Student interests,
- Demographic data and educational background,
- Intended career pathways, and
- Applicability within the wider environment.

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9   From the IFRC guidance document on project planning (see Annex A for link), they define a stakeholder as a "person or group of people who have an interest in the intervention that is being planned"
10   For the JOSY pilot, this consisted of refugees from Syria and disadvantaged Jordanian students, in line with previous approaches and implemented projects by GIZ.

Checklist B: Questions for summer school programme needs assessment

1. What are reasonable entry requirements for a summer school programme that target beneficiaries could meet?
2. Is reliable and affordable internet available for beneficiaries to access affordably and reliably?
3. What level of digital literacy do target beneficiaries currently have?
4. What is the current perception of blended learning from students and the wider community?
5. What courses, projects and training sessions would target beneficiaries be most interested in taking?
6. What would be needed from volunteers?
7. What social activities would target beneficiaries be most interested participating in? What would make them more or less likely to participate? Why?
8. What support services would be needed most from beneficiaries and volunteers?
9. What language skills do beneficiaries have?
10. What is the best way to communicate with students and volunteers?
11. What time constraints do the beneficiaries have? Are these consistent week to week?
12. What psychological or family-related problems may present as barriers for beneficiaries' participation?
13. Do male and female beneficiaries experience the same enablers and barriers for participation?
14. What accreditation is relevant to the needs of beneficiaries and applicable to local and international contexts?

The needs assessment should investigate challenges students from the target group face in order to provide a basis for planning and implementing the components of the summer school programme. This could be conducted via focus groups or questionnaires depending on the programme scope, and may result in the inclusion of specific help services, such as psycho-social support, or changes to the training provided to tutors depending on the results.

The JOSY needs assessment was successful in attracting 40 students to participate in the focus group and 90 students to answer the online questionnaire. This created a foundation from which to build an appropriate curriculum and course structure that was relevant to the needs of the students, by identifying:

- Course areas students were interested in taking: management skills, programming, public health, business and economics,
- Social activities students would be interested in participating: sports, movie nights, outdoor activities, cooking classes,
- Potential challenges: e.g. allocating the required amount of time and their experience in online learning, and
- Their level of English: the programme team found that it exceeded their expectations.

CONDUCT A LABOUR MARKET ASSESSMENT

The inception phase should also involve a labour market analysis. This could take place in the form of a survey, as utilised for the JOSY pilot to assess labour market demands with participants from Zain, Migrate and Arab Bank (representing the demand of leading companies within the Jordanian labour market). The results of this survey identified a high demand in the financial sector, telecommunication, engineering, IT/tech, computer science, and technical support. This was incorporated into the design phase for courses, tutorials, and training sessions offered.

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Step 3: Explore what has been done before

This step involves exploring, documenting and analysing relevant literature and programmes in order to understand what has already been developed for digital summer school programmes and what can be improved upon in future similar practice. In particular, literature and programmes aligned with the unique contextual considerations of the intended operating environment should be consulted in order to ensure that the socio-cultural context is informing the design, as this plays a significant role in the ability to introduce technology infrastructure in a community. Experts and programme managers and staff of similar programmes should also be consulted.

If nothing is available in the target sector, the programme should explore what approaches are available in another sector and if they are able to contextualise them for their own purposes. Instead of designing something new, summer school programmes should consider what they may be able to reuse so as to leverage the gains from previous projects, using their learning to improve practice such as software, digital tools, content, data security protocols, etc. This should include an analysis of strengths, weaknesses, opportunities and threats of the tool or approach. For digital summer school programmes working with refugees, programmes should seek literature and other programmes on such areas as:

- Introducing blended learning into fragile contexts
- Considerations and standards (e.g. see Connected Learning in Crisis Consortium (CLCC) quality standards as listed in Annex A) for blended and online learning for refugees or other vulnerable populations
- Key barriers and obstacles to learning and engagement in online and blended learning environments
- Best practices for online summer school programmes
- Relevant accreditation

Of course the context of the programme will lead to other areas to research during this step, as this list is not exhaustive.

3.2   Summer school design phase

The design phase is intended to develop the summer school programme objectives and budget, develop the curriculum and course outline according to the students' needs and interests, modularise summer school programme courses, and develop tutorial and training session content and recruit appropriate tutors and trainers.

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Inception phase									
		Design of content & structure: *MOOCs, training sessions, tutorials, projects, social activities, support services, study hubs*							
					Implementation of pilot				
								Evaluation of pilot	

Indicators for this phase (as taken from the JOSY pilot) can include:

- A summer school programme curriculum is developed.
- A sufficient number of academic volunteer tutors for online tutorial sessions are recruited.
- A sufficient number of academic volunteer trainers for offline support in Amman are recruited.
- Extracurricular sessions are adapted and prepared.

Step 4: Define programme objectives and assess resources

DEFINE OBJECTIVES

Following the research phase, and in accordance with the results of the stakeholder mapping, needs assessment and drawing on learning from other projects and literature, summer school programme objectives should be clearly defined and agreed on by all partners within the steering committee. Objectives should be clear, realistic, measurable and reflective of any constraints that emerged from the research phase. They should include learning goals and competencies sought from the summer school programme activities. These objectives will be followed with the identification of associated deliverables and key milestones. For the JOSY pilot, the objective was improved job prospects and future outlook of Syrian refugee and Jordanian university students through training in academic courses and life skills.

ASSESS RESOURCES

Cost-benefit and resource assessment should take place within both the research and design phases and be appropriately documented and evaluated throughout the lifecycle of the programme. This should result in a programme budget by the end of the design phase of the summer school programme.

Assessing resources refers to determining the inputs needed and programme budget on the basis of the intended interventions. When considering the cost-benefit of a programme, it is not necessarily only about the amount of money or resources going in, but also whether the resources are being used responsibly. As such, the budget should be accompanied by a clear rationale for each expense. Digital programmes offer challenges for assessing cost-benefit because of the large upfront costs, so it is important to include components like scalability which may raise the value of the intervention. Support and capacity building activities, for example, should not be underestimated because they can offer longer-term cost savings through building local capacity. As mentioned in the previous step, it is also worth researching what already exists to save on costs. For a digital summer school programme, this may mean leveraging available software instead of building it from scratch, offering current MOOCs as an alternative to developing new ones, or using communication channels students are already familiar with rather than developing new channels and chat forums.

Checklist C: Assess resources

- Identify project costs for the medium and long term.
- Identify resources needed for programme development and implementation. Include direct and indirect costs.
- Identify which interventions will be most beneficial with the resources available.
- Create a realistic budget agreed on by all partners that reflects different partner priorities.
- Ensure that partners understand and agree with what is required of them for resource distribution.
- Evaluate scalability within resource costs – e.g. platform costs are high but able to scale to x number of programmes in x number of contexts.

Expenses involved in delivering digital summer school programmes for refugees may involve the following (although this list is not exhaustive):

- System set-up (installation of technology/server, operations testing and training for staff, and integration of additional ICT/systems)
- Needs assessment
- Outreach to students, tutors and trainers
- Developing modularised course structure and guidance
- Developing and facilitating offline activities
- Communication and feedback
- Monitoring, data collection and progress reports

Step 5: Design online and offline summer school programme activities

After the steering committee has agreed on the programme objectives and budget, the structure and approach of the summer school programme activities can be designed. Activity design explores which inputs and activities are most likely to lead to the programme objectives within the budget. This step should result in a clear programme plan that presents the timeline of activities and resources required, roles and responsibilities, key milestones, as well as risks and ways to mitigate for them. The following step is divided into developing recruitment criteria for students and volunteers, and designing appropriate online and offline summer school programme components.

DEVELOPING RECRUITMENT CRITERIA FOR STUDENTS AND VOLUNTEERS

The result of the stakeholder mapping will help identify the recruitment criteria for students and volunteers. In line with the CLCC quality standards[11], entry requirements for summer school programmes working with refugees should:

- Accept alternatives to official transcripts and documents when these are not available and recognise credits from other programmes,
- Be in compliance with national standards, and offer credits that are convertible to international frameworks, and
- Also offer the programme to host communities and / or other vulnerable or displaced communities as well as refugee students at nominal or no cost.

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11   Connected Learning in Crisis Consortium: http://www.connectedlearning4refugees.org

Student selection can take place in an online process like it did for the JOSY pilot, where students were asked to complete two test MOOCs, an English language assessment and an online query. Students were selected based on gender, nationality, study motivation, previous study experience, level of English, and digital literacy.

A recruitment strategy will also need to be formed for tutors and trainers. This will likely include their background, area of expertise, experience tutoring or facilitating training sessions and working specifically with vulnerable populations, location, and time available.

DESIGN ONLINE COMPONENTS

The online and offline activities should be designed as complementary to one another. Online elements include courses, tutorials and skills training, and communication pathways. This should consider the results of the needs assessment and unique needs of the target beneficiary group, such as their digital literacy and their access to reliable power supply, devices and internet connectivity.

A summary of guidance for designing digital online summer school programme components, with lessons learned from the JOSY pilot, is included below:

- Modularise courses, focusing on learning outcomes that contribute to the development of 21st century skills, and create a curriculum that is flexible and responsive to students' individual needs as documented in the inception phase. This is particularly the case in a fragile context like Jordan where refugee students have diverse pathways, with many being transient and unable to commit to long-term study. For the JOSY pilot, each module was designed to contain up to four seminars and was complemented by online and offline tutorials to support their learning and develop specific competencies or abilities.
- Any software or other ICT tools designed should be appealing and intuitive to use, but often using ones that already exist that beneficiaries may already be familiar with are best. This is especially the case for communication channels for students to communicate with each other.
- Carefully assess the potential data protection risks at each stage of project development and implementation and take appropriate measures where required. Explicitly inform students, tutors, and trainers what kinds of protection against potential risks can or cannot be guaranteed as an organisation.
- Design the course for high retention and completion rates by mitigating for self-motivation, maintaining momentum and time management. Retention and completion rates were a challenge for the JOSY pilot because of these challenges, as noted by students, staff, tutors, and trainers.
- Explore scalability and sustainability by considering how the programme may be adopted later, understanding which components may be applicable to different operating contexts, and documenting this learning throughout the programme lifecycle. This could be ensured through working with local technology partners when planning the course components, exchanging learning systematically with other projects and donors throughout the course of the programme, and evaluating different technical solutions.
- At the beginning of the programme, clearly stipulate how the courses, tutorials, and skills training sessions aim to improve the situations of students. JOSY pilot staff and students noted that the aim may have benefited from being refined at the outset to better understand how taking the summer school programme will lead to the intended project objectives.
- Ensure that the programme offers meaningful accreditation. This was noted by students as a challenge for the JOSY pilot in terms of certification opening doors to employment or further education.

DESIGN OFFLINE COMPONENTS

Offline course components for summer school programmes could include tutorials or skills training sessions, social activities, and support services. JOSY offered study hubs where students could find spaces for studying and working with devices and internet connectivity. The criteria for appropriate hub selection was also developed in this stage: e.g. practical learning environment, stable internet connection, potential of having spaces with computers / devices that students could access. These spaces could be co-working spaces, libraries, computer labs, or innovation centres, as examples.

Offline skills training sessions can be offered to summer school programme students to develop a specific competence or ability. JOSY selected training sessions with high applicability for personal, academic and professional relevance. These training sessions included life skills, job application skills, and design thinking. Projects were also offered for business plan writing, programming, and business English. During the projects, students worked together in groups to develop their own product as a way to apply academic knowledge and skills to real life. Guidance for the design phase, as expressed by trainers, includes involving them more actively in the design stages.

Offline support services should also be offered, such as accessible and appropriate counselling and services for academic support, professional development and career planning, and psychosocial well-being. Support is explored in more depth in Step 8: Support and follow-up.

Step 6: Establish clear programme learning cycles

Programme learning cycles should be documented and agreed on during the design phase to show how learning will be used to inform changes where necessary. This should include refining the programme objectives, and developing a clear Theory of Change and logical framework (logframe matrix) that documents indicators and how they will be measured, which is agreed by all partners. Programme learning cycles should also document how learning will be collected during programme implementation. Resources have been included in Annex A for how to develop a Monitoring and Evaluation (M&E) framework and system as well as how to write a log frame.

This should include the following steps:

- Identify indicators that will be used to measure the success of the programme (it should be easy to measure the indicator the same way each time),
- Identify the data source for each indicator, the frequency by which it will be collected, as well as who is responsible for collection and reporting, and
- Provide a clear outline of how beneficiaries' voices and opinions will be incorporated into the programme.

Assessment tools should be non-invasive and sensitive to the characteristics of students and contextualised to their environment. It is important that there is no overlap between surveys and interview requests from different partners. Systematic feedback loops should be put in place and account for feedback to come from off-boarding students, tutors or trainers who have dropped out of the programme or become inactive. All stakeholders should understand how their voices will be incorporated into programme learning.

3.3 Summer school programme implementation phase

This phase involves implementing the programme plan created and agreed at the end of the design phase, consisting of interconnected online and offline elements. The implementation phase is broken down into three steps: implementing online and offline course elements and coordinating the tutors and trainers, providing support services and systematically following-up with stakeholders, and monitoring and tracking the progress of students. Indicators for this phase can include the number of students who successfully complete the summer school programme.

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Inception phase									
		Design of content & structure							
					Implementation of pilot: *Course facilitation, volunteer coordination, maintenance and feedback*				
								Evaluation of pilot	

Step 7: Course facilitation and tutor and trainer coordination

This step is broken down into the following summer school programme activities to be implemented:

- Kick-off event
- Online courses
- Tutorials and training sessions
- Community-building activities

KICK-OFF EVENT

The implementation of activities could begin with a kick-off event, as offered in the JOSY pilot, aimed to build momentum with online learning and create a social bond at the beginning of the programme between students, tutors and trainers. A mock agenda for a kick-off event is included below.

Agenda for summer school programme kick-off event:
- Arrival and icebreaker
- Welcoming words from the programme team
- Presenting the programme
- Introducing tutors and trainers, if relevant
- Introduction to the online platform
- Questions and answers
- Networking / mingling session

Remember to include breaks and the environment and seating / tables should be conducive to mingling.

For the JOSY pilot kick-off event, 60 students participated, alongside GIZ and Kiron staff, 4 tutors / trainers, and 8 volunteers. It was held in the evening for ease and convenience.

ONLINE COURSES

Online courses are a unique opportunity for students to access quality courses from well-known universities and exchange their learning with other students across the world. The JOSY pilot offered students a virtual campus, or 'Kiron campus' (pictured below in Figure 1) where students were able to plan their studies, complete modules, find language courses, as well as find guidance for how to study well online.
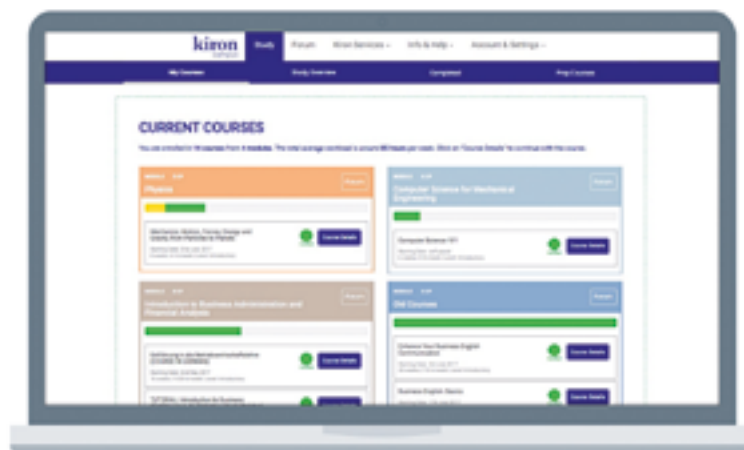

Figure 1: Kiron campus sample page

In the JOSY pilot, students participated in four different courses:

• Business and economics (61 % of students),
• Computer science (32 % of students),
• Mechanical engineering (5 % of students)[12], and
• Political science (2 % of students).

Learning from the JOSY pilot suggests that it is critical to provide enough support for how to learn online as it became clear that online learning was difficult for some students. While many students noted the benefits of online learning and the benefits it afforded them, one student in the focus group also explained: *"I'm not interested in virtual classes – I feel stressed. I don't like working on the laptop for more than one or two hours so I like offline more"* (male summer school programme student). Challenges in online learning were also mentioned by programme staff, tutors and trainers.

TUTORIALS AND TRAINING SESSIONS

Expectations, roles and responsibilities should be outlined for tutors and trainers at the outset of the programme and their voices should be included in the structure and design. A comprehensive induction and training programme should be provided that includes the unique operating context of the programme, consider-

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12 Mechanical engineering students had the highest averages of courses taken, courses completed and total log-ins, although there were only 3 students compared to 38 business and economics students, which also had high averages. Political science only had one registered student who did not appear to complete any of the seven courses they enrolled in, despite their high number of log-ins.

ations for working with vulnerable populations, as well as background information regarding the contracting authority. During programme implementation, tutors and trainers should be supported at an operative and content level.

Structural considerations should also be reviewed with tutors and trainers including the amount of time expected from them, the expected student attendance and other operational logistics, recommended methods of communication, and a clear orientation as to the overall programme goals and objectives and how their work will feed into these goals. The following is a framework for a tutor / trainer induction package:

- Chapter 1: Background on students, their educational levels, and challenges faced
- Chapter 2: Overall summer school programme learning objectives
- Chapter 3: Purpose of the tutorial / skills training session in the context of this programme
- Chapter 4: Why be a tutor / trainer? Objectives and benefits
- Chapter 5: A tutor / trainer will… A tutor / trainer will not… guide
- Chapter 6: Tips for leading tutorials / skills training sessions

Checklist D: Working with tutors and trainers

- Review expectations with tutors and trainers for their roles and responsibilities.
- Develop a user-friendly induction and training programme inclusive of programme aim and context as well as considerations when working with vulnerable populations.
- Provide guidance for each tutorial and training session.
- Ensure tutors and trainers understand what the student is learning in the course curriculum.
- Provide a space for tutors and trainers to reflect on successes and challenges together, whether this be online or offline.
- Create clear avenues for tutors and trainers to follow-up regarding technical problems and pathways to report on concerns regarding students.

Further guidance that draws on the lessons learned from the JOSY pilot are as follows:

- Ensure that relevant curriculum and guidelines for interactions with students are provided, as well as a comprehensive overview of the context, structure and long-term targets of the programme.
- Support should be offered to tutors and trainers throughout the programme from the implementing body. In the JOSY pilot, tutors and trainers were impressed by the response time from Kiron regarding technical trouble-shooting or responding to student-related concerns.
- If attendance is known to be a problem with the student population, this should be met with ways of mitigating for it and tutors and trainers should be warned about this ahead of time. In the JOSY pilot, tutors were frustrated with the poor attendance for tutorials and felt that the students needed to have a better understanding of what they could get out of the tutorials in order to become more engaged. Trainers also mentioned that students were very late for classes and felt that the session needed to be organised more firmly from the implementing partner.
- A space should be provided for tutors and trainers to reflect on successes and challenges together. This could be facilitated by the implementing partner through online or offline pathways (e.g. chat rooms, Skype meet-ups, coffee meet-ups for those in the same region, etc.).

COMMUNITY-BUILDING ACTIVITIES

Building a community is an important component of a successful programme, and one that may be particularly crucial in fragile contexts like Jordan. This can be done through engaging methods of digital communication, offering offline projects to promote group work, or providing social activities for students to participate in. Social activities can provide a safe space for peer learning and bonding, and exchange of learning and ideas in an informal environment. These activities should never be obligatory for students to attend. Rather, they should be attractive, welcoming and accessible to all students. Often activities will adapt following progress reporting and so the programme team should remain flexible.

"*I loved the social events a lot. I would always go – it's beautiful and [you] meet people different from you. In villages [it is] not usual to do this, so it's very interesting and helpful.*" (Female summer school student)

"*I went to all of the social activities. Best part of the programme. And we could bring friends.*" (Male summer school student)

Further guidance, including lessons learned from the JOSY pilot, is summarised below:

- Summer school programme students should be encouraged to have Facebook and WhatsApp groups in order to exchange course-related information and learning, such as session timing, opportunities for scholarships, and providing support for other pupils' concerns and confusion about course components. For the JOSY pilot, students in the focus group discussion described these groups as an effective means of building a community and noted that they have continued to use the Facebook and WhatsApp groups following the completion of the programme.
- Any new communication channels, such as the Kiron forum for the JOSY pilot, are adequately tested and trailed to ensure that they are user-friendly and relevant to the needs of students. The Kiron forum offered a space for students to connect with other students to ask course-related questions in specified chat streams but this appeared to be underutilised, with many students explaining that they preferred to use WhatsApp and Facebook instead. On the post-course survey, only 8 out of 18 respondents said that they used the Kiron forum.

Step 8: Support and follow-up

This step involves offering accessible and relevant support services and systematically following-up with stakeholders to ensure that there are no barriers to participation that can be easily fixed by the programme team, and students feel supported to complete the programme. Support services can include the provision of immediate trouble-shooting for technical difficulties, comprehensive FAQs, resource guides for students, and contact details for programme staff that beneficiaries can use for specific purposes. These lines of support should be provided throughout the programme should be accessible and all students should be aware of them.

A range of support services should be offered to students. For the JOSY pilot, support services included access to Kiron's student services, FAQs, Kiron forum, Kiron helpdesk, study spaces, in-person guidance office hours, and e-mail and social media correspondence with the Kiron team. When asked if the support services they used were useful to their needs, all students either strongly agreed (60 %) or agreed out of 18 responses. The majority of students also felt that Kiron was very responsive to any problems that they raised.

There should also be consistent communication and responsiveness towards students. A key strength of the JOSY pilot programme was the communication and ensuring that feedback was collected by all involved parties and learning was fed back into programme design. A close relationship with students was maintained on all sides to understand their needs. After seeing how important personal contact was to students, for example, practices were adapted students were called once a week to help them, advise them, answer their questions, and motivate them to complete their coursework. In the student focus group discussion for this evaluation, students agreed that these weekly calls were important to them to stay motivated to complete weekly assignments. Otherwise, the students noted that there was no time pressure to stick to the online courses.

Checklist E: Working effectively as a strategic partnership

- Select an appropriate contract.
- Form a steering committee.
- Develop clear communication pathways and a protocol that has been agreed within the contract by all involved parties, including consistent steering committee meetings.
- Identify the data that will be shared, defining how it will be used, when, by whom and in what form is necessary.
- Provide clarity to all programme implementers regarding what is required from them for reporting purposes.

Follow-up communication with stakeholders also includes follow-up within the steering committee and among programme partners. This may involve monthly or quarterly meetings to discuss a pre-set agenda or for responsible parties to present the progress of the course completion. Expectations should also be consistently managed on the part of the partners regarding roles and responsibilities and partners should be aware of what updates or communication is required from them. A cooperative, open and transparent relationship is needed to develop and implement a programme inclusive of all partners' priorities and needs. In the JOSY pilot, partners felt that there was a good deal of collaboration and flexibility within the strategic partnership between GIZ and Kiron. They also agreed that the steering committee meetings provided effective structure to their joint decision-making.

Step 9: Monitor and track progress

Throughout the lifecycle of the summer school programme, the structure and content should be routinely assessed for relevance, effectiveness and efficiency in accordance with the agreed monitoring plan developed in Step 6: Establish clear programme learning cycles. This involves monitoring programme activities, user response and change. The resulting progress reports will inform whether or not the interventions need to be changed or adapted as the programme evolves. This will document the responses from students, tutors and trainers from the previous step regarding follow-up communication and should take advantage of simple, cost-effective digital tools like online mini questionnaires to receive immediate feedback from beneficiaries about their experience in the programme. In particular, this should explore:

- Appropriateness and relevance of programme structure and content for the unique characteristics of beneficiaries,
- The relevance and effectiveness of the tutorials and skills training sessions for student learning,
- Learning priorities, viewing the programme as a step in a longer trajectory of the student's career and personal goals,
- Usage behaviour on the platform and within the offline course components, and
- Time or other constraints students may be experiencing, such as access to internet or language barriers.

Adaptations to the programme may be necessary as a result of the monitoring (e.g. developing more Arabic content or offering more study hubs), as well as available support. It is important that the responsible parties collect data carefully and document any challenges in reference to collection (e.g. students are not responding to surveys sent out by e-mail). The monitoring plan, like the entirety of the programme structure, may need to remain flexible and adaptive to the needs of the stakeholders.

3.4   Summer school programme evaluation phase

The aim of the evaluation phase is to measure the impact of the programme activities on the beneficiaries and explore the appropriateness of the online and offline interventions against the identified barriers.

Month 1 Month 2	Month 3 Month 4 Month 5	Month 6 Month 7 Month 8	Month 9 Month 10
Inception phase			
	Design of content & structure		
		Implementation of pilot	
			Evaluation of pilot: *Measure the success of the summer school programme*

Step 10: Conduct programme post-processing

While it can be difficult to show direct impact in projects of this nature, monitoring and evaluation tools should measure the programme against the OECD DAC criteria[13]: relevance, effectiveness, efficiency, impact and sustainability. Samples for post-processing must be representative for the full population, and the evaluation should be as systematic and objective as possible.

Engagement and attainment according to the programme indicators (e.g. increase in confidence for knowledge and skills in the course subject) should be assessed against student demographics, considering data and anonymity restrictions. It is critical that data collection instruments be assessed for reliability and validity, and all data collection be explained well to participants and administered in a standardised and objective way. The perspective of the tutors and trainers should also be included during the evaluation, conducting interviews or focus groups where possible and ensuring that their insights are well documented. The results of the evaluation then complete the cycle and inform new planning processes, whether for the continuation of the same programme or the implementation of a new intervention.

13   OECD DAC criteria: http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

Lessons learned from the JOSY pilot post-processing are summarised below:

- Develop a realistic, clear, and detailed log frame to apply to an evaluation with reasonable numbers for indicators (i.e. not too low or high) and clear language (i.e. steer clear of vague language and try to be as detailed as possible).
- Anonymise student data while not forsaking being able to track engagement across key demographics (gender, nationality, education level, etc.) and by each student. The JOSY pilot evaluation struggled with being able to disaggregate by demographics as these were not included in the data provided to the external evaluator.
- Do not over-communicate with the students by sending too many requests for feedback. There were concerns from staff and students in the JOSY pilot regarding this oversaturation of requests.
- Ensure there is enough time during the evaluation to adequately measure impact (i.e. it will have to be after the project closes). A challenge of the JOSY pilot evaluation was the timing since there had not been time for changes to fully manifest.

Concluding remarks

The above manual provides guidance on designing and implementing digital summer school programmes, drawing on the learning from the JOSY pilot. This guidance is best used in conjunction with other materials, depending on the unique context of the intended programme. Because every programme is different with regard to its beneficiaries, objectives, timeline, resource allocation, etc., it is often best to consult a wide range of resources during the inception phase. This manual intends to provide a foundation of the key components of a results-based approach to programme design and development, and aims to aid in mitigating key problems and challenges digital summer school programmes may encounter.

Annexes

Annex A: Further resources

While there are numerous resources available online for development programmes, the following provides a sample of resources relevant to the above sections. These resources serve as an example of what is available, but it is recommended that further scans take place at the conception of all projects.

Refugee-related resources	• Higher Education for Refugees in Low Resource environments[14] (Jigsaw Consult): A landscape analysis and research study regarding refugee higher education. • ICT4Refugees[15]: A report on the emerging landscape of digital responses to the refugee crisis. • Landscape Review[16]: Education in Conflict and Crisis - How Can Technology Make a Difference? • Connected Learning in Crisis Consortium (CLCC[17]): A consortium that "aims to promote, coordinate, collaborate and/or support the provision of quality higher education in contexts of conflict, crisis and displacement through connected learning"

Digital development-related resources	• Principles for Digital Development[18]: The Principles for Digital Development are nine 'living' guidelines to help practitioners integrate established best practices into technology-enabled development programmes.
	• General programme planning guidance:
	  • How to design a new programme[19] (tools4dev)
	  • IFRC project / programme planning[20]: Guidance manual.
	• Toolkit - Digitalisation in Development Cooperation and International Cooperation in Education, Culture and Media[21]: Checklists to help project managers contextually plan ongoing or new ICT projects, to identify weaknesses in ICT projects and to generate awareness of the range of influencing factors that need to be considered.
	• Glossary - Digitalisation and Sustainable Development[22]: Terminology from the Digital World for Development Cooperation and International Cooperation in Education, Culture and Media.

Data protection resources	• The NGO Tactical Technology Collective's Security-in-a-box[23]: Web-based toolkit on data security for activists and human rights defenders. • The Responsible Data Forum[24]: This is a network of different organisations that deal with ethics, data protection and security.
Stakeholder mapping & analysis resources	General guidance: • ODI Planning Tools: Stakeholder Analysis[25]. • USAID - Annex A: Stakeholder analysis tool[26]. • Stakeholder analysis: A basic introduction[27] (Research to Action). There are also many online tools and interactive software for mapping stakeholders using interactive software, such as: • Group map[28] • Mind tools[29]

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14   http://jigsawconsult.com/case/higher-education-refugees#.WvRQxtPwb-Y
15   https://regasus.de/online/datastore?epk=74D5roYc&file=image_8_en
16   http://www.ineesite.org/en/resources/landscape-review-education-in-conflict-and-crisis-how-can-technology-make-a
17   http://www.connectedlearning4refugees.org
18   https://digitalprinciples.org
19   http://www.tools4dev.org/resources/how-to-design-a-new-program
20   http://www.ifrc.org/Global/Publications/monitoring/PPP-Guidance-Manual-English.pdf
21   https://www.giz.de/fachexpertise/downloads/bmz2016-en-toolkit-digitalisation.pdf
22   https://www.giz.de/expertise/downloads/bmz2016-en-glossary-digitalisation.pdf
23   https://securityinabox.org/en
24   https://responsibledata.io
25   https://www.odi.org/publications/5257-stakeholder-analysis
26   https://www.usaid.gov/gbv/toolkit-annex
27   http://www.researchtoaction.org/2012/05/stakeholder-analysis-a-basic-introduction
28   https://www.groupmap.com/map-templates/stakeholder-analysis
29   https://www.mindtools.com/pages/article/newPPM_07.htm

Cost-benefit analysis & developing a budget resources	• Budget template[30] (tools4dev). • How to do a basic cost-benefit analysis[31] (tools4dev). • Developing a Cost-Benefit Analysis Tool[32]: Experiences and Lessons from Malawi and Mozambique. (Better Evaluation). • Cost-Benefit Analysis in World Bank Projects[33] • Good practice review: Cost-benefit analysis[34] (chapter 18).
Monitoring and evaluation resources	• How to write an M&E framework[35] (tools4dev). • How to create a monitoring and evaluation system[36] (tools4dev). • How to write a logical framework[37] (tools4dev).

Annex B: Contacts

For questions or concerns regarding this manual, please contact a member of the team:

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…the evaluation approach and methodology	Meaghan Brugha, Researcher, Jigsaw Consult[39] (lead author of external evaluation team)	m.brugha@jigsawconsult.com

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30   http://www.tools4dev.org/resources/budget-template
31   http://www.tools4dev.org/resources/how-to-do-a-basic-cost-effectiveness-analysis
32   http://www.betterevaluation.org/resources/guides/develop_cost_benefit_tool
33   http://siteresources.worldbank.org/EXTOED/Resources/cba_full_report.pdf
34   https://goodpracticereview.org/9/monitoring-and-evaluation/cost-benefit-analysis
35   http://www.tools4dev.org/resources/how-to-write-a-monitoring-and-evaluation-framework
36   http://www.tools4dev.org/resources/how-to-create-an-monitoring-and-evaluation-system
37   http://www.tools4dev.org/resources/how-to-write-a-logical-framework-logframe
38   https://kiron.ngo
39   Jigsaw Consult is a social enterprise that undertakes applied research studies and evaluations in the international development and humanitarian sectors: http://jigsawconsult.com

On behalf of

Federal Ministry
for Economic Cooperation
and Development