

Adapting SCALE-UP for blended learning: ideas

This document is designed to provide ideas to support delivery of SCALE-UP in 2020/21. The ideas in this document are not requirements but have been collated based on examples of practice from across the university.

SCALE-UP in a blended learning context

There are two options for delivery of your SCALE-UP module;

1. Fully online; or
2. Blended delivery.

The ideas in this document are designed to support experienced SCALE-UP practitioners to adapt existing SCALE-UP modules for blended delivery in existing SCALE-UP rooms. Because SCALE-UP already includes a significant amount of blended learning practices, these modules are ideally placed to adapt to this new context. Staff looking to adopt SCALE-UP for the first time should discuss this with their Learning and Teaching Manager, and seek advice from flexiblelearning@ntu.ac.uk.

SCALE-UP teaching rooms: changes

SCALE-UP teaching rooms have been redesigned to comply with 1 metre+ social distancing requirements meaning that some aspects of the room will be different;

- SCALE-UP tables will be able to accommodate three students.
- SCALE-UP laptops will no longer be accessible in rooms, and you are encouraged to avoid using whiteboards to prevent virus transmission.
- Teaching should be planned with students remaining seated and socially distanced.

In addition, while NTU will be working to support those students caught in the digital divide to have laptops, it cannot be assumed that all students will attend with lessons with their own IT equipment or that it will be automatically compatible with NTU systems.

You should advise students of the technology they might need before the seminar, and also be prepared for this to be accessed by a range of devices, such as smartphones, and tablets. As MS Teams provides an app and can work through browsers for the most common operating systems, you should prioritise the use of MS Teams to support widest possible compatibility.

Group formation and roles for blended delivery

The same principles for group formation and role allocation should apply as when delivering SCALE-UP normally. Guidance on group formation and roles can be found in the [SCALE-UP Handbook](#).

Depending on the size of your modules, students may need to attend rotationally according to logistical demands. For example, a module of 30 students, with a room capacity of 10, would have one of three groups of 10 on-campus every three weeks, with the remaining students attending online, this would be facilitated via teams as highlighted above.

Groups should be formed based on students timetabled to be in the room in the first instance, with other groups participating online synchronously. This potentially offers a smoother experience than dividing group members between online and offline spaces.

Careful consideration should be given to group allocation, and the deployment of a strategy to manage this will help. Any strategy, even one which requires perfecting, is better in terms of group formation, than ad hoc group allocation.

You may choose to do this based on information you already have about your cohort or using diagnostic testing pre-session. The following steps are recommended;

- Decide on a strategy for group formation, and size.
- The SCALE-UP handbook can provide advice on developing and deploying a strategy. But consider using tools such as Microsoft Forms or other interactive response tools in NOW to conduct a diagnostic test which aligns to understanding students' skills, knowledge and understanding against module learning outcomes.
- Assign groups in a Word document and publish to the NOW Learning Room.
- The document should list all students and assign their role (scribe, manager, questioner).
- Be clear with students in advance if group role rotation after 3-4 weeks is intended. The strategy used to do this should be determined in advance, e.g. repeat diagnostic testing, or monitoring student performance during the module and strategically group based on these.
- Consider the needs of students who find it difficult speaking with groups of new people, such as incorporating an ice breaker to help the introductions, and ensuring the students are engaged with each other and aware of their group, when 'dropping in' on group work.

Learning activity design

When designing a learning activity many aspects of the tasks may be able to remain as originally planned. However, you may wish to consider re-evaluating what activities are conducted in the classroom synchronously, and which are conducted outside the classroom asynchronously.

Usually in a SCALE-UP class, three students work on one laptop. With the move to blended learning, this work will need to be undertaken through a combination of students' personal devices (laptops, phones, iPads). The Microsoft Whiteboard add on to teams can be used for work they would have undertaken on communal whiteboards.

The biggest change is likely to be the absence of a consistent provision of laptops for individual students, and the challenge of not being able to ensure software will work across all the different types of technology students may bring with them. This means you will need to consider ways in which those activities can be brought to life off-line in the classroom.

For example, the dynamics or ratio of public thinking and feedback (discussed below) may be different to how you originally designed with more taking place in the classroom and for longer periods. It is recommended that any changes like this are 'broken-down' into chunks and facilitated effectively across and between groups to avoid a return to more didactic teaching experiences. CADQ can offer module specific advice and guidance on this, via flexiblelearning@ntu.ac.uk.

It is recommended that you produce written guidance on the tasks and work set in class, supported by clear step-by-step instructions, which are published on NOW in advance. This will help ensure students who are unable to attend can keep up to date with the work set, and provide remote contributions outside in-class activities, where appropriate.

The key challenge you will face in this is ensuring that instructions are clear enough for students to follow and understand asynchronously, and without you to 'fill in gaps' across all groups as you may do in person. It is therefore recommended that:

- activities are peer reviewed prior to deployment, ideally someone with no prior knowledge of the activity to ensure that the communication is clear and can be understood by a wide audience.
- the formatting and presentation of activities is cross referenced against an accessibility checklist, [such as this one](#) to ensure that adaptive software, disabled students, and students with specific learning difficulties, can engage in the task equitably and fulfil their team role.

'Chunked' content, public thinking, and feedback

In a blended learning context, it is recommended that the 'Chunked' content, Public Thinking and Feedback aspects of SCALE-UP are delivered as on-campus sessions (with rotational attendance as required).

Here many of the elements of SCALE-UP can be delivered as originally planned, following a structure similar to this;

1. Activity
2. Discussion
3. Mini Lecture
4. Repeat 2-3 above throughout the session

In order to help respect social distancing, it is recommended that you facilitate tasks and discussions and present mini-lectures through use of in-MS teams presentation sharing, and in-classroom microphones rather than walking around the room.

In MS Teams the 'General' channel provides a plenary area for all to receive public thinking outside as well as inside the room. At present you should create a 'Group' channel for each student group where they can use the meetings feature to interact with each other. A further update of MS Teams scheduled for the end of summer may make this more intuitive – see updates on online learning on the Flexible Learning Website when this is ready.

You can join the individual group channels to 'drop in', observe discussion and talk to individual groups, as you would physically in person if teaching under normal conditions. This applies to sessions undertaken solely in-classroom as well as sessions which include synchronous in-classroom and outside classroom teaching. Unless it is important that group interactions should be private (e.g. for assessed groupwork), you can create open channels which avoids manually assigning students to the channels within Teams.

Both the General and Group channels areas have collaborative tools (e.g. OneNote, collaborative Word documents, Whiteboard) which can support collaboration either online or on-campus.

Formative support

Formative support should follow normal principles; the following points should be considered in a blended learning environment:

- Using online tools, such as [The Difference Engine](#) in NOW, to take stock and consolidate student's comprehension and skill development at the end of an online activity. The results of which can be used by tutors to inform and shape feedback messages given to individual students, groups or the whole cohort.

- You should ensure you give full consideration to how you end synchronous activities, so that there is sufficient opportunity to 'wrap up' a teaching session. This should cover;
 - The role and purpose of any asynchronous learning done pre-session and clarity on how it fits with the session.
 - A recap of the work done during the session, what has been achieved and how progress through the module is being made.
 - Clear sign posting to what comes next; either more asynchronous learning (optimum), or what will be covered in the next synchronous session.

Students should not leave a session unclear of what comes next or what they need to do.

Assessment design

Most SCALE-UP assessment methods easily translate into blended learning and can be completed or submitted online.

Some SCALE-UP modules have practical assessments which cannot be delivered online. In such cases, these assessments will need to take place on-campus with appropriate social distancing measures or other interventions in place.

Further guidance and next steps

The [Flexible Learning website](#) provides useful further guidance for course and module teams.

The [Teaching Remotely](#) webpage contains several guides on aspects of online teaching such as online assessment, quizzing and automated knowledge checks.

The [SCALE-UP Handbook](#) provides comprehensive details on SCALE-UP, and should be referred to for further information on the approach.

The [Active Collaborative Learning \(with SCALE-UP\)](#) learning room on NOW contains various SCALE-UP resources including session plans and guidance on moving SCALE-UP online. It also houses a Community of Practice discussion forum for discussing challenges and sharing practice.

Contact flexiblelearning@ntu.ac.uk for additional support and to request the allocation of an educational developer to work with and advise you on specific adaptations to your SCALE-UP module.

Appendix: contextual information on SCALE-UP

The [SCALE-UP Handbook](#) provides a more detailed discussion of SCALE-UP approaches, but identifies 6 key components described as essential, which are summarised in the table below.

<p>Group formation and roles</p> <ul style="list-style-type: none"> • Students work in groups of 3 (or 4) • Tutor assigned, (mixed ability) groups, with planned rotation • Defined roles for each student, with periodic rotation and reflection 	<p>Learning activity design</p> <ul style="list-style-type: none"> • Enquiry and problem-based activities replace lectures • Activities such as tangibles (hands on), ponderables (intriguing questions) and visibles (artefacts/images/simulations) are used to address real-world problems • Activities foster accountability and positive interdependence
<p>'Chunked' content</p> <ul style="list-style-type: none"> • Content 'chunks' such as short videos/ readings are interspersed with activities • Flipped learning: students engage with tasks before, during and after the session • Mini-lectures may supplement in-session learning 	<p>Public thinking & feedback</p> <ul style="list-style-type: none"> • Students share initial ideas, give & receive peer feedback • Students interact as individuals, small and large groups, and with whole class • Tutor observes learning and provides responsive feedback
<p>Formative support</p> <ul style="list-style-type: none"> • Scaffolding: activities progressively build on learning outcomes, and conceptual understanding • Students supported to 'teach' each other through tasks • Tutors use incisive questioning to foster a positive mind-set and develop deeper learning 	<p>Assessment Design</p> <ul style="list-style-type: none"> • Start with the learning outcomes (constructive alignment/ backwards curriculum) to design and measure attainment • Form of assessment reflects the SCALE-UP experience and is aligned to the learning outcomes • Activities are clearly linked to assessment

Table 1: Essential SCALE-UP Components—A Quick Guide (McNeil et al, 2018)