National College of Ireland

Quality Assurance Handbook

Chapter 13: Programmes using Technology-Mediated Learning

Updated and approved version – October 2022

Version	Description	Owner/Changes made by
1.0	2018 approved Chapter	QIE Shauni Hegarty
1.1	2022 draft updated chapter	CELL Sam Cogan Digital Learning sub-committee of LTA Committee Reviewed by Registrar, Director of QIE and Director of CELL
2.0	October 2022 Approved by Academic Council	

1 General Policy, Standards and Roles and Responsibilities

This policy is designed to ensure quality of design, delivery and infrastructure supporting technology-mediated programmes and modules at the National College of Ireland. Its purpose is to support lecturers, programme developers, staff and management in ensuring that blended and online delivery is crafted and monitored in such a way that it provides the maximum benefit to the learner.

The term 'Technology-Mediated Learning' is primarily used to cover blended, hybrid and online learning, but in some cases may also refer to in-class learning that necessitates the use of technology as part of the delivery.

Table 1Technology Mediated Learning Definitions

Blended Learning	Learners engage in a balanced mix of both online and face to face instructional events, which necessitate the design of on campus contact. Face to Face and Online Instructional events are exclusive
Online Learning	Learners engage primarily with online/remote instructional events not necessitating on campus contact

NCI's strategy for technology-mediated learning is aligned with the College's Learning, Teaching & Assessment Strategy. This document has been created in line with QQI's 2018 Statutory Quality Assurance Guidelines for Providers of Blended Learning Programmes and has been adapted to address all Technology Mediated Learning delivery formats. The rationale for incorporating technology-mediated learning into the teaching, learning and assessment practices of the College includes:

- Flexible and adaptive learning to suit students' needs
- Expanded collaboration and goal-oriented activities
- Promoting self-directed and autonomous learners
- Catering for individual learners through engagement and multiple modes of learning (e.g., visualization, animation, simulation, narrative and interactivity)
- Supporting effective teaching strategies such as problem-based learning, meaningful contexts and case studies, learner collaboration, open and continuous assessments, simulations, learning by doing and many others.

Programmes that are delivered through synchronous learning events utilise the College's Virtual Learning Environment (VLE[1]), and virtual classroom technology[2] platforms to present, organise and manage student learning activities.

[1] This is currently the Moodle platform
[2] This is currently the Teams virtual classroom environment

Instructional settings detail the delivery method of a particular instructional event and are different from instructional pedagogy. Instructional settings to be used in the delivery of a technology-mediated programme may include a combination of one, many or all of the below, dependant on the instructional pedagogy of the programme:

Table 2: Definitions of Instructional Settings

a) Campus	The learning event (lecture, tutorial, laboratory or seminar) takes place on campus
b) Livestream	The learning event takes place on-line
c) Campus-livestream	The learning event takes place on campus and is simultaneously streamed on-line
d) Campus^{R}	The learning event takes place on campus and a recording is available subsequently
e) Livestream^{R}	The learning event takes place on-line and a recording is available subsequently
f) Campus-livestream^{R}	The learning event takes place on campus and is simultaneously streamed on-line and a recording is available subsequently
g) Directed ELearning	Specified tasks to be carried out by students during a designated time interval

1.1 NCI's Standards for Technology-Mediated Learning

1. Students on technology-mediated learning programmes are students of NCI and entitled to similar access to library, college supports, school and administrative structures.

2. Students are made aware of the technical specifications, time commitments and specifics of the delivery modes they will be engaging with before enrolling on the programme, via open days, course prospectus materials and via the website.

3. Students are advised in advance of commencement of the course of the technical requirements and pre-requisite skills for effective participation on the course.

4. Students are provided with support during course induction on how to use the learning technologies associated with the course.

5. NCI provides technical support for College systems (e.g. VLE, virtual class room, Student Portal etc.).

6. It is the responsibility of students to ensure they have the required local access and technical facilities if they are participating off-campus.

7. NCI can provide loan laptops to learners that require them, subject to criteria. Many programmes that are designed with Technology Mediated learning in mind are designed as Bring Your Own Device (BYOD) and will not be a part of the laptop loan scheme.

8. Programme and module learning outcomes and associated assessments are the same for all modes of delivery except where specifically specified and approved.

9. Lecturers are encouraged to apply good pedagogic design to their production and planning of student learning activities – this is achieved by mapping such activities against specific learning outcomes.

10. Support and ongoing professional development are provided to college staff in the design, production and use of new technologies in teaching and learning.

11. Students should be provided with opportunities to review archived instructional sequences for revision and assignment purposes. Where recording of instructional sequences is not appropriate, learners are provided with appropriate support material on the college's LMS

12. Student assignments are submitted electronically through the LMS and Turnitin software unless otherwise specified.

13. Students are offered learning supports for their specific blend of Technology-Mediated Learning. This is designed in the programmatic review phase with the Digital Learning team.

14. Where a programme is validated and offered in a majority or fully online model i.e. fully or majority livestream, as per table 2 definitions, NCI will not set out to restrict learners' geographic location/domicile, subject to evolving recruitment strategies and policies and QA requirements.

15. Where NCI wishes to offer a fully or majority online (programme to transnational learners, additional QA measures will be followed where necessary to ensure that the same high-quality standards are applied across the student lifecycle as are upheld for domestic learners – from initial application enquiry, through admission and registration, to learning and pastoral student support services, assessment, exams and graduation processes. These specific QA procedures will be contained in relevant Chapters of the NCI QA Handbook.

16. Where technology-mediated programmes have aspects of face to face or campus livestream learning, students are informed in advance of the in-person attendance expectations so that they can make an informed choice as to their entry on to the programme and their options for travel if necessary.

17. Where a programme's assessment structure is in part or entirely online, the programme team will periodically review the assessment strategy to ensure that Academic Integrity challenges in an online learning environment are addressed and appropriately designed for, in line with Chapter 4 of the Quality Assurance Handbook as it relates to Academic Honesty and Academic Code.

1.2 Roles and Responsibilities

For each programme or module that is designed and delivered in a technology-mediated mode, accountable key roles have been identified.

- Programme Director: Responsible for the academic management of the programme in accordance with policy in the Quality Assurance handbook (section 3)

- Programme co-ordinator: Responsible for administrative support of the programme in accordance with the Quality Assurance handbook (section 3)

- Content developer: Responsible for module content and working with the Digital

Learning Design Team to ensure that the module is designed to be delivered using technology. The lecturer may fulfil the role of Content developer, but this is not necessarily the case in all circumstances. Content developers report directly to the School (management), which the programme is associated with.

- Content editors: Responsible for editing content created by Content developers, to ensure suitable quality for online learners. Content editors are responsible for packaging digital learning content so that it is appropriate for use on the college's LMS. Content editors report directly to the Digital Learning Design team.

- Learning Experience Monitor: Responsible for guiding and monitoring the development and implementation of the Online Delivery for new modules or for lecturers who are new to technology-mediated delivery

- Lecturer: Responsible for the delivery and assessment of the module as outlined in the approved programme document.

1.3 Digital Learning Design Team

The Digital Learning Design (DLD) Team consists of members of staff who are appropriately qualified and experienced in learning design and are required to, at a minimum, obtain a facilitator badge in Universal Design for Learning (UDL). The DLD team will ideally have postgraduate level awards in learning and teaching upon commencement in their role, and if not, are required to complete such an award.

During the programme development phase, the programme development team will be supported by the Digital Learning Design (DLD) team. The DLD team is responsible for ensuring that the programme team are supported in designing best practice pedagogy for Technology Mediated learning.

During the delivery phase, both the programme delivery team and the learners will be supported by the DLD, who will provide technical support on the learning tools used and will form an essential part of the module evaluation and review process.

The organisational chart below shows where the DLD team sits within the organisational structure.

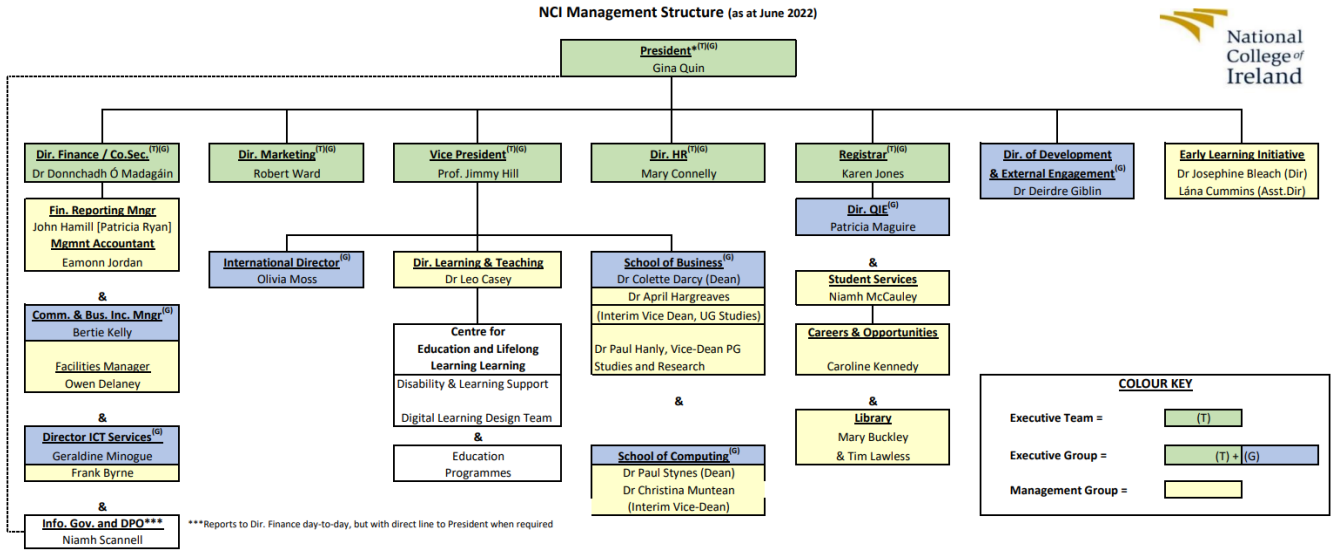


Figure 1Organisational Structure

2 Validation of Technology-Mediated Learning Programmes

Technology-mediated programmes are subject to the programme development, validation, evaluation and review processes policies and procedures of the College. The initial validation of a programme should consider whether the full programme, or components thereof, can be delivered using technology mediated means.

Where a programme has already been validated by QQI and/or recognised by a professional body, the addition of this mode of delivery may require a differential validation as outlined in Quality Assurance procedures for programme validation.

Programmes developed with any aspects of technology-mediated learning must use the services of the Digital Learning Design team via the Center for Excellence in Lifelong Learning (CELL). The Digital Learning Design team will work with the programme team to ensure that NCI's QA guidelines for Programmes using Technology-Mediated Learning are adhered to, and so that the programme team is sufficiently supported in resourcing and designing the program.

Programmes may not be delivered using Technology-Mediated Learning modes of delivery until approval to do so is received from the awarding body in line with its policies and procedures.

Proposals to develop new programmes using technology-mediated learning are subject to business case approval for viability and sustainability as outlined in NCI's quality assurance procedures for programme development and validation. NCI's QA procedures (2022/23) specify that all programmes which go through re/validation must do so via the Programme Lifecycle Management Executive Sub-Group which reports to the Executive and the Academic Council.

Any additional costs associated with development, review and evaluation must be considered. These include but are not limited to

1. Instructional design support
2. Assessment facilitation
3. Content updating
4. Recording facilities
5. Learner Supports

These must be thoroughly explored before proposing any programme using technology-mediated learning.

3 Learning & Teaching Strategies for Technology-Mediated Delivery

Lecturers will need to adapt their teaching style to promote engagement in technology mediated environments such as online classrooms, hybrid learning environments etc. To facilitate this, mandatory training will be provided to all lecturers who are new to a particular medium. This training is detailed in section 6 below. Training for all staff will also be ongoing throughout the year, and forums aimed at creating communities of practice for online education are set up on NCI's systems. Peer review and collaboration is especially encouraged for lecturers engaged in technology mediated delivery, and the college's Center for Excellence in Lifelong Learning will facilitate continuous professional development in key areas, such as Technology Enhanced Learning, and Universal Design for Learning.

NCI designs its training and learning and teaching strategies for technology mediated learning based on both QQI's Statutory Quality Assurance Guidelines for Blended Learning, and the theoretical frameworks of Communities of Inquiry (COI) and Universal Design for Learning.

The COI framework allows NCI to remain focused on the Education experience by designing learning and teaching strategies that are focused on a learner's social, cognitive and teaching presence. This in turn allows NCI to design courses that remain challenging and engaging in a technology mediated delivery.

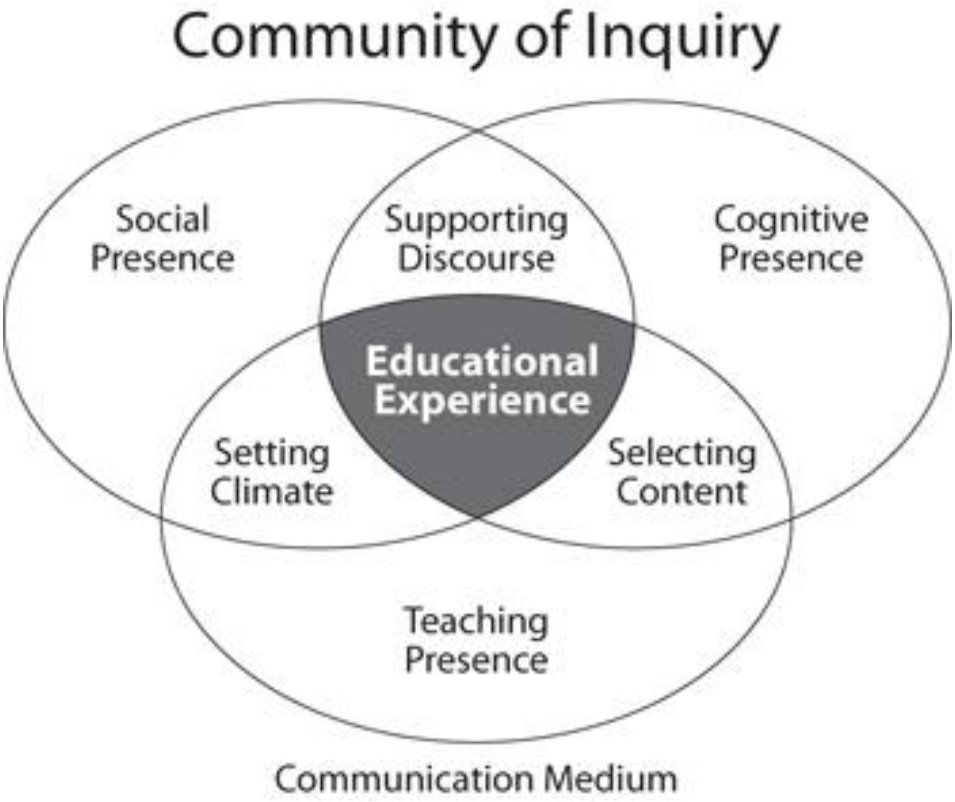


Figure 2https://coi.athabascau.ca/coi-model/

The UDL framework is designed to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. UDL is designed to support learners with different learning preferences, backgrounds and motivations, as well as learners with accessibility issues. UDL is especially important in technology mediated learning where access issues and engagement issues can be more prevalent. NCI encourages staff to engage with the UDL badge designed for the National Forum for the Enhancement of Teaching and Learning by AHEAD and UCD Access & Lifelong Learning, and the Digital Learning Design Team specifically approaches programmatic design and review with UDL in mind.

4 Assessment in Technology-Mediated Programmes

All programmes are subject to the assessment policy and procedures of the College as set in Chapter 4 of the QA handbook. The assessment strategy, content and learning outcome mapping for a programme/module should be the same regardless of the instructional strategies of the module, however in some cases a different examination environment may be needed. As referenced in QQI's review; "e-Proctoring in Theory and Practice", "the traditional assessment system through examinations might suit some disciplines (e.g., mathematics and related areas) but could not be considered optimal for all". Whether online or face to face NCI strived to design assessment structures that have both validity and reliability, and which also promote assessment as a tool **for** learning, not simply **of** learning. In line with QQI's document, NCI carefully selects tools for online assessment of any kind,

be they LMS based or using an external proctoring system, following the guidance in the document. This document will be used as a reference point for any programme team who wish to design assessments that occur remotely.

In order to provide programmes with significant levels of remote/distance learning, it may be necessary to provide students with the option of taking their assessment in an online environment. In some cases this will not be appropriate e.g. in cases where professional body requirements necessitate in person exams. Where online assessment is used however, the environment must in turn be a straightforward, secure and student-centred offering which ensures not only the integrity of the exam process, but also does not advantage or disadvantage the student in any way over a traditionally proctored in-person equivalent.

These procedures are informed by the College's policy and procedures on *invigilation* and ensuring *the security and integrity of the assessment process* as outlined in Section 4 of the QA handbook.

The following requirements have been identified as being necessary for the proctoring of online assessment.

4.1 Invigilation/Proctoring

Traditional face to face terminal assessments are proctored (invigilated). It follows that online versions of these same examinations must also be proctored. This can happen via a live proctoring system, artificial intelligence driven systems, or via recordings which are subsequently reviewed.

4.2 Recording

To ensure the integrity of students' exam environments, the following details must be captured.

1. Screen recording
2. Audio recording
3. Webcam recording

Each of these recordings must be complete, with no breaks in coverage for the duration of the exam.

4.3 Internet reliance

Students who engage in an online offering of a course generally do so from home. This means that it is unrealistic to always expect solid broadband connections. Therefore, any technical solution must not be reliant on a consistent internet connection at all times. This is not to say that the solution may not use the internet at all, rather that the reliance on a solid, uninterrupted connection is not viable. To this end, technical solutions which rely on consistent streaming may not be appropriate.

4.4 Data Capture

Reliance on data capture by an external organisation should be minimised where possible. Any external solution provider must be compliant with data protection laws, and organisations external to the EU must be Safe Harbour agreement compliant.
As with internal terminal examinations, student scripts must be kept for a year and a day.
Where possible examinations should be delivered through NCI's own Learning Management

System and scripts should be captured through same.

4.5 Technical specifications

Any technical solutions must be able to run on all machines matching the minimum necessary technical specifications provided to students by the college on BYOD/Online courses.

4.6 Criteria for the Selection of Remote Proctoring Software & Provider

Any provider or software selected for the provision of remote proctoring services must fulfil the following criteria

1. The software must allow for complete lockdown of the learner's device to services other than those permitted by the faculty member and/or programme team
2. The software must allow for the unambiguous identification of the student
3. The software has the capacity to capture a 360-degree overview of the testing environment
4. The process must make a copy of all recordings available at the end of the assessment
5. Reports from the process must be available within 3 days of the assessment
6. Proctors employed by the provider must be trained and evidence of that training provided
7. The provider used must have the capability to store recordings for at least 4 months
8. The provider must hold its data in a secure location within Europe or within a 'safe-harbour' environment

4.7 NCI's Protocol for the Use of Remote Proctoring is contained in Appendix 1 to this document.

5 Admission and Registration of Learners to Technology-Mediated Programmes

The College's admission and registration policies apply to all learners applying to and registered on technology-mediated learning programmes.

The College's administrative systems accommodate:

- online application,
- online interview,
- online registration, payment and curriculum selection processes.
- online requests for extension of assessment deadlines, deferral of assessment, deferral of programme
- online requests for application to financial assistance

Identification cards are posted to online learners. Learners on online or blended programmes are subject to NCI's attendance and engagement policy. Engagement with online services will be monitored by the Education Engagement Officer.

Learner records, including records of their interactions in an online environment are subject to NCI's record management, retention and data protection policies.

5.1 Access to Services and Learning Supports

The College's policy on access to learning supports applies to all learners regardless of their mode of delivery. Learners are also given the option of availing of all supports and services face to face.

5.2 Supports Specific to Technology-Mediated Programmes

Programmes which are designed to be in online mediated format have supports that are specific to these mediums. The Digital Design Team (DLD) runs an online service aimed at helping learners who are not frequently on campus to navigate college life. This support service runs several interventions

- The Learning Online Support Team (LOST) is a subset of the DLD, aimed at giving learners a human contact that remains with them throughout their college experience. The team is involved in orientation and open days and has a responsibility for visiting the learners throughout the semester in their classes. The LOST support team are available in the evenings for live chat/calls with learners who need pastoral support or guidance and runs a ticketed email and support account (lost@ncirl.ie) so that all student queries are responded to in a timely fashion.
- LOST monitors learner interaction on Directed E-Learning courses, emailing learners that fall behind on a weekly basis with tips on catching up or seeking specific learning supports.
- LOST runs support sessions throughout the semester aimed at helping learners adjust to technology mediated learning. These sessions are mainly study skills based.
- LOST routinely liaises with class representatives to ensure that feedback related to technology mediated learning fed back to the relevant School/Lecturers and actioned.

NCI has in place specific contacts for bullying and harassment. Given the additional dangers of cyber bullying and harassment, a specific member of staff will be elected as the contact for cyber bullying and harassment.

5.3 Additional Supports

The College's **IT** infrastructure uses virtual desktops which allows off-campus access to all IT services regardless of the mode of delivery of the programme

The **Library & Information service** provides significant online resources in the form of e-books and journal articles. A postal service is available to off-campus learners where required.

The **Maths Support** service has developed a significant number of online resources available to learners available via the Virtual Learning Environment

Learning Supports e.g. academic writing, disability support etc are provided using online delivery technologies

Computing Support is provided using online delivery technologies and has developed a significant number of online resources available to learners available via the Virtual Learning Environment

The Student Counselling and Wellness Service's aim is to support students and offer a supportive encouraging environment where students can talk about any struggles or difficulties they may be facing while they are in college. These services are available face to face or online.

6 Training and Support of Staff Developing, Delivering and Supporting Blended and Online Programmes

Both lecturing and support staff are provided with training in both the pedagogic and technical knowledge needed to provide an optimum level of support for students who are accessing those supports online.

Key support staff in the following departments will be required to train with the online classroom systems.

- Computing support
- Maths support
- Learning support
- Disability support
- Learning Online Support

Any staff member asked to participate in online delivery is required to undertake training sessions aimed at improving online pedagogy and ensuring consistent and appropriate teaching methodologies, regardless of prior online delivery experience outside of NCI.

Staff will have the option of retraining each academic year.

6.1 Training for Synchronous Online Delivery

Training on the use of the virtual classroom platform is designed to address both the technical and the pedagogical competencies associated with teaching via technology mediated means. It addresses 5 key competencies

- System training
- Effective online delivery practices
- Discussing motivation
- Course design
- Institutional support

Training takes place over 2 sessions which occur in advance of a facilitator/lecturer's first delivery. Training then continues into the semester, as a Learning Experience Monitor will be assigned during the first 3 weeks of a delivery to provide support and feedback.

7 Learning resources, materials and delivery mechanisms are appropriate and fit-for-purpose

7.1 Modules/Part Modules for Synchronous Online Delivery (See Figure 1)

Learning events set for synchronous online delivery must be run through the module planning form (see figure 3 for example) and discussed with an instructional designer. This both allows the lecturer an opportunity to become cognisant of how their delivery may have to vary in an online mode, and allow for open and honest discussion and feedback about the planned delivery and assets with an online expert.
The initial delivery of each module will have a Learning Experience Monitor (LEM) assigned for the first 2-3 weeks of delivery. The LEM will be an individual trained in pedagogical approaches for online delivery who will assist lecturers in refining their technique and navigating the online system. They will also advise the IT department if there are any technical issues that require monitoring.

7.2 Modules/Part Modules to be Delivered Asynchronously

Content developed for asynchronous delivery is subject to the following process. *See Figure 2.*

1. Planning
    a. A 'Module Planning Form' (MPF) is assigned to the Content Developer for the module. MPF's ensure that the exact split of class contact vs asynchronous content is explicit throughout. Additionally, the exact makeup of the asynchronous content is made explicit, eg which elements are video based, reading based, audio etc, and the exact timings of these pieces
    b. Before asynchronous content is created, the MPF must be signed off by both a member of the Digital Learning Design team, who will focus on the pedagogy of the content, and a subject matter expert from within the School who will assess the plan against the Learning Outcomes. It is expected that this process be an iterative and cyclical model which is fully completed before any content is developed.
2. Creation
    a. Content Developers are assigned software licences to support the design and creation of video, audio and reading resources for learners. They are also given a set of guiding resources and principles to support their pedagogical design.
    b. Content Developers are assigned a Content Editor, who will be able to edit video/audio and/or reading material so that it is formatted correctly for the college's Learning management System.
    c. Once material has been formatted it is sent back to the Content Creator for sign off.
    d. Once signed off, the asynchronous materials are placed on the college's learning management system by the Content Editors, who ensure that the material is visible to learners, and that it is created in such a way that the college can track learner engagement.

The choice of content to be delivered in this manner should be chosen carefully as the resources required to maintain and update this type of delivery are significant.

7.3 Modules/Part Modules to be Delivered via Campus-Livestream

Learning events that are delivered via campus livestream, eg an event on campus that is livestreamed using a virtual classroom system or similar. These events require careful

planning and support and therefore can only be implemented where appropriate supports are available. Campus livestream events will be supported by NCI's IT department who will provide a dedicated IT support service for these events. Programme development teams should be cognisant of the support need when timetabling events of this nature.

Lecturers/facilitators who deliver in this mode will undertake training designed specifically to support campus livestream and will be assigned a member of the Digital Learning Design team to act as a critical friend/peer for the duration of a module delivery.

7.4 Maintenance and Testing of Environments

The programme team will work closely with assigned contacts from the NCI I.T department and the Digital Learning Design team to ensure rigorous testing of both the online classroom systems and other technologies such as the virtual desktop environment are appropriately tested.

The I.T department is responsible for specifying a set of minimum technical requirements for students to have on their home machines. These specifications will be based on the technologies identified in the programmatic review/design process.

7.5 Learner Feedback

Programme teams are supported by the Quality and Institutional Effectiveness (QIE) team, as well as the Digital Learning Design team in the gathering, assessment and actioning of learner feedback. Programme teams are expected to regularly review feedback via the Annual Programme Evaluation and Review Process (APERS). The DLD team would support and guide programme teams to ensure the technology remains fit for purpose for maximising the quality of the experience. Qualitative and quantitative data would also be analysed within the quinquennial programme review process prior to programme revalidation through QQI, NCI's Awarding Body.

It is important that learner feedback is taken seriously and is addressed in a timely fashion. This is especially true of feedback relating to technology mediated learning, as the technology itself can in some instances act as a barrier for learners causing them to become isolated. To this end, the Digital Learning Design team will engage with the class rep system to promote clear and open feedback loops between learners and the programme teams throughout the semester.

Figure 3: High Level Process for Synchronous Online Delivery

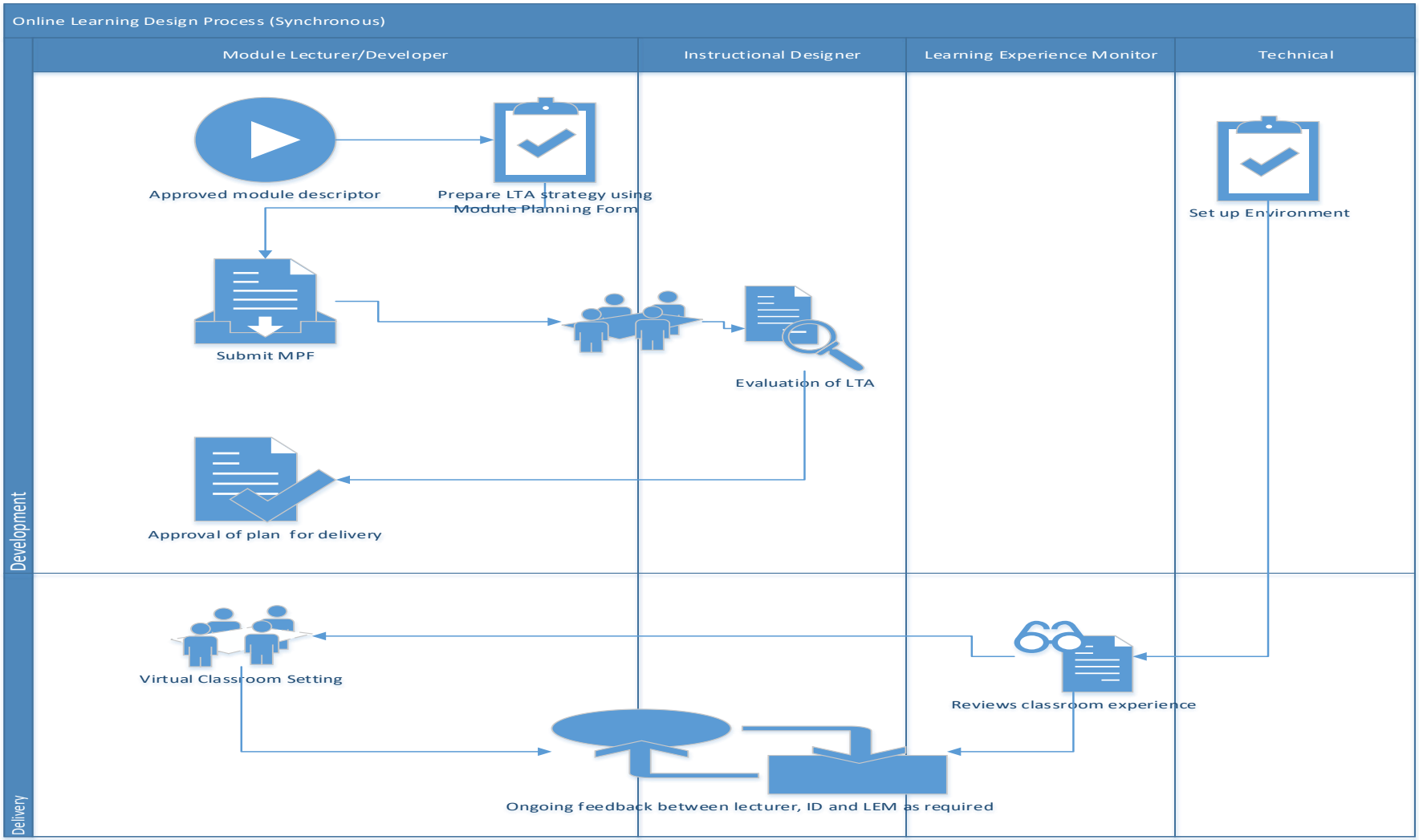
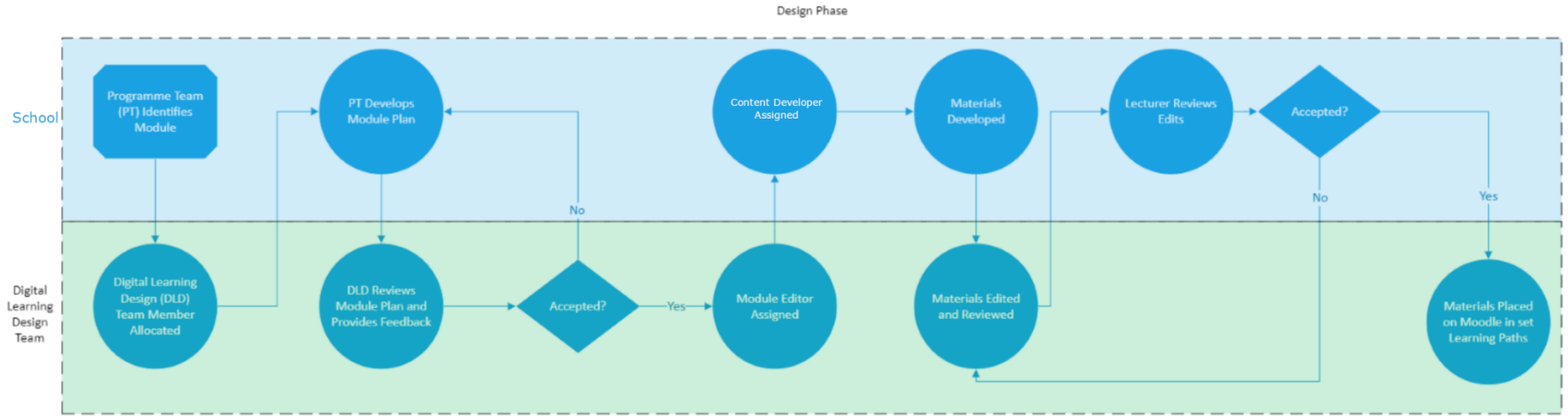


Figure 4: High Level Process for Asynchronous Online Delivery



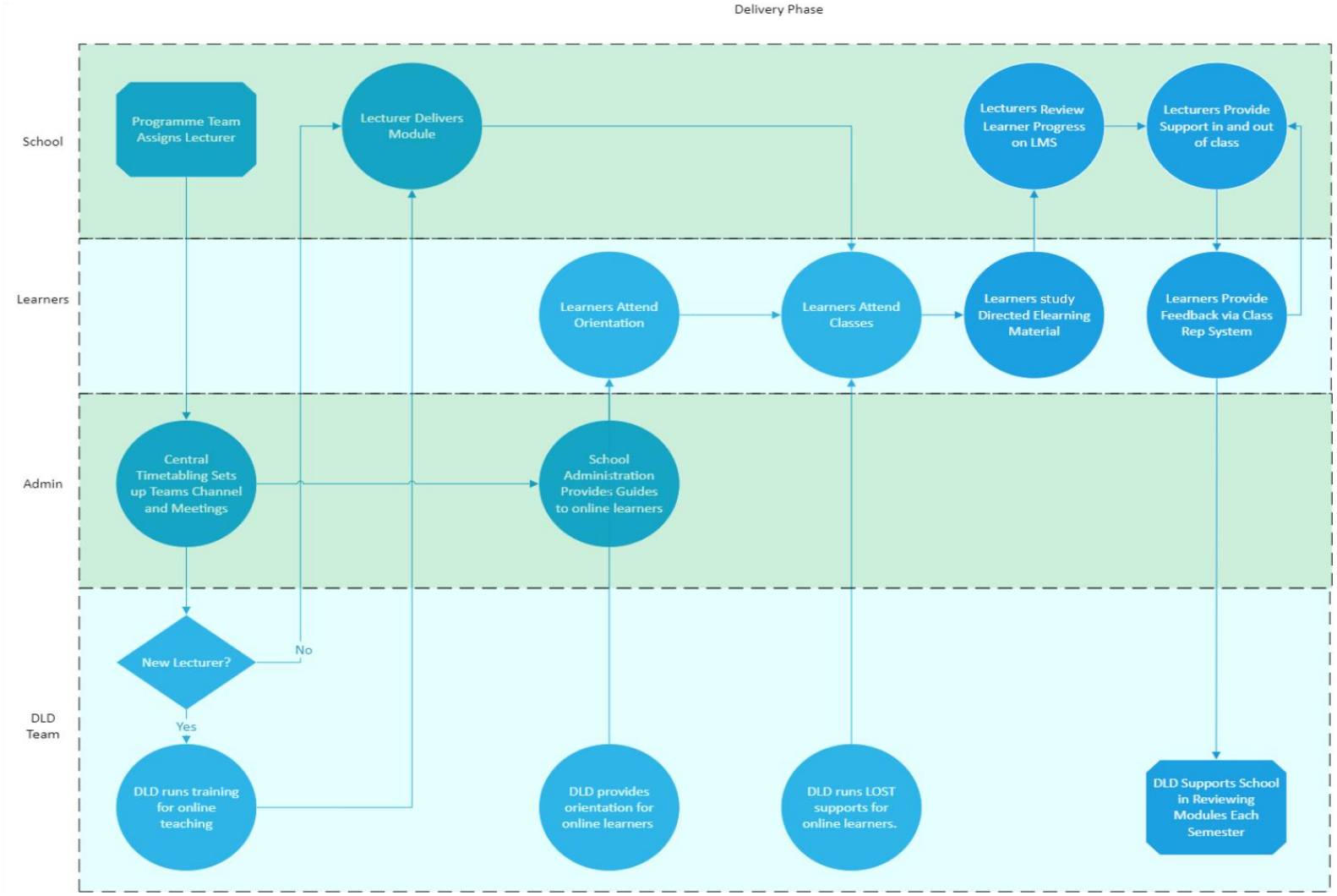

Delivery Phase
School
Learners
Admin
DLD Team
Programme Team Assigns Lecturer
Lecturer Delivers Module
Lecturers Review Learner Progress on LMS
Lecturers Provide Support in and out of class
Learners Attend Orientation
Learners Attend Classes
Learners study Directed Elearning Material
Learners Provide Feedback via Class Rep System
Central Timetabling Sets up Teams Channel and Meetings
School Administration Provides Guides to online learners
New Lecturer?
No
Yes
DLD runs training for online teaching
DLD provides orientation for online learners
DLD runs LOST supports for online learners.
DLD Supports School in Reviewing Modules Each Semester

Figure 5: Sample Module Planning Form – L8 Software Development

Week 1

Thursday, February 11, 2021 10:56 AM

Module Creator: Sam Cogan (sam.cogan@ncirl.ie)
Credits: 10
Contact: 2 hours
Directed: 2 hours

Week Topic	Week Intro Message
Intro and Overview	Welcome to Software Development! In this module we will learn the basics of the Java programming Language. Java is an incredibly powerful programming language and consistently ranks as one of, if not the most used language in the world. Many of the things that you learn about Java are also true of other programming languages, so it is a great place to start. Begin by selecting Lesson 1 below. Once you have completed a lesson the next set of content/lessons will unlock. Unlocked content can be reviewed at any time and will remain unlocked for the duration of the course. You will likely have questions every week. It is really important to post these in the Teams channels so that they can be addressed, this helps both you and other students. Questions posted on Teams will generally be addressed within 24 hours. More complex questions will be addressed in the Live Sessions along with lab feedback and solutions
Contact (120)	**Directed (120)**
• Module introduction (Assessment structure, class structure, Expectations of Directed Learning) • Survey of learner prior experience • Importance of problem solving skills ahead of syntax • Finish session by ensuring all learners have a Java editor correctly installed on machine, as it is necessary for following week. • Introduce NCI Virtual Desktop for any learners who struggle to get their Java environment set up. Assign lab assistant to help learners get set up outside class time • If time remains, introduce basic main class setup and 'hello world' code • Remind students of expectations on labs before the following week.	Please note that videos/content must be named identically in this document and when uploaded • **How Computers Interpret Code- Interpreters & Compilers (V,20)** • **Editing Code (V,20)** • **Common Errors and How to Fix Them (R,10)** • **Fix Me – Code Challenge (TC,CC, 15)** • **Fix Me Solution (V,5)** • **Simple Addition – Code Challenge (TC,CC,15)** • **Simple Addition – Solution (V,5)** • **Week 1 Lab (MU,20)** • **Week 1 Summary Quiz (Optional) (MQ, 10)**

Please note that the above document is a sample document for review and may not reflect an accurate depiction of the module design. Please see explanatory statement below:

- Week topic will be the 'name' of the topic/week as listed on Moodle.
- Week intro message will be an introductory statement for learners that will give an overview of what to expect for that week of content.
- The 'Contact' section is a broad teaching plan for the lecturer responsible for delivering the module. It will outline an example of how the synchronous contact time may be used. Lecturers are encouraged to use their own discretion and expertise here to better suit the classes needs and may diverge from the suggested lesson plan if they deem fit

- The number beside both ‘Contact’ and ‘Directed’ refers to the expected time for a learner to engage with that aspect in minutes. 120 here suggests that a learner will spend 120 minutes in contact time this week, and 120 minutes engaging with directed materials.
- The codes after each activity in the ‘Directed’ section denotes the type of activity and the learner effort required (in minutes). For instance, (V,10) denotes that the learners must watch a 10 minute **v**ideo, and (TC,CC,15) denotes that a learner will be given **t**emplated **c**ode and a **c**ode **c**hallenge that will last approximately 15 minutes.

8 Appendix 1: Protocol for the use of remote proctoring

8.1 Purpose

To outline the process by which the invigilation of assessment undertaken under 'examination' conditions is managed in the following circumstances:

1. The module is delivered online
2. The learner is unable to attend an assessment for a validated reason and has been given permission by the Registrar to undertake the assessment in this manner

This applies to 'in class tests' and 'terminal examinations' and any time constrained assessment

8.2 Obligations of the School and Programme Team

The Programme Director/Vice-Dean must ensure that learners are afforded an opportunity to:

1. Test that their environment will facilitate access to the remote proctoring service
2. Take a dry-run assessment to understand how the process works at least 3 weeks before the assessment is scheduled.

8.3 Conditions to which a learner must agree in order to take a remotely proctored assessment:

1. The learner's technical environment must meet the required specification as laid out in the programme information
2. Learners must permit the installation of the software used for this process on their device
3. Learners are required to establish identity following the procedures outlined by the software provider instructions.
4. Learners are responsible for self-testing the functionality of the system well in advance of all Remote Proctored exams in their courses, so that any troubleshooting that is required can be accomplished.
5. Learners must agree to the storing of their name, email address and a recording of the assessment on the software providers' server/ This will be deleted at the end of the assessment period and after all appeals are completed.
6. The test environment must replicate the traditional environment and conform to the following:

- A quiet, secure, fully lighted room for the examination
- No other people in the room
- Sit at a clean desk or clean table (not in a bed or sofa)

- No talking out loud or communicating with others by any means (with the exception of contact with the faculty member in an emergency)
- No leaving the room--this includes taking the computer.
- The exam should be taken in the same room that the "Exam Environment View" is completed in/
- There should be nothing except computer and external cameras/microphone on the desktop, tabletop or floor surrounding the learner
- Bottles of water are allowed. All labelling must be removed
- All books, papers, notebooks, or other materials should be removed from the environment, unless specifically permitted in written guidelines for a particular examination
- No writing visible on desk or on walls
- No music playing
- No other computers running in the room used
- No headphones or ear buds allowed
- No hats, scarves or other headgear are allowed except with permission.

Learners are not allowed to use the following unless otherwise noted by instructor/exam giver:

- Excel
- Word
- PowerPoint
- Calculator (online/computer or handheld devices)
- Textbooks (online/computer or hardcopy books)
- Notes (online/computer or hardcopy notes)
- Pen and Paper (for the purpose of taking notes during exam or calculations)
- Other websites

Cameras must be an external device and placed on the lid of the laptop/monitor or in a location where it will have a constant, uninterrupted view of the test taker.

The web-cam must be correctly situated:

- Web-cam must be focused on individual taking exam at all times
- Nothing covering the lens of the camera at any time during the exam

8.4 Breach of Protocol

If the recording of the assessment flags a potential breach of these regulations, the learner will be notified within 5 working days of the assessment taking place.

If a breach of this protocol is confirmed, the learner will be subject to the disciplinary procedures of the College

8.5 Exceptions

If a learner is unable to take an assessment in the environment outlined above, they must attend the assessment at NCI or other agreed location.

If a learner is unwilling to have their data stored by the software provider, they must attend the assessment at NCI or other agreed location