



# iTEC

Designing the future  
classroom

## WP5: Evaluation Handbook

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# Credits

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V4		Typographical errors, clarification of role of Associate Partners in evaluation, insert definition of Learning Story, Learning Activity from D10.1		
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## INTRODUCTION

The purpose of this document is to provide guidance for National Pedagogical Coordinators (NPCs) on the evaluation procedures and protocols. It includes relevant information from the Evaluation Plan (D5.2). Where complex concepts are used (throughout this document) readers should refer to the agreed definitions in Appendix 1 below.

### 1.1 The objectives of WP5

- To produce a knowledge map of current evidence of the use of innovative tools in classrooms.
- To engage with teachers to record the process of operationalising Learning Stories in classroom settings, within each project cycle.
- To establish how teachers integrate innovative technological tools within their pedagogy.
- To evaluate the impact of the Learning Stories in each cycle on:
  - teaching practices;
  - [teachers' Learning Story specific] engagement with all stakeholders;
  - individualisation;
  - collaboration;
  - creativity;
  - expressiveness;
  - overall transformative effect and the design of the future classroom, including underlying change processes.

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This document relates to the evaluation of the pilots in each cycle. The purpose of an evaluation is to identify 'merit and shortcoming' (Stake, 2004, p16) of an event, practice or programme.

iTEC's working definition of **impact** in the Project Proposal, Part B: page 71 of 79 is as follows:

Impact is the overall achievement of an intervention on the educational system and can be described by a variety of qualitative indicators such as 'improvements in national test' or 'improved learning in schools' depending on the policy target. It is the end point of an intervention involving input, process, output and outcome. Isolating the variable that caused the impact is problematic in education.

Therefore, WP5 will consider the overall achievement and outcomes of Learning Stories on teaching and learning with particular regard to:

- what is considered to be good practice (by teachers and other stakeholders);
- what the enablers and barriers are;
- how the barriers may be overcome;
- whether the innovation is sustainable, transferable and scalable.

We are interested in **change** and **innovation** as follows:

On the pedagogical level innovations are defined in terms of novel didactic solutions reflecting theoretical shifts (e.g., from a behaviourist to a constructivist perception of the learning process) or technological changes – as in ICT implementation. Pedagogical innovations may take the form, for example, of novel instructional formats, increased delegation of responsibility and control over the learning process to the students, or alternative methods for the assessment of learning. (Mioduser et al, 2003, p26)

Judgements will need to be made about the extent of change (which can vary from replication of existing practice through the implementation of technology to radical transformation) and the temporal nature of the change. The definition of pedagogical change and innovation will vary from country to country (Kozma, 2003): *‘innovation often depends on the cultural, historical, or developmental context within which it is observed’* (p17). Therefore, as National Pedagogical Co-ordinators (NPCs) you will be asked to define innovation in the context of your own countries ensuring that the definition does not include technological change alone (i.e. the adoption of technology to replicate existing practices). This country-specific perception of innovative practice will be documented in the Knowledge Map as part of each participating country’s profile.

**Transformation** is a term commonly found in educational literature and policy rhetoric, particularly in relation to the use of technology to support teaching and learning. It means more than change alone; rather it is radical or fundamental change (Fisher, 2006). Here we are adopting the following definition that: *‘[t]ransformation is significant, systematic and sustained change’* (Caldwell, 2009, p4). That is it *‘implies a profound or fundamental change, a metamorphosis that involves some radical innovation, not just incremental innovation. The difference is important’* (Hargreaves, 2003, p1 cited in Fisher, 2006, p294). Furthermore, a significant change in a teacher’s practice must be multidimensional, including changes to resources, teaching approaches and beliefs (Fullan, 2001). Sustainability will be explored as far as possible but, due to the timescales in iTEC cycles, it may be difficult to obtain more than a teacher’s intention to continue with a particular Learning Story in the future. We will therefore consider each Learning Story which is selected for validation in WP4 with regard to its potential to lead to transformation in the classroom, as perceived by teachers and other related stakeholders. We will capture the change process and consider what needs to be in place in schools and national policies in order to take Learning Stories to scale.

The research questions are outlined below. We acknowledge that the concepts underpinning the focus of the evaluation with regard to teaching practices are complex and difficult to define precisely, particularly given that multiple interpretations may exist across national and local contexts. However, we have created, through a collaborative process, a set of working definitions (see Appendix 1: WP5 Agreed Definitions and Descriptions) which define our understanding of the more complex terms. Additionally, the actual focus of the inquiry will depend on the specific Learning Stories put forward for large-scale piloting in each cycle.

## 1.2 Overview of evaluation

The focus of the evaluation is two-fold.

Firstly, to capture the journey of implementing the Learning Stories in classrooms focusing on: adaptation, change processes, challenges, ease of implementation.

Secondly, to evaluate the outcome of the implementation of the resulting Learning Activities in relation to meeting teaching objectives, the impact on learners and the impact on teachers' practices.

This is to be achieved through two main sources of data collection to be conducted each cycle:

- A survey of all teachers participating in the project at the end of the implementation of a Learning Story.
- Three case studies of individual teachers from 2 or 3 schools.

In addition, data will be collected from the processes leading up to the Learning Story implementation (development of the Learning Stories, the development and pre-piloting of the prototypes), workshop events, national support mechanisms and, contributions and activities in the teachers' online community.

We cannot assume that the same teachers will participate during each cycle and we need to be mindful of not overburdening very busy practitioners with data collection requirements. Therefore, it is not appropriate to adopt an experimental design (requiring data collection at more than one point or from comparison groups).



## 1.3 The research questions

The research questions that WP5 will address are as follows:

1. What are stakeholder<sup>1</sup> perceptions of the impact of Learning Stories on
  - Teaching practices including assessment; constructivist pedagogies: e.g. student-centred, knowledge building, self-directed, problem-based, active, peer-support; roles of teachers and learners; new learning spaces; effective uses of digital tools; and specifically:
    - Individualisation
    - Social/collaborative elements of learning
    - Creativity
    - Expressiveness
    - Engagement with a wider range of stakeholders<sup>2</sup>
  - Teacher attitudes (motivation and engagement)
  - Learner attitudes (motivation and engagement), and learner attainment (skills, knowledge and understanding)
2. To what extent does the implementation of the Learning Story lead to any form of transformation and which Learning Stories have the maximum potential to have a transformative effect?
3. How effective are iTEC national and local support and mechanisms for local implementation (including the development of technical and pedagogical knowledge and skills)?
4. How do teachers perceive the Learning Stories in relation to quality (how easy it is for teachers to implement a Learning Story including the selection and combination of a range of people, tools, resources and services; connection to current practice; what works and what doesn't work)?
5. What are the enablers and barriers to the process of implementation?

Clearly, these questions will be challenging to address and we are already considering how they might be revised and refocussed in the future. The questions above and evaluation criteria below will remain as stated in the Evaluation Plan for Cycle 1 and will be reviewed prior to Cycle 2. In particular, the transformative effect of Learning Stories will be challenging to measure. In some countries the selected Learning Stories for large-scale pilots may not be innovative. Teachers may already be engaged in Continuing Professional Development and reflection on their practice leading to continual change. And of course transformation and change can take time, training and practice to achieve whereas the Learning Activities may only involve one or a few lessons. Responding to Research Question 2 will require careful exploration through a wide range of data, inevitably being reliant upon stakeholders' perceptions of the potential of Learning Stories to lead to change rather than evidence of change

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<sup>1</sup> These are the "school-based stakeholders", i.e.: Students, Teachers, ICT Co-ordinators (where appropriate), Head Teachers. We refer to this group of stakeholders as "S-B stakeholders"

<sup>2</sup> These are the "Learning Story-specific stakeholders" with whom a teacher may engage whilst teaching with a particular Learning Story and with whom the teacher would not usually engage. These may include, for example, parents, members of the community, local/national/international subject experts and/or professionals, students from other countries etc.. We refer to this group of stakeholders as "LS-S stakeholders"

itself. From an alternative perspective, the short timescale and tight turnaround required from teachers participating in a cycle may make implementation of Learning Stories more challenging than it might otherwise be. Time will be an important factor to take into consideration.

In Cycle 1 it is likely that it will not be possible to explore the research questions as fully as we wish. As iTEC technologies will not be available and teachers selected to participate will be using existing technologies, there will be little need in some countries for specialised support and training. However, in some countries it may not be possible to recruit ICT confident and experienced teachers so this may vary from country to country.

## 1.4 Evaluation criteria

The evaluation criteria below are not presented in priority order. They are numbered only for ease of access. They have been used to frame and develop the research instruments. They will be reviewed and revised as necessary after each cycle. They are presented here for information. They have already been documented in the Evaluation Plan and will not be reviewed and revised until after completion of Cycle 1. However, a number of issues and suggested additions have already been raised. These will be addressed in the next cycle.

For clarification:

- ‘Active use of the teacher community’ will be measured through observation of its use by WP5 members. The number and type of contributions will be evaluated. It is not the responsibility of the NPC to collect data on this aspect. However, it would be beneficial if NPCs could encourage teachers to visit and use the site.
- Below we use the word ‘transformation’ very broadly to include teaching and learning, but also the environment and any other aspects that relate to educational systems.
- Unfortunately we do not have the resources to survey learners. However, a group of learners will be interviewed in each case study during which they will be asked about their experiences of, opinions about and attitudes to the Learning Activities.
- Of course ‘long-term’ is difficult to define precisely and therefore difficult to measure. Due to the tight timescales concerned within each cycle we are only able to ask teachers if they might continue to use the Learning Story/Learning Activities in the future. We will explore this through teacher/head teacher/ICT co-ordinator interviews as well. We are not able to collect data beyond the lifetime of the iTEC project and therefore will not necessarily be able to confirm whether or not rhetoric becomes practice. However, where possible we will contact teachers again to see if they continued to use Learning

Stories/Learning Activities. We will be explicit about the format of the data in all reporting (largely teacher perceptions).

1. The set of training resources produced for teachers is perceived by the teachers to be supportive of their continuing professional development in relation to the technical and pedagogical skills required to integrate digital tools into their teaching practices.
2. There is evidence that the training resources are:
  - a) made available to support all teachers;
  - b) perceived by teachers to be useful and appropriate to their needs;
  - c) easy to locate and access;
  - d) easy to adapt to suit local contexts.
3. Software developed specifically for iTEC (e.g. composer, shells, registry, SDE) is perceived by S-B Stakeholders to be fit for purpose and easy to use.
4. Teachers' technical skills and understanding of the pedagogical use of digital tools increases.
5. Communities of practice, supported by online communication and collaboration tools, are established and are:
  - a) actively used by teachers (at least weekly);
  - b) perceived by teachers to be easy to use and fit for purpose.
6. The Learning Stories used by teachers in the pilots are perceived to be innovative by all stakeholders, whilst remaining connected to current practice, in the context in which they are adopted (nationally, regionally, locally).
7. Learning Stories used by teachers in the pilots are successful and of good quality when they are supported by evidence that they:
  - a) engage and enthuse teachers and students;
  - b) are perceived to contribute effectively to teachers' and students' objectives and practices;
  - c) have a positive impact on learner attitudes and attainment (teacher perceptions);
  - d) have a positive impact on teacher attitudes to their use of technology to support teaching and learning;
  - e) require relevant and appropriate use of digital tools (i.e.: the Learning Story could not be undertaken just as appropriately/efficiently without the use of the digital tools);
  - f) present achievable technical challenge (ie: they are challenging, but not too difficult to adapt/implement);
  - g) are perceived by S-B stakeholders and NPCs (who will liaise with NTCs) to be technically sustainable and scalable;
  - h) would be recommended by participating teachers for regional/national dissemination;
8. There is evidence that the adoption of a Learning Story will lead to a long-term change for a teacher (and possibly for the school overall) in relation to one or more of the following teaching practices:

- a) New approaches to assessment procedures which are considered to be more authentic (valid, reliable and useful to teachers and students) than previous assessment practices;
- b) Adoption of approaches to teaching that change the ways students learn (e.g. student -centred, knowledge building, self-directed, problem-based, active, peer-support);
- c) Shifts in the roles of, and relationships between, teachers and students;
- d) Creation of new learning spaces within and/or beyond the boundaries of the classroom;
- e) Appropriate, innovative and effective uses of digital tools;
- f) Teachers' approaches to:
  - I. Individualisation
  - II. Social/collaborative elements of learning
  - III. Creativity
  - IV. Expressiveness
  - V. Engagement with a wider range of stakeholders
- 9. Learning Stories with the maximum potential to trigger the transformation of teaching and learning are identified.
- 10. Underlying change processes necessary to bring about transformation are identified.

We appreciate that some of the terminology above is open to interpretation. As referred to above, Appendix 1 below provides working definitions of many of the terms.

The table that follows maps the relationship between the Research Questions, Evaluation Criteria and Research Instruments.

Research Questions	Evaluation Criteria	Instruments
1) What are stakeholder perceptions of the impact of Learning Stories on: <ul style="list-style-type: none"> <li>a) Teaching practices</li> <li>b) Teacher attitudes</li> <li>c) Learner attitudes</li> </ul>	4) Teachers' technical skills and understanding of the pedagogical use of digital tools increases  6) The Learning Stories used by teachers in the pilots are perceived to be innovative by all stakeholders, whilst remaining connected to current practice  7) Learning Stories used by teachers in the pilots are successful and of good quality  8) There is evidence that the adoption of a Learning Story will lead to a long-term change for a	1. Teacher questionnaire (teaching practices; motivation and engagement; learning activities; attainment)  6. Teacher interview 7. Head-teacher interview 8. ICT co-ordinator interview 9. Student group interview 11. NPC interview

	teacher	
2) To what extent does the implementation of the Learning Story lead to any form of transformation? Which Learning Stories have the maximum potential to have a transformative effect?	<p>6) The Learning Stories used by teachers in the pilots are perceived to be innovative by all stakeholders, whilst remaining connected to current practice</p> <p>8) There is evidence that the adoption of a Learning Story will lead to a long-term change for a teacher</p> <p>9) Learning Stories with the maximum potential to trigger the transformation of teaching and learning are identified</p> <p>10) Underlying change processes necessary to bring about transformation are identified</p>	<p>1. Teacher questionnaire</p> <p>7. Head-teacher interview</p> <p>8. ICT co-ordinator interview</p> <p>6. Teacher interview</p>
3) How effective are iTEC national and local support and mechanisms for local implementation (including the development of technical and pedagogical knowledge and skills)?	<p>1) The set of training resources produced for teachers is perceived by the teachers to be supportive of their CPD, in relation to the technical and pedagogical skills required to integrate digital tools into their teaching practices</p> <p>5) Communities of practice, supported by online communication and collaboration tools, are established and actively used by teachers</p>	<p>1. Teacher questionnaire (preparation)</p> <p>6. Teacher interview</p> <p>8. ICT co-ordinator interview</p> <p>11. NPC interview</p>
4) How do teachers perceive the Learning Stories in relation to quality (how easy it is for teachers to implement a Learning Story including the selection and combination of a range of people, tools, resources and services; connection to current practice; what works and what doesn't work)?	<p>3) Software developed specifically for iTEC (e.g. composer, shells, registry, SDE) is perceived by S-B Stakeholders to be fit for purpose and easy to use</p> <p>7) Learning Stories used by teachers in the pilots are successful and of good quality</p>	<p>1. Teacher questionnaire (implementation and future use)</p> <p>6. Teacher interview</p> <p>8. ICT co-ordinator interview</p> <p>11. NPC interview</p>
5) What are the enablers and barriers to the process of implementation?	Synthesised analysis of data from Criteria 1-9	<p>1. Teacher questionnaire (future use)</p> <p>6. Teacher interview</p> <p>7. Head-teacher interview</p> <p>11. NPC interview</p>

## 1.5 Outline of evaluation requirements (Cycle 1)

Please note that the following outline is for guidance only and can be adapted according to local/national practices (such as school holidays in June or July).

- June: NPCs to attend a half-day online workshop during which the evaluation approach, protocols, research instruments and all evaluation/data collection requirements will be explained. All participants will receive an Evaluation Handbook.
- June: NPCs complete 1 side of A4 describing what innovative practice might look like in the national/regional context.
- June-July: Identify 3 teachers from 2 or 3 case study schools who will participate fully in the evaluation.
- June-July Introduce case study teachers to multimedia story requirements.
- June-Sept: (prior to large-scale pilots, as part of WP4): Design and deliver local face-to-face and online workshops for teachers participating in large-scale pilots (see D4.2 section 3.8, DoW task 4.5 p23). Please note that this may be provided through more informal means such as email and that the facilitation of the pilots may or may not involve technical and/or pedagogical training. This will depend on the expertise of the participating teachers and the technical requirements of the Learning Stories in each cycle.
- June-Sept: Arrange translation of research instruments.
- Encourage all teachers to use the teachers' community to share experiences, discuss issues and seek advice.
- Oct-Dec: Spend one day with each case study teacher
  - Observe a lesson in which the Learning Story is being implemented, taking field notes (30-60 mins)
  - Collect any documentation relating to the lesson (lesson plan, resources)
  - Interview the teacher (20-30 mins)
  - Group interview with 6-8 students (20-30 mins)
  - Interview head teacher (20-30 mins)
  - Interview ICT co-ordinator (20-30 mins)
- Dec-Jan: Write case study report for each case study teacher (3 sides of A4).
- In cycles 3, 4, 5 arrange transcription of interview data and translate all data (field notes, interview data, multimedia stories, lesson plans/resources) for one case study (case study report not required in these cases).
- Oct-Dec: On completion of the Learning Story implementation all teachers must complete an online questionnaire (alternative formats can be provided on request and a pdf version will be made available to NPCs for distribution as required) which will take no longer than 20 minutes.
- Oct-Dec: During one cycle in the lifetime of the project a member of WP5 will visit for 2 days to observe data collection from case study schools. Dates and times will be negotiated with NPCs.

Please note that our expectation is that NPCs from Associate Partners will as a minimum:

- Ensure that participating teachers complete the online questionnaire.
- Be available to be interviewed by WP5.

Associate Partners are invited to participate fully in the case study data collection should they wish to do so.

## **1.6 Identifying participants**

### **1.6.1 iTEC School selection criteria**

To be an iTEC school, the school should have:

- A supportive head teacher/senior management team who will commit to the project and who will provide feedback on the organisational changes that may be required by some of the iTEC Learning Stories in order to ensure their full implementation within their school.
- At least two ICT confident teachers (who could also be the head teacher or a senior manager) who are:
  - Making innovative and effective use of learning technology/technologies in a classroom (preferably a learning environment other than the school's computer suite/ICT room).
  - Motivated to experiment with new learning technologies and innovative pedagogical approaches and who are willing volunteers and prepared to commit to the project.
  - In a permanent post in the school, in order to warrant continuity of work in the school over a sustained period.
  - Willing and committed to be involved and deeply engaged in a long term project (that could be linked with graduate studies in the field of ICT in education,) From a range of teaching subjects and school levels to ensure that a variety of subjects and levels are represented across iTEC as a whole (teachers from the same school need not be from different teaching subjects but it would be preferable if they were).
  - In an influential role such as ICT co-ordinator, lead teacher or school-based teacher trainer.
- A designated ICT co-ordinator (in primary schools this may be one of the above ICT confident teachers) willing to commit to and support the project.
- ICT technical support for the teachers involved in the project (desirable).

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Therefore, the selection strategy is purposeful and those involved will represent innovative ICT teachers, but not necessarily all teachers. This approach is



considered to be essential in order to avoid drop-out or limited progress. The teachers involved need to be willing to try out new approaches and to be innovative in the classroom.

### 1.6.2 Selection of iTEC classrooms

For clarification we are defining "classrooms" as "classes of learners" simply because one teacher may engage with one Learning Story with more than one of his/her classes (for example 2 classes in the same year group but of differing abilities OR 2 classes in differing year groups etc.) As teachers and educationalists know, no two classes have the same "chemistry" and therefore the different "class" responses to the same Learning Story could vary (and, indeed the same classroom might be differently managed/arranged/organised for different classes of learners even if they are engaged in the same Learning Story).

The teacher implementing a Learning Story could teach all the lessons in the same "classroom" (for example a secondary science teacher might teach in the same lab all the time), but having used the same Learning Story with 2 different classes, that one teacher will contribute 2 of the 1000 "classrooms" expected to validate the Learning Stories developed in the project. Teachers will need to be aware that, if they use the same Learning Story with more than 1 class, they will need to complete a questionnaire for every class that is involved in the Learning Story pilots. For this reason, it is recommended that no teacher uses more than 2 classes for any one Learning Story.

Although a teacher may have taught several lessons to one class (related to one Learning Story), that one class of learners would only count as one 1 of the 1000; i.e. "class" does not equate to "a single lesson".

The term "classroom" will continue to be used in all iTEC documentation in order to ensure linkage with all work packages, but "classes" as described above will be assumed throughout.

The Performance and Research indicators have been used to generate the sampling strategy and selection criteria for schools and for case study schools (separate criteria). They are explained in the DoW Part B on page 20. They are important for the success of the validation and the evaluation processes.

Indicator	Minimum	Maximum
Number of Learning Stories taken to large scale per cycle min/max (decision taken by GA, process to be reviewed for Cycle 2)	2	3
Minimum number of classrooms involved per cycle in large-scale testing (WP4)	250	



Minimum number of countries involved in testing each Learning Story in a large-scale pilot (WP4)	5	13
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A country must participate in at least 4 cycles.

Each country must participate in the first cycle and provide a minimum of 10 classrooms. Please note that the indicator relating to the number of classrooms involved in each cycle will not be met in the first cycle – this is an exception. For example, a MoE could involve a small number of schools (i.e. only 3-5). It is actually preferable in the first cycle to start with a small number of schools in order to try out the implementation and evaluation procedures.

Our assumption is that a Learning Story may be piloted in more than one cycle, possibly with some form of further refinement or additional development. If so, then it would be desirable to pilot a Learning Story for a second time with schools which piloted it the first time and also new schools which have no prior experience of the Learning Story.

New classrooms can be introduced to the project during any cycle.

### 1.6.3 Meeting the required numbers of classrooms (classes)

- Over the course of iTEC each country will provide data from an agreed number of classes as negotiated with the WP4 leader on a case-by-case basis (typically around 80). However, the same teachers (and, indeed, the same classes) could be involved in more than one cycle in order to achieve this. And the same teacher could provide data for more than one class.
- We do not expect any one country, over the life of the project, to collect data from more than the agreed number of classes. MoEs may wish to identify several teachers from within a single school, though no teacher should engage with the Learning Story with more than two classes (see Section 4, paragraph 2)
- It will be acceptable for a country to involve more than the agreed number classes if they wish to do so.
- Each country needs to identify **at least** 40 classes for **at least** one cycle (which we suggest should be in cycles 3, 4 or 5).
- The selection of Learning Stories to be implemented in each cycle will need to be negotiated with the leader of WP4 as we need to ensure that at least 5 countries pilot each available Learning Story during each cycle. In the cycle when a country offers 40 classrooms it would be preferable for those classrooms to pilot the same Learning Story in order to be able to

conduct quantitative analysis on a country-by-country basis as well as aggregate responses across the whole project.

The following is an example of what one country's involvement might look like:

- A country agrees to provide 80 classrooms
- 5 classrooms participate in the first cycle
- 15 classrooms participate in the second cycle
- 40 classrooms participate in the third cycle
- This country does not participate in the fourth cycle
- 20 classrooms participate in the fifth cycle

#### **1.6.4 Case study selection criteria for each country participating in a single cycle**

Case studies are likely to include Learning Story implementations which will be judged as being 'successful' to varying degrees. In each cycle, each participating country's NPC should identify 2-3 case study schools PRIOR to engaging in the pilot. This is necessary in order for teachers to fully document the process of implementing the Learning Story. 3 case studies are required from each participating country in each cycle and NPCs will need to identify 3 case study teachers from their selected case study schools. The same case study schools (and teachers) could be used in every cycle if preferred, but this is not a specific requirement. There will inevitably be greater demands on case study teachers (see 4.3.1 below) and NPCs should consider possible incentives for these teachers. In addition, these teachers will be acknowledged in all applicable evaluation reports unless they request otherwise.

#### **What is a case study teacher's required commitment?**

It is worth noting here, that the time a teacher uses to engage with a Learning Story in each cycle could be highly variable as teachers understandably will want to make use of the Learning Stories in their own particular ways (e.g.: one teacher may wish to use the Learning Story to create one Learning Activity to be undertaken during one lesson, whilst another teacher may wish to use the same Learning Story to develop a series of Learning Activities to be undertaken over a series of lessons). Any variation in engagement with the Learning Stories is acceptable for the purpose of case study evaluation (as long as the Learning Story engagement falls within the specified piloting period). However, it is the responsibility of the NPCs to discuss issues related to time allocation with the selected teachers and their Head Teachers/school managers.

In order to show the extra commitment a case study teacher needs to make, the requirements for all iTEC teachers are listed below and requirements that are **additional** for fully engaged case study teachers are highlighted in bold.

All teachers new to the project will first be introduced to iTEC and then will engage in the following:

1. Training (if appropriate) and introduction to the Learning Story.
2. Planning one or a series of Learning Activities to teach (including resource preparation).
3. Teach one or a series of lessons using the Learning Activities.
4. **Be observed whilst teaching one of the Learning Activity lessons.**
5. **Be interviewed after observed lesson (*approx 20-30 minutes*).**
6. **Arrange for a group of 6-8 students (from the observed lesson) to be interviewed by the lesson observer as soon after the lesson as possible (*approx 15 minutes to select students and to book interview room*).**
7. Communicate/network (throughout the above activities) with other teachers involved in Learning Story implementation.
8. **Write a multimedia story in diary/journal style (see guidance notes below) about their holistic experience of the Learning Story (*approx. 2/3hours over the Learning Story implementation period*).**
9. Complete the online questionnaire as soon as their Learning Story pilot has been completed.

The 2-3 schools selected as case study schools from which the 3 case study teachers will be chosen must:

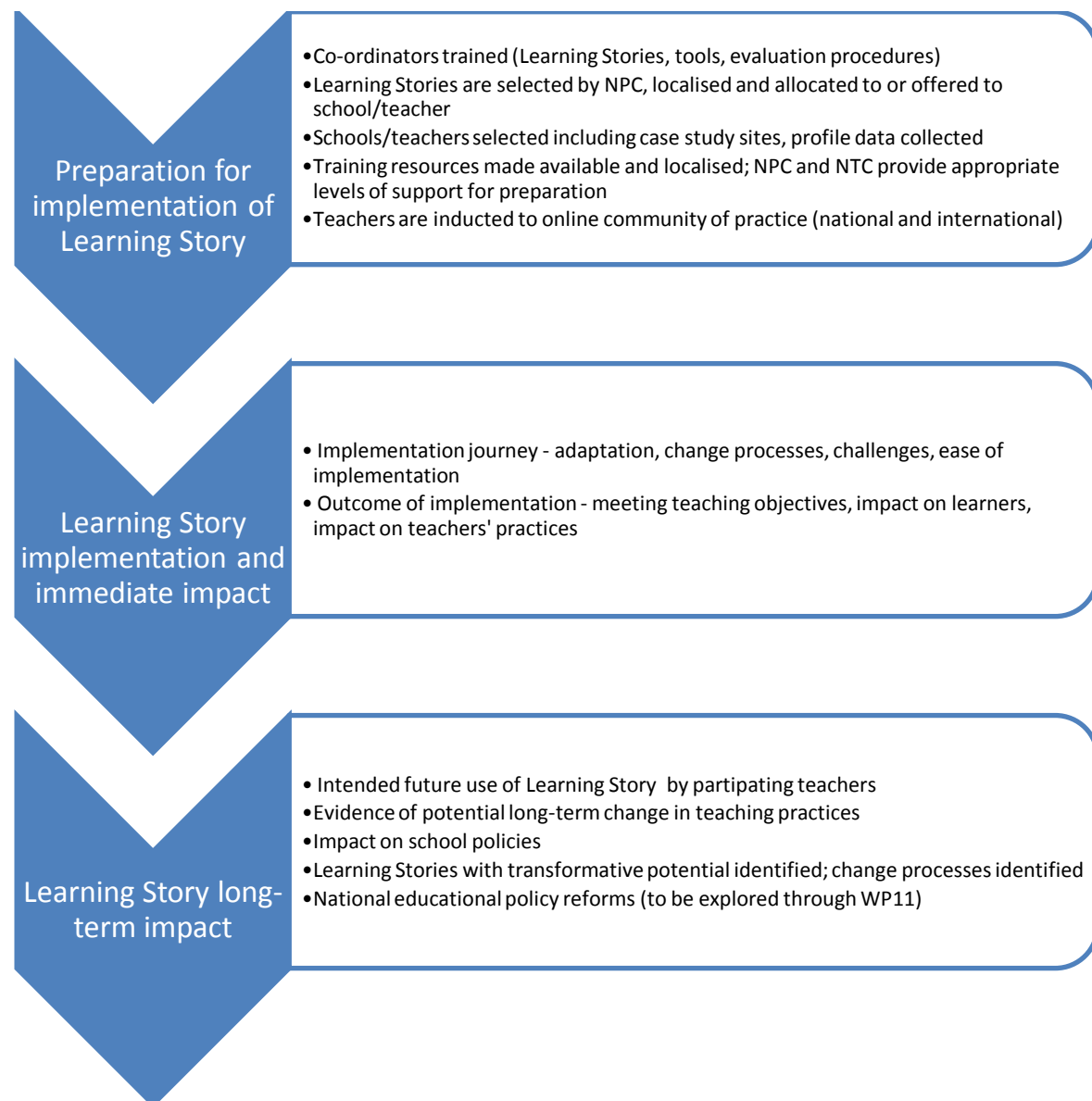
- Be representative of the range of schools involved in iTEC nationally (ie according to proportions of primary and secondary schools) in the cycle.
- Be representative of all schools in the country (as far as possible given the school selection criteria) with no more than one classroom from a school that is considered to be highly innovative (i.e. atypical) in terms of the use of technology to support teaching and learning.
- Have access to the appropriate technology to support the Learning Story implementation (the technology available may or may not meet the requirements for the Learning Story; in the latter case the Learning Story may be partially implemented or alternative tools may be adopted).

The teachers involved must represent a range of teaching subjects including at least one from Science, Technology, or Mathematics (subject to the requirements of the Learning Stories put forward for large-scale piloting). In addition, where primary school teachers are involved they could focus on one or more of these subject areas when implementing the Learning Story.

## 1.7 Focus of evaluation of large-scale pilots

The main focus of the evaluation is presented in the diagram below. However, data relating to the following preparatory events/processes (carried out by WP2/WP3/WP4) will be collected in order to provide a context for the evaluation:

- 20 educational scenarios proposed
- Scenarios transformed to Learning Stories
- Pre-pilots of Learning Stories
- 2-3 Learning Stories selected for large-scale pilots



## 1.8 Research instruments and protocols required

Research Instrument	When?	Who?	How?
1) Teacher questionnaire	Immediately following completion of Learning Story implementation	All participating teachers complete independently. NPC monitors completion rate	Online, paper-based version (PDF) available as necessary
2) NPC Pro-forma to define local innovative practice (for inclusion in Knowledge Map)	June 2011	NPC completes in first cycle only	Electronic form will be emailed to all NPCs
3) Multimedia Story: guidance and exemplar	From beginning to completion of Learning Story implementation	Case study teachers only	Online Diary blog or Journal repository, via the Teacher Community site
4) Lesson observation guidance	Towards the end of the case study teachers' implementation of Learning Stories.	NPC to observe all case study teachers for one lesson in a Cycle.	Field notes; can be digitally recorded if desired (personal choice).
5) Documentation	Collected during case study visits or electronically immediately after visit	NPC to request/collect relevant documentation including lesson plans/lesson evaluations etc	Paper and electronic documentation as available
6) Teacher interview schedule	Immediately after observed lesson	NPC to interview case study teacher	Audio recorded; field notes
7) Student group interview schedule	Immediately after observed lesson	NPC to interview student group	Audio recorded; field notes
8) Headteacher interview schedule	During case study visit	NPC to interview head teacher	Audio recorded; field notes
9) ICT co-ordinator interview schedule	During case study visit	NPC to interview ICT co-ordinator	Audio recorded; field notes
10) Case study report pro-forma	As soon as possible after completion of case study visit	NPC to produce based on observation, interviews and documentation	Electronic form to be submitted to WP5
11) NPC interview	Towards the end of each cycle	WP5 leaders to interview NPC	Via telephone or face-to-face if visiting country; audio recorded; field notes

**Note:** Research Instruments 4) -10) are to support the writing of the NPC case study reports (see below).

## 2 RESEARCH INSTRUMENTS AND PROTOCOLS

Please note that, although these instruments will be used in each cycle, the questions asked will be reviewed at the end of each cycle and may change as the project progresses. Therefore, the instruments that are included in this document are specific only to Cycle One.

### 2.1 Teacher questionnaire

At the end of each Learning Story implementation, **all participating iTEC teachers including those from Associate Partner countries** are required to complete the online questionnaire/survey. It will take no longer than 20 minutes for teachers to complete. This will be verified by piloting the questionnaire prior to Cycle 1.

The online survey will collect **quantitative** data to capture perceptions from all participating teachers in relation to:

- the impact of the technology/Learning Story/Learning Activities on:
  - teaching practices and attitudes
  - learner attitude and attainment
  - individualisation
  - social/collaborative elements of learning
  - creativity
  - expressiveness
  - engagement with stakeholders
- the overall transformative effect of the technology/Learning Story/Learning Activities
- classroom design
- national approach to project introduction and implementation
- local support for the project; technical and professional
- what works and what doesn't work
- barriers/enablers
- good practice
- overall perceptions of the project, Learning Story and technology

Most questions will be statements which teachers will need to indicate their level of agreement with:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly Agree

Where appropriate a 'not applicable' option will also be offered.

The questionnaire will be presented online via the Teacher Community using Survey Monkey. Teachers will be able to save and return to their survey at a later time as long as they use the same computer and do not delete cookies on that computer. Filtering will be used if appropriate. Basic information about individual teachers and the classes of learners involved will already have been collected via WP4 – the online registration system once available.

The last section of the questionnaire will be formed of open ended questions requiring brief responses. We will ask teachers to respond in English if possible but teachers may respond to these questions in their own language. We will then translate the responses ourselves drawing on local expertise/native language speakers where possible and using online translation tools otherwise. There is no requirement for NPCs to arrange translation of open responses.

**NPCs are responsible for ensuring that all participating teachers complete the online questionnaire.** Teachers should be encouraged to complete the questionnaire as soon as possible after completing the implementation of the Learning Story. A mechanism will be implemented which will ensure that non-responders can be identified and follow-up requests for completion can be made. This information will be shared with NPCs as appropriate.

The questions below will be presented within Survey Monkey on separate pages to minimise information overload. It will be piloted with at least 5 teachers from at least 3 countries. The final version will be available by the end of September 2011.

**NPCs will need to arrange for the questionnaire to be translated if required.**

It is organised into 3 sections:

- Preparation: training and support provision, use of teacher community
- Implementation: digital tools, teaching practices, individualisation, collaboration, creativity, expressiveness/engagement, learner attitudes, teacher attitudes, attainment
- Future use: changes, issues, benefits, potential, intended future use, dissemination

### 2.1.1 Preparation

How many training session/workshops (run by your National Co-ordinator or ICT co-ordinator) did you attend in preparation for the implementation of the Learning Story?

\_\_\_ out of \_\_\_

Evaluation Criteria	In preparation for implementing the Learning Story ...	SA	A	N	D	SD
1	the training sessions/workshops/resources provided appropriate technical skills to support the implementation of the Learning Story.					
2	the training sessions/workshops/resources introduced me to new pedagogical approaches.					
	the training sessions/workshops/resources introduced me to new ways to use technology to support teaching and learning.					
	the training resources were easy to locate.					
	with no help, I was able to adapt the Learning Story to suit my particular needs.					

Evaluation Criteria	In relation to the online teachers' community...	SA	A	N	D	SD
5	I have been an active and regular user, visiting the community at least once a week.					
	I have found it easy to use.					
	participating has been useful for discovering new ways to use technology to support teaching and learning.					



## 2.1.2 Implementation

### Digital tools

Evaluation Criteria	The digital tools I used when implementing the Learning Story ...	SA	A	N	D	SD
3	were ones I had not used before.					
7e	were essential for the Learning Story implementation.					
7 f	could be replaced by other digital tools.					
	were easy to use.					
	could be replaced with non-digital resources.					
	were powerful tools for supporting teaching and learning.					

### Teaching practices

Evaluation Criteria	The implementation of the Learning Story enabled me to...	SA	A	N	D	SD
8 a	include content not previously introduced.					
8 b	incorporate approaches to teaching that facilitate different approaches to learning.					
8 c	assess students in a new way.					
8 d	create opportunities to learn beyond the boundaries of the classroom.					
	explore different teacher and student roles and relationships.					

### Individualisation

Evaluation Criteria	The implementation of the Learning Story enabled me to adopt teaching strategies to ...	SA	A	N	D	SD
8 c	meet the individual learning needs of my students.					
8 b	track each student's progress.					
8 f I	support students to work independently according to their interests and abilities.					

### Collaboration

Evaluation Criteria	The implementation of the Learning Story resulted in my students...	SA	A	N	D	SD
8 f II	having increased opportunities for collaborative activity.  developing new skills for collaborative work.  using digital tools to support collaborative activities.					

### Creativity

Evaluation Criteria	The implementation of the Learning Story enabled...	SA	A	N	D	SD
8 f III	creative activities to take place.  students to develop their creativity.  me to develop my creativity as a teacher.					

### Expressiveness and engagement with the wider community

Evaluation Criteria	The implementation of the Learning Story enabled my students to...	SA	A	N	D	SD
8 c	express their ideas in new ways using digital tools.					
8 f IV	communicate in new ways with each other.					
8 f V	communicate with me in new ways.					
	communicate in new ways with the wider community (e.g. other teachers, parents, experts).					

### Learner attitudes: motivation and engagement

Evaluation Criteria	The implementation of the Learning Story ...	SA	A	N	D	SD
7a	actively involved students in tasks.					
7c	led to students being immersed in their work (so that they did not notice time passing, for example).					
	has had a positive impact on student attitudes to learning.					

### Teacher attitudes: motivation and engagement

Evaluation Criteria	Because of my experience of the implementation of the Learning Story ...	SA	A	N	D	SD
7a	I will use technology more often in the future.					
7 d	I feel that the investment required was worthwhile.					
8 e	I think that students learned new concepts which would be difficult to teach otherwise.					
	I have become more enthusiastic about my job.					
	I feel that the Learning Story presents exciting opportunities to do things differently in the classroom.					

### Professional development

Evaluation Criteria	The implementation of the Learning Story has led to improvements in ...	SA	A	N	D	SD
1	my skills in the use of digital tools.					
4	my knowledge of the pedagogical use of ICT.					
7 b	my understanding about the potential of integrating ICT in my teaching practice.					
8 e	my understanding about the ways that students can learn.					

### Student attainment

Evaluation Criteria	The implementation of the Learning Story has led to improvements in ...	SA	A	N	D	SD
7 c	my students' levels of attainment (as indicated by my assessment data).					

### 2.1.3 Future use

If I used the same Learning Story again, I would: . . .

The real benefit of the Learning Story is: . . .

If I used the same Learning Story again, I would not: . . .

The main problem with the Learning Story is: . . .

I think that this Learning Story has the potential for innovative practice in the classroom in the future: Yes – Definitely, Yes – Probably, No.

Explain why or why not: . . .

I intend to use the Learning Story again in the future: Yes - Definitely, Yes - Probably, No

I would recommend that this Learning Story should be made widely available to other teachers. Yes – Definitely, Yes – Probably, No

Explain why or why not: . . .

## **2.2 Pro-forma to define local innovative practice**

This is required to provide a baseline of what constitutes innovative practice in each country. NPCs will be asked to provide some contextual information about what constitutes innovative practice with regards to teaching, learning, and technology. This will happen in the first cycle only.

A question for NPCs: What is Innovative Practice in your Country?

In relation to the use of ICTs and learning technologies, "innovative practice" reveals itself in many different ways across our iTEC partner countries. Therefore, in order to capture each country's baseline expectation of "innovative practice" (that includes the use of ICTs/learning technologies), NPCs are required to provide WP5 with up to 1 side of A4 describing what they might expect to see in classrooms where teachers are engaged in "innovative pedagogy" and their learners are engaged in "innovative learning".

This information will be included in each country's section of the Knowledge Map and will provide an important "local baseline" for WP5's evaluation of the pilots.

The two questions NPCs will address, in no more than 150 words each are:

- If you were asked to nominate innovative practitioners who are making exemplary uses of ICT in your country, how would you describe them (what pedagogical aspects and technical aspects do you consider to be innovative)?
- What would be the 3 main criteria you would use to judge whether or not classroom practices with ICT could be considered to be innovative?

In addition NPCs will be asked to select the Learning Stories from Cycle 1 which they consider are the most innovative, taking into account the local context.

The pro-forma will be an electronic document that will be circulated separately.

## 2.3 Guidance for the Collection of Case Study Data by National Pedagogical Co-ordinators

The purpose of the case study data collection is to inform the Case Study Report (CSR).

The purpose of the CSR is to obtain as full and clear a picture as possible about the way a teacher is implementing the Learning Stories.

### 2.3.1 Guidance for the Case Study Teacher's iTEC Multimedia Story

In order to help support case study teachers in their writing of multimedia stories, guidance is presented below as a set of questions and answers. Key points within the sections are highlighted in bold type.

Because this section provides information for case study teachers, these guidance notes are also produced as a separate document located on the Teachers' Community site (see: "Guidance for Case Study Teacher's iTEC Multimedia Story")

#### 2.3.1.1 What is a multimedia story?

There are many definitions of "multimedia story", but for the purposes of this project, **our definition of an iTEC Multimedia Story** (this is quite a lengthy name, so we'll refer to it as an iMmS) is as follows:

- **it is** essentially a story written in simple straight forward language<sup>3</sup> about a teacher's and his/her students' experiences of implementing an ITEC Learning Story.
- **it is** a text-based journal or diary style narrative that is augmented<sup>4</sup> by a selection of any of the following media items:
  - still photographs
  - video clips
  - audio
  - graphics
  - hyperlinks to websites
  - possibly other documents  
(such as hand-outs, lesson plans, work-sheets etc)

---

<sup>3</sup> It is preferable for your iMmS to be written in English for sharing purposes, but if this is difficult, then it can be written in your own language. Remember, though, that it can be more widely shared if written in English.

<sup>4</sup> Media items should support/add to the written narrative.

- possibly diagrams (showing, for example the class's seating arrangements, an outdoor learning area or a plan of the school);
- **it does not** have to include all of the multimedia examples referred to above;
- **it does not** have to include large amounts of written content.

**Note:** **It is essential** that Permissions are sought and granted in accordance with the country's legal requirements before including any images of students, teachers or other persons in the iMmS.

### 2.3.1.2 What are the purposes of an iMmS?

There are two main purposes for the iMmS:

#### 1. to capture your experiences of:

- how you are integrating technologies into your existing pedagogy (teaching practices)

*(think about: what you are doing with the technology in your teaching that you would not/could not have done before).*

- how your teaching practice (pedagogy) is beginning to change or is likely to change over time;

*(think about: all aspects of the way you are implementing the iTEC Learning Story and consider what is having an impact on the way you are teaching and the way your students are learning. Then consider what is likely to have a long-term impact on your teaching and the way your students learn).*

- how the design of Professional Development is (or is not) helping you to adjust your teaching practices;

*(think about: the training, support and development opportunities that are supporting you to use the technology and any new practices you are beginning to employ).*

- the main barriers to and enablers of changes to your practices

*(think about: any problems/barriers that you and/or your students are experiencing/have experienced in implementing the Learning Stories and also consider what has been useful and has really helped you and/or your students to engage positively in new ways of working)*

#### 2. to share with other teachers (on the iTEC Teacher Community site) your iTEC experiences

*(think about: you being able to get ideas from other teachers as well as them being able to benefit from your experiences; ie the mutual benefit of sharing your stories. All completed iMmS will be kept in a searchable iMmS Repository (see 2.3.6: "How do I share my story?").*



### **2.3.1.3 Who should write an iMmS?**

- **All case study teachers** are required to write an iMmS.
- **Other iTEC teachers** can write an iMmS if they wish, but it should be noted that:
  - a. taking on this additional work load will be the teacher's own **personal undertaking**;
  - b. there will be **no extra time allowance** to support this activity;
  - c. anyone choosing to contribute their own iMmS must **keep to these guidelines**.

### **2.3.1.4 How do I structure my iMmS?**

- You can choose to structure your iMmS in one of two ways:
  - 1. Chronologically
  - 2. Thematically

It is preferable to keep to just one of the two structures for the whole of your story.

1. You can choose to present your story **chronologically** covering a variety of experiences as they occur in your iTEC lessons (such as, for example: describing the most exciting/surprising/disappointing/groundbreaking aspects of a lesson with some attempts to explain the reasons behind the selected elements of the lesson).

This is very much like writing an on-going diary and therefore, this style of story is referred to as an **iMmS diary**.

An extract from an **iMmS diary** is provided below.  
(See section 3.1.5 for what to include in **your iMmS**)

---

**Extract from an iMmS DIARY (the embedded links are shown in brackets and are described below because they are not “live” in this extract; the information included at the end (i.e.: KEY and NOTE) do NOT appear in the iMmS:**

---

(start of extract)

**September 25<sup>th</sup> (iTEC Lesson 3 of 6)**

(a) “The students (1) that were talking to our remote guest “expert” (Dr X) (2) through the interactive whiteboard (3), spent too long being shy and quiet at the beginning of their virtual meeting and this meant that they didn’t have time to cover all the questions (4) they had collected from their classmates. I hadn’t considered this “time issue” and will need to alert my students to this possible problem when they have their next virtual meeting with a guest expert. However, the students actually solved the problem themselves this time by asking Dr X if they could send her the questions via email and if she could recommend any reliable websites to help them continue with their search for information . . . if I’d asked them to do this, they would have had a good moan and thought of it as a bit of an imposition, but they were so enthusiastic about setting this up themselves. (5).” (b)

**Key Words/phrases/Tags:** collaborative learning; student attitude/motivation; external expert. (end of extract)

- 
- KEY:**
- 1 link through to **photo** of group sitting round the IWB talking to Dr X;
  - 2 link to **website** about Dr X;
  - 3 link to **hand-drawn diagram** showing where student groups were located in classroom and very brief notes included on diagram about what tasks they were undertaking;
  - 4 link to **document** (copy of the questions);
  - 5 link to **audio clip** of students’ reactions after the meeting.
- NOTE:**
- 1 This teacher always includes a link to her lesson plan at the beginning of an entry (a) and a link to her Lesson Evaluation at the end (b).
  - 2 The entry presented above is the full entry for 25<sup>th</sup> Sept.
- 

2. You can choose to present your story **thematically** presenting focused information and reflections on specific elements of teaching and learning with the Learning Story (there may be sections on, for example: “using the technology”, “some changes in my teaching/planning”, “the limitations of my classroom”, “the way I implemented the Learning Story”, “my students’ responses to the technology/to the Learning Story” etc). Writing thematically means that rather than writing a chronological narrative, you are choosing to navigate through various key elements of your story capturing media items and making brief notes related to your chosen themes throughout all your iTEC lessons. At the end of your Learning Story implementation, you then construct your iMmS with a separate chapter/section for each of your themes.

This is like writing a journal and therefore, this style of story is referred to as an **iMmS journal**.

An extract from an **iMmS journal** is provided below.  
(See section 2.4.5 for what to include in **your iMmS**)

---

*Extract from an iMmS journal (the embedded links are shown in brackets and are described below because they are not “live” in this extract; the information included at the end (ie: KEY and NOTE) would NOT appear in the iMmS:*

(start of extract)      **Assessment and Individualisation (1 of 3 entries for Assessment)**

“The students are benefiting so much from our use of the Learner Response Devices (LRDs) (1) since we started using the self-paced software (2). They found it much more interesting to use the LRDs once they could answer questions at their own pace (3) and they appreciated my interventions when I could see on my laptop that they were struggling with certain questions (4). After one particular lesson (5), my students and I reviewed our use of the LRDs and our review is captured in my lesson evaluation (6). I feel as though I am actually beginning to see how I can use assessment for individualised learning.”

Key Words/phrases/Tags: assessment; individualisation; learner response devices; self-paced assessment (end of extract)

---

**KEY:**      1: link through to **video clip on website** that shows the LRD and how it works;  
               2: link to **website** the self-paced software;  
               3: link to **photograph** showing students using the LRDs in class;  
               4: link to **audio clip** of brief discussion between teacher and student about a problem;  
               5: link to **lesson plan**;  
               6: link to **lesson evaluation**.

**NOTE:**      The entry presented above is the first of 3 entries about Assessment.

---

### 2.3.1.5 What should I include in my multimedia story?



Before you write anything in your story, re-visit the purposes of the iMmS and let these serve as a broad guide for the content of your story whether it is presented as an iMmS diary or an iMmS journal. Refer back to these frequently when writing as they will help to keep your story focused.



#### ➤ All diaries and journals will need:

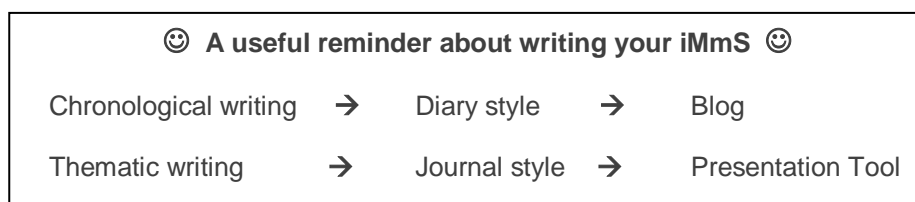
1. a **context** which provides the following details:
  - The age of your students and the number in your class;
  - The subject/topic you are teaching
  - The Learning Story that you are implementing

**Note:** This contextual information should be included at the beginning of your story whether you are writing a diary or a journal.
2. to include brief information about your iTEC experiences **before you start to implement the Learning Story** (e.g.: how were you introduced to your Learning Story? what training were you given? what went well?/what didn't go so well? . . . and reasons why);
  - Diary writers:            include **one brief** pre-implementation entry
  - Journal writers:        include **one slide** that captures your pre-implementation experiences.

3. to include entries about your implementation of the Learning Stories with your students (see below);
  4. **Key Words** to help make the iMmS stories “searchable” and easier to share. Key Words relate to the purposes of the iMmS and teachers will select their Key Words from “drop-boxes” or will create “tags” when submitting their stories on the Teachers’ Community site.
    - **Diary writers:** select Key Words or create Tags every time they blog (i.e. each time they make a diary “entry”)
    - **Journal writers:** select Key Words or create Tags when they upload their completed journal.
- If you choose to write an **iMmS diary**, select the most interesting points (remembering the **purposes** of your story) that you would like to share **from each iTEC lesson** and briefly tell your story deciding where you might include the media items you have captured in your lessons or whilst planning them.
- If you choose to write an **iMmS journal**, you will need to **decide, right at the beginning of your teaching with the iTEC Learning Story**, what your themes are going to be (e.g.: changes in your practice, your students’ learning, assessment, individualisation, collaborative learning, learning space/s, involvement of others beyond the classroom etc). Keeping the main iMmS’ **purposes** in mind, you will need to **choose 3/4 themes (preferably 3)**.
- Whichever style you choose, it will be helpful to include links to **lesson plans and evaluations** where you feel these will support your story or even tell a large part of the story for you and this will help to save you some time by avoiding too much narrative! Another way of including lesson evaluation may be, for example, an extract from an audio recording of your students reviewing a lesson. This is not only a demonstration of interesting practice, but (with their permissions of course!) a clip of the recording would also be a rich source of feedback/information that you can include in your story.
- Whichever style you choose, you will need to remember:
- to **plan for capturing/recording the media items** (photographs, audio/visual recordings, graphics, screenshots etc) throughout your iTEC lessons;
  - to **collect any pieces of student work** that you would like to share in your iMmS.
  - to make sure you **know how to use your recording equipment** and **check that the equipment works** (e.g.: think batteries!)
  - to ensure you have appropriate **permissions** to capture and make use of photographs, audio and visual recordings

### 2.3.1.6 How do I share my story?

- It is advisable to use a **presentation tool** (eg PowerPoint, Prezzi, Penzu: [www.penzu.com](http://www.penzu.com), LDS journal: [www.ldsjournal.com](http://www.ldsjournal.com), loggel: [www.loggel.com](http://www.loggel.com)) **for Journal writing** and to **write your Diary as a Blog**:
- **Presentation tool and Journal writing:**
  - You can tell your story and embed all your media items in the slides (eg 2/3 slides for each theme/chapter of your journal) and of course you can use the “Notes” facility if you need to explain some of the story in a little more detail.
  - A completed Journal should not have more than 12 slides (plus notes).
  - You will be required to provide your Key Words/Tags before uploading your iMmS
  - Instructions about selecting your key words and uploading your Journal will be provided on the Teachers’ Community site.
- **Blogs and Diary writing:**
  - You can start your Blog in the dedicated iMmS area of the Teachers’ Community.
  - You will find all the instructions about starting your Blog and how to upload your media items in this area.
  - You will be required to provide your Key Words for each entry you make on the Blog (i.e. each diary entry).
  - Instructions about selecting your key words will be found on the Blogging area of the Teachers’ Community site.
- All iMmS will be kept in a dedicated area on the Teacher Community website. All iTEC teachers and project partners will have access to this area and there will be instructions about how to search the iMmS.
- Please note that Tutorials about how to upload and share your Diary blog or your Journal presentation can be found on the Teachers’ Community site (available from mid-July).



### 2.3.1.7 What about time and effort involved in writing the iMmS?

- You should start your iMmS as soon as you become involved in iTEC and some of your story should refer to your introduction to the project and the Learning Story.

- Your iMmS should be completed when the Learning Story implementation ends.
- Remember that media such as photographs, video clips, text, diagrams and voice (as appropriate and depending on local availability of suitable technologies) can capture processes, practice and interesting situations in ways which are not as time-consuming as writing narrative.
- You do not need to spend time making iMmS into polished pieces – rather they will be collections of media and **brief narrative reflections** that document your experiences (either in diary or journal style) of the different stages of the implementation process.
- We estimate that completing an iMmS might involve 2-3 hours work over a four month period (for example, spending 15-20 minutes at regular intervals documenting the process [for diary and journal writing] in the fastest possible way and in the style that is most appropriate for you, then perhaps 30 minutes when the Learning Story is actually implemented in the classroom).
- The ways you spread and allocate your time is entirely your choice, but try not to exceed 3 hours in total.



**Please remember that the guidelines above are just that: guidelines. The most important things to remember are that you have a story . . . it is a story worth telling and others will benefit from reading it. Good luck with your iTEC multimedia story!**



## **2.3.2 Guidance on the NPC Visit to the Case Study Teacher**

### **2.3.2.1 Introduction**

Work Package 5 acknowledges that, in partnership with us, National Pedagogical Co-ordinators (NPCs) play a vital role in the collection of qualitative data from case study teachers (CSTs) and school-based (S-B) stakeholders in their countries.

This section provides guidance for all NPCs in order to aim for a consistent approach to the data collection activities across the iTEC partner countries.

Because consistency across the countries is highly desirable, it is important that the data collection protocols described in this document are, within the bounds of local political and cultural contexts, adhered to where possible.

- This section of the document is presented as a set of guidance notes (addressed to the NPC), questions (that an NPC might ask) and answers that explain the data collection protocols.
- In each Cycle, when you visit each of your three case study teachers, you will be carrying out the following activities:
  - one observation of one iTEC lesson being taught by the case study teacher;
  - four interviews:
    - the case study teacher whose lesson you observed
    - a small group of students who participated in the observed lesson
    - the Head Teacher (HT)
    - the ICT Co-ordinator (ICTC)
  - Collection of case study teacher's documentation
- The field notes, recordings and documents you collect from the above activities provide all the information you need to help you write each of the required Case Study Reports (CSRs). You will be provided with a CSR pro forma to help you structure your report (to be provided separately).

### 2.3.2.2 What do I need to do before my visit to the Case Study Teacher?

- **2/3 weeks before your intended visit to your case study teacher and his/her school, communicate (letter, email or phone call) with the Head Teacher<sup>5</sup>:**
  - seek permission to carry out the iTEC Evaluation activities;
 

explain that the purpose of your visit is **research focused** and that you are **not there in any way to assess** the school, the case study teacher, or any other S-B stakeholder;

suggest a date for your visit. You will **need a whole day** if there is only **one case study teacher at the** school; two days if there is more than one in a school (see Notes 3-5 below).
  - request that a schedule (see Notes 1-2 below) **be prepared** and rooms **allocated to accommodate:**
    - **observation** of the case study teacher's iTEC lesson (preferably the whole lesson);

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<sup>5</sup> It is assumed that the Head Teacher will be required to give permission for iTEC activities to take place in your schools, but if this is not the case and the you (NPC) are working directly with the case study teacher/s, then this letter will need to be sent to the case study teacher.

- four interviews (each 20/30 minutes) with:
  - the observed case study teacher;
  - a group of students from the observed lesson;
  - the school-based ICT Co-ordinator (if there is one who is involved in iTEC);
  - the Head Teacher.

(Include/attach copies of the interview questions in your communication)

**Notes for your attention**

- 1:** The **schedule needs to be sent to you at least one week before your visit** in case you need to suggest any changes.
- 2:** Your **schedule** will need to include:
  - times/locations for your observation and your interviews;
  - time (on arrival preferably, but may be spread throughout your day) for introductions to S-B stakeholders (though, of course, you may already know them) and for “settling into the school” for the day (ie knowing where to find the classroom, the interview rooms, where to have lunch etc);
  - include a little time in the CST’s classroom before the observed lesson takes place, so that you can set up any recording equipment you may be using and you can work out (with the CST) the best place to locate yourself for observing the lesson (see Observation Guidance below).
- 3:** The **teacher** and **student** interviews need to take place as a “**suite of activities**” (ie undertaken together with the interviews being carried out as soon as possible after the lesson observation).
- 4:** The **Head Teacher** and **ICT Co-ordinator** interviews **can be fitted in** around the “suite of activities”.
- 5:** Where **the case study teacher is also the ICT Co-ordinator**, then this person will be required to undertake **two interviews** (or extra time can be added to the end of the “teacher” interview). Also note, that if time does not permit the teacher with a dual role to undertake two interviews, the “teacher” interview must take precedence.

- explain whether or not you are intending to video record or take photographs of teachers and/or students in the lesson you will be observing (see Note 6 below) as **permissions for these need to be agreed before your visit**.

**Note for your attention**

- 6:** You are not required to video record or take photographs of the lesson, but you may choose to do either (or both) of these for the purposes of recall when you are writing your Case Study Report.

- **2/3 weeks before your visit, write a similar letter to the CST** or copy him/her into the Head Teacher’s letter<sup>6</sup> (being guided by whichever is most appropriate and acceptable in your country; also see Footnote 6 above) that includes everything in the Head Teacher’s letter as well as informing the CST that:
  - as part of your data collection requirement, you will need to collect, **on the day of your visit**, all iTEC lesson plans, evaluations and resources that

<sup>6</sup> It does not matter if you write separate letters or a combined letter as long as the HT and the CST are clear about the requirements and the activities that need to be scheduled.



have been completed prior to the lesson you will be observing (i.e. for previous, related lessons).

- 2/3 days before your visit, you will need to have a copy of the lesson plan for the lesson you will be observing. It is difficult to read this whilst you are beginning your observation. However, if sight of this before your visit proves to be impossible, then at least try to read through the aims and the objectives of the lesson before the lesson starts.
- you will be contacting the CST and/or school again 2/3 days before your visit to ensure that everything is in place for your visit.

➤ **1/2 weeks before your visit:**

- read through and familiarise yourself with the interview questions;
- decide on how you will capture your observations of the iTEC lesson:
  - Video recording
    - This is not a requirement, but you might choose to seek permissions so that you have a visual prompt when you are writing your Case study Report;
    - It would also be beneficial for dissemination purposes to have video recordings or photographs from at least 2-3 lessons over the course of the iTEC project;
    - You may want to use a tripod; this can help to leave you free to make additional notes.
    - You may want to walk around with the camera, but remember to be the observer rather than an intruder!
    - Even though you may decide to record the lesson, it is advisable to make some notes and to use the areas included on the Observation Note Sheet<sup>7</sup> (see Appendix 2) to guide both your recording and your note-taking.
    - Make a copy of the Observation Note Sheet to take with you on your visit.
    -
  - Field Notes
    - you may chose to use the Observation Note Sheet or simply use the areas included on the sheet to make your own notes.
    - Make a copy of the Observation Note Sheet to take with you on your visit.
- Decide what equipment you will need to take with you for the lesson observation and the interviews. Think:

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<sup>7</sup> As part of your preparation for observing and interviewing, you will need to check the definitions in the Evaluation Plan for: individualisation; collaboration; creativity; expressiveness.

- note book (and a copy of the Observation Note Sheet)
- pens
- camera
- digital video recorder
- digital audio recorder (for the interviews)
- tripod
- batteries/leads/chargers/extension lead/memory stick

(always make sure you are familiar with a piece of equipment if it is something you have newly acquired for the activity).

- **2/3 days before** your visit, contact the teacher in order to:
  - provide assurances to the teacher that your role in his/her classroom is that of **observer and not assessor**;
  - if you have not already received it, request a copy of the lesson plan for the lesson you will be observing; you will need to read it before your visit;
  - check that:
    - everything has been organised for your visit (permissions, schedule, rooms etc);
    - everyone being interviewed has been informed;
    - there are no changes to your schedule (if there are, you will need to request a copy of the new schedule);
    - that you both know your time of arrival;
    - that you know what to do on arrival at the school;
    - that documentation (lesson plans and evaluations related to lessons already taught whilst implementing this Learning Story) will be available

### **2.3.2.3 What do I need to do during my visit to the Case Study Teacher?**

- There should be no need to arrive early as your schedule should include time for introductions to S-B stakeholders (though, of course, you may already know them) and for “settling into the school” for the day.
- Make sure you keep to the arranged schedule and avoid any time slippage.
- Your scheduled activities will include one CST lesson observation followed by the CST interview and the student interview; the ICTC and the HT interviews will fit around this “suite of activities”.
- Remember to collect all relevant documentation before you leave.

### **2.3.2.3.1 Lesson Observation Guidance**

- The purpose of the Lesson Observation is to provide an opportunity for the NPC to share real-time experience of the way teachers and students are making use of and responding to the iTEC Learning Stories and the learning technologies.
- The observation of the lesson provides the NPC with a context for the Teacher and Student Interviews that follow the observed lesson.
- Before a lesson starts, you will need to:
  - check with the teacher how s/he prefers you to observe. Some will like to “place” you where it feels best for them whilst others will be happy for you to move around the class. However, it is up to you to ensure that you are observing the lesson in a way which is not intrusive;
  - provide further assurances, if necessary, to the teacher being observed that you are focused on collecting data for research and that you are not there in any kind of judgemental capacity. Remember that even the most confident teachers can feel nervous when being observed and trying something new;
  - decide (if you have agreed with the teacher that you will record the lesson) where it is best to place your video recorder and/or tripod (think batteries and/or sockets . . . you may need an extension lead!);
  - check that permissions are in place for all the children in the class if you are recording.
- During the lesson, you will need make notes (even if you are recording the lesson, it is helpful to make brief notes) that focus on the following questions:
  - How is the teacher addressing<sup>7</sup>:
    - Individualisation;
    - collaboration;
    - creativity;
    - expressiveness;
  - How is the teacher integrating innovative technological tools within their pedagogy?
  - What is innovative about the way the teacher is teaching?
  - How are the students responding to the Learning Activities?
  - Is the classroom setting appropriate for implementing this Learning Story? How?
  - Is there teacher/student engagement with others beyond the classroom? Who? How?
- An Observation Note Sheet is offered as a recording tool (see Appendix 2). Use of this is optional.

**2.3.2.3.2 Interview Guidance (General)**

- The guidance offered to NPCs in this section applies to all the interviews (Teacher, Student Group, ICTC, HT).
- Information specific to particular interviews can be found at the beginning of the relevant interview schedule below.
- Remember that ‘Learning Story’ refers to the more concrete examples derived from the educational scenarios and provided by WP3.
- Remember that ‘Learning Activity’ is the implementation of a Learning Story by a teacher. The implementation may well include a series of Learning Activities rather than a single Learning Activity.
- **When conducting any of the interviews**, please note the following:
  - Depending on national/local policies you may need to obtain interviewees informed consent to participate in the evaluation. Exemplar consent forms can be provided by WP5 on request.
  - The interview should take no more than 30 minutes.
  - Ensure that the interview finishes on time, but try to avoid “clock watching” as this can be very off-putting for those being interviewed.
  - To help with the writing of their Case Study Report (CSR), NPCs should audio record their interviews (check that you have consent).
  - Field notes:
    - these are useful aide memoires even if the interview is recorded, but field notes are essential if the interview is not recorded (ie if consent to record is not given).
    - there are many ways to record field notes, but basically, they should be key points recorded against the question being asked.
    - if the NPC is relying on field notes and does not have any interview recording, it is important to write fuller notes as soon after the interview as possible; the longer the time gap, the less information is retrieved. It is also important to make a careful note during the interview of verbatim quotations which seem to be very important. That is, to record exactly what someone says and make sure that the field notes clearly indicate that this is a quotation.
  - Those being interviewed need to be assured of confidentiality and need to be put at their ease. Because there is a lot to cover, it would be helpful if casual/friendly chat/discussion takes place before the time allocated to the interview.

- Try to keep to the specified questions, but let them be a guide rather than a script.
- Sometimes you will need to 'probe' for more detail. To do this, you will use phrases/questions such as:
  - "Can you give me a little more information about that?"
  - "Can you think of an example to illustrate the point you are making?"
  - "Can you provide me with a little more detail?"
- You may find that a particular question may not be applicable in a particular interview or has already been covered within a response to a previous question. It is all right to miss out those questions that do not apply.
- Sometimes it is possible to combine questions (see for example questions 3.7.2.4 and 3.7.2.4 in the Teacher's Interview).

#### **2.3.2.3.3 Document Collection**

- Documents that are created to support the implementation of the Learning Stories will be collected by the NPC and used to support and inform the writing of their CSR. These might include:
  - Lesson Plans
  - Lesson Evaluations
  - Resources that have been used by the teacher or the students

#### **2.3.2.4 What do I need to do after my visit to the Case Study Teacher?**

- Let WP5 know that your visit has taken place and that you are ready to make arrangements for your on-line interview (see NPC Interview below).

**WP5 contact details:**

Maureen Haldane: [m.j.haldane@mmu.ac.uk](mailto:m.j.haldane@mmu.ac.uk);  
 Cathy Lewin: [c.lewin@mmu.ac.uk](mailto:c.lewin@mmu.ac.uk)

- Write your Case Study Report (in English) as soon after your visit as possible and send to WP5.
- An electronic CSR pro forma will be provided for you separately to this document.
- In Cycles 3, 4 and 5 you will be required to select one Case Study and all the data collected will for that case study needs to be transcribed and translated before sending to WP5. Dates for submission of each Cycle will be negotiated

### 2.3.3 Teacher Interview: Guidance and Schedule

- The teacher to be interviewed is the teacher who was observed.
- The teacher interviews take place as soon after the observed lesson as possible.
- To help with the writing of their Case Study Report (CSR), NPCs should audio record their interviews (where consent is given).
- The interview questions focus on the impact of the technology/Learning Story on teaching practices, learner attitude and attainment, engagement with **stakeholders**, individualisation, social/collaborative elements of learning, creativity, expressiveness, the overall transformative effect and implications for the design of the future classroom. Refer back to these and use them to help focus and contextualise your questioning.
- Remember that it is all right to miss out those questions that do not apply and that sometimes it is possible to combine questions (eg: 3.7.2.4 and 5).
- You may wish to ask about specific things that you saw in the lesson and these should be accounted for in the timing of your interview.
- Try to make sure you spend approx 0.25% of your time on the first 3 questions and approximately 0.75% of your time on the 'Learning Story' questions.
- See also 3.2.3.2 above for more general interview guidance.

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#### 2.3.3.1 Training

1. How did the training help you overall? (e.g.: the training resources/support materials that were used)
2. With hindsight, what else could have been included in the training?
3. What kinds of activities have you undertaken in the iTEC Teacher Community? How has the Teacher Community helped you to change your practice? Can you give us an example?

#### 2.3.3.2 Learning Stories

4. How does the lesson I have just observed fit with the implementation of the Learning Story overall? (One of a series of lessons? A single lesson?)
5. Have you needed to make any changes to the Learning Story? What changes have you made (so far)? Why?

6. How successful has the Learning Story been (to date)? In what ways? Why? What factors have contributed to the success (so far)?
7. How, if at all, has your involvement changed your pedagogical approach? (Think about: roles, assessment, individualisation, collaboration, creativity, expressiveness/communication, engagement with a wider range of stakeholders)
8. Have there been any other changes or unexpected outcomes as a result of your involvement in the project?
9. What challenges have you faced (so far) in implementing the Learning Story? Were there any challenges in relation to the organisation of the school or the design of the classroom? How did you overcome the challenges?
10. What kind of support have you received in this process? From whom? How was this helpful? What additional support might have been beneficial?
11. How has the Learning Story fitted the needs of the curriculum? In what ways, if any, has your planning changed in order to accommodate the Learning Story?
12. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?

### **2.3.4 Head Teacher Interview: Guidance and Schedule**

- The interviews with Head Teachers should be audio recorded (where consent is given).
- These interviews will capture qualitative data on the change management process and will facilitate the generation of lessons learned and key success factors in implementing the Learning Stories.
- Be conscious of the time element in these questions i.e. Q7 the HT might be encouraged to consider future implications.
- See also 3.2.3.2 above for more general interview guidance.

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#### **2.3.4.1 Learning Stories**

1. How does the Learning Story fit with the school vision/strategy/pedagogical and/or curriculum planning? Will your experience lead to any changes in the future?
2. How does the Learning Story fit with the current school culture and practices? What changes have occurred through the implementation of Learning Stories?
3. To what extent does the Learning Story meet the curriculum needs?

4. What challenges have you faced/are you facing in resourcing the technical requirements for the Learning Story? How have you overcome/are you overcoming these challenges?
5. Is the implementation of the Learning Story impacting on teaching practices? If yes, how? Can you give an example?
6. Is the implementation of the Learning Story impacting on teacher attitude? If yes, how? Can you give an example?
7. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?
8. Would you support the continued use of the Learning Story in your school? What will you put in place to ensure that this happens? What impact would this have in terms of your management and leadership of the school? Are there any external factors affecting the continuing use of the Learning Story in your school?

### **2.3.5 ICT Co-ordinator Interview: Guidance and Schedule**

- The ICTC interview should be audio recorded (where consent is given).
- These interviews will capture qualitative data on the change management process and will facilitate the generation of lessons learned and key success factors in implementing the Learning Stories.
- Some ICTCs will play a more active role in supporting teaching and learning in their schools than others and therefore for some, certain questions will be inappropriate. It is all right to leave such questions unanswered.
- See also 3.2.3.2 above for more general interview guidance.

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#### **2.3.5.1 Training**

1. What do you think about the technical training?
2. What do you think about the pedagogical training?
3. How did the training help your teachers overall?
4. With hindsight what else should have been included in the training?
5. What additional training and/or support did you offer your teachers? What worked well? What would you do differently next time?

#### **2.3.5.2 Learning Stories**

6. How did the Learning Story fit with the school ICT strategy/plans?



7. Did you need make any changes in the Learning Story? What changes did you make? Why?
8. How successful was the Learning Story? Why? What factors contributed to the success?
9. What challenges did you face in resourcing the technical requirements for the Learning Story? How did you overcome these challenges?
10. What other challenges did you face and how were they overcome?
11. Has the Learning Story implementation impacted on teaching practices? If yes, how? Can you give an example?
12. Has the Learning Story implementation impacted on teacher attitude? If yes, how? Can you give an example?
13. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?
14. How innovative was the Learning Story in relation to current practices at your school?
15. Will your involvement lead to any changes in your future planning?

### **2.3.6 Student Group Interview: Guidance and Schedule**

- Interviews with a small group of students (6-8) selected by the teacher should be audio recorded. Assure them of confidentiality.
- Consent will have been obtained as appropriate and in line with national/school protocols.
- It is preferable to interview the students without their teacher, but check that this is in line with national/school protocols.
- Spend a few minutes introducing yourself and decide how you will remember and record their names (small name cards might be helpful).
- Remind the students to talk one at a time otherwise it will be difficult to make sense of the audio recording.
- When writing the case study report it will be necessary to identify the gender of students if you present verbatim comments so you will need to ensure that you can put the names of students to the contributions made during the interview.
- Use the interview questions to allow short focused discussions to take place.
- Try to encourage all students to contribute.
- See also 3.2.3.2 above for more general interview guidance.

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### **2.3.6.1 Learning Stories**

1. What are the differences and similarities between the lesson I have just observed and any related previous lessons and the kinds of activities you usually engage in at your school?
2. What do you think about technologies used in these lessons? How do they compare with the technologies you use outside school?
3. How did you learn how to use the use these technologies? Were there any difficulties at all?
4. What have been the main challenges for you in these lessons? Have there been any particular challenges in relation to how you were learning? If so, how did you overcome these challenges?
5. How did you feel in these lessons? What did you like most? Why? What, if at all, did you not like? Why? Would you like to do more learning in this way? Why/why not?

### **2.3.7 Pro-forma for Case Study Report**

This will be provided as a separate electronic pro forma. All reports must be in English. There will be two sections. In the first section you will be asked to provide short responses to a number of questions, ensuring that the same information is provided by all NPCs. In the second section you will be asked to write a short narrative, using all data collected. There will be some sub-headings to provide structure for you. We do not expect the narrative sections of the case study report to be any longer than 3 sides of A4. However, it is perfectly acceptable for you to write a report which is longer. Sometimes it is easier to write as much as necessary and not to worry about the length.

#### **Key pointers**

- Listen again to any audio recordings and make more detailed notes about the interviews. We do not feel it is necessary to transcribe interview data (it will take at least 5 hours per hour of audio recording to do this) except for the cases in cycles 2-5 for which you will send the data to WP5 rather than provide a case study report. However by listening back you will be able to capture further key points which you may have missed during the actual interview and to record verbatim quotations which you feel are important and that you may use in the CSR.

- Read through your field notes and all the other documentation provided by the teacher. You may wish to make further notes during this process.
- Use verbatim quotations (what the interviewee actually said, in their own words) to illustrate key points. In this way the narrative is presented in the stakeholders own words. Verbatim quotations should be presented in quotation marks, with the source of the quotation identified clearly (ie student, CST, HT etc).
- Be careful to distinguish between what actually happened (in the observation, from the interviewees responses) and what the stakeholders would have liked to have happened or might try in the future.
- Any claims made such as assertions about impact on learning should be evidenced by giving a justification or clear example of how the impact manifested itself (ie support for the claim being made). Using more than one source of data (your own observation, what the students said etc) will help to justify the teacher's claims.

### **2.3.8 National Pedagogical Co-ordinator Interview Schedule**

- WP5 will carry out online interviews with all NPCs (including Associate Partner NPCs) during the fourth month of each large-scale pilot cycle.
- Interviews will last for approximately one hour.
- The questions to be asked of NPCs, presented below, are organised in 2 columns. This is to show that, although WP4 will be asking the questions in the left-hand column, WP5 also needs to have the responses to these questions. NPCs will only be asked these questions once as WP4 and WP5 will liaise in order to share NPCs' answers.
- NPCs will probably like to prepare for their interview by reading through the questions and making notes prior to the interview event.
- WP5 will liaise with NPCs to arrange the interview date and the format of the interview (eg: Flash Meeting, WebEx etc).

WP4 NPC Questions	WP5 NPC Questions
<b>A) Selection</b>	
<p><b>1. Learning Stories</b></p> <ul style="list-style-type: none"> <li>a. How did you choose the Learning Stories for your country?</li> <li>b. How many Learning Stories did you choose for Cycle One?</li> <li>c. To what extent did you allow teachers and/or students to help with this initial selection of Learning Stories and how were they involved in the process?</li> <li>d. If there needed to be any “localisation” of your chosen Learning Stories, please briefly describe: <ul style="list-style-type: none"> <li>i. why there was a need to “localise”;</li> <li>ii. the “localisation” process;</li> <li>iii. the support you received to help you “localise”;</li> <li>iv. who provided the support to help you “localise”.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>e. Reflecting on the Learning Story selection process: <ul style="list-style-type: none"> <li>i. Which aspects of the Learning Story selection process were successful?</li> <li>ii. What challenges, if any, did you face in the Learning Story selection process?</li> <li>iii. How could the Learning Story selection process have been improved?</li> <li>iv. Is there anything you would definitely <b>do again</b> and why?</li> <li>v. Is there anything you would definitely <b>not do again</b> and why?</li> <li>vi. Main lessons learned?</li> </ul> </li> <li>f. <i>(Repeat e. above in the context of “localisation” if appropriate)</i></li> </ul>
<p><b>2. Schools, iTEC Co-ordinators, Teachers and classes</b></p> <ul style="list-style-type: none"> <li>a. How many iTEC teachers and schools have taken part in Cycle One?</li> <li>b. How did you select the following (and who was involved in selecting them): <ul style="list-style-type: none"> <li>i. iTEC schools?</li> <li>ii. school-based iTEC coordinators?</li> <li>iii. iTEC teachers?</li> <li>iv. classes?</li> </ul> </li> <li>c. How did you select your case study teachers?</li> </ul>	<ul style="list-style-type: none"> <li>d. Reflecting on the process for selecting schools, iTEC Co-ordinators, teachers, classes and case study teachers: <ul style="list-style-type: none"> <li>i. Which aspects of the selection process were successful?</li> <li>ii. What challenges, if any, did you face in the selection process?</li> <li>iii. How could the process for selecting schools, iTEC Co-ordinators, teachers, classes and case study teachers be improved?</li> <li>iv. Is there anything you would definitely <b>do again</b> in Cycle Two and why?</li> <li>v. Is there anything you would definitely <b>not do again</b> in Cycle Two and why?</li> <li>vi. Main lesson learned?</li> </ul> </li> </ul>
<b>B) Preparation and Training</b>	

<p><b>1. iTEC Teachers and other Stakeholders</b></p> <p><b>a.</b> How were your iTEC teachers prepared and trained in order to help them understand:</p> <ul style="list-style-type: none"> <li>i. the iTEC project (including its aims, objectives and structure) and their role within it?</li> <li>ii. the Learning Stories (including the purpose and intended function of them) and their relationship with them?</li> <li>iii. the technology required for the Learning Story with which they would be working?</li> <li>iv. their online community and support facilities.</li> </ul> <p><b>b.</b> Did you prepare and train any of the following and if you did, please say how:</p> <ul style="list-style-type: none"> <li>i. Head Teachers</li> <li>ii. ICT Co-ordinators</li> <li>iii. school-based iTEC Co-ordinators</li> <li>iv. students</li> <li>v. parents/carers</li> <li>vi. What additional training/support was provided for case study teachers, their school-based iTEC Co-ordinators, their ICT co-ordinators and their Head Teachers?</li> </ul>	<p><b>c.</b> Reflecting on the process for preparing and training iTEC teachers, case study teachers and their school-based iTEC colleagues and any other stakeholders:</p> <ul style="list-style-type: none"> <li>i. Which aspects of the preparation and training process were successful?</li> <li>ii. What challenges, if any, did you face in the preparation and training process?</li> <li>i. What, if any, were the main enablers?</li> <li>ii. How could the process for preparation and training be improved?</li> <li>iii. Is there anything you would definitely <b>do again</b> and why?</li> <li>iv. Is there anything you would definitely <b>not do again</b> and why?</li> <li>v. Main lessons learned?</li> </ul>
<p><b>C) The Learning Stories and teachers in action</b></p>	
<p><b>1. iTEC Schools and Teachers (20mins)</b></p> <p><b>a.</b> What systems/processes have you set in place to</p>	<p><b>b.</b> Reflecting on the overall management of ITEC in your country and the implementation of the chosen Learning Stories:</p>

manage the project and to communicate with your iTEC schools and teachers in order to acquire feed-back from them whilst iTEC teachers are engaged in an iTEC Cycle?

- i. Which aspects of your management of the iTEC project in your country have been successful?
- ii. What challenges, if any, have you faced in the management of the iTEC project in your country?
- iii. Which aspects of the Learning Story implementation in your country have been successful?
- iv. What challenges, if any, have your teachers faced in the Learning Story implementation?
- v. What, if any, have been the main enablers overall?
- vi. What/Where/How could key improvements be made?
- vii. Is there anything you would definitely **do again** in Cycle Two and why?
- viii. Is there anything you would definitely **not do again** in Cycle Two and why?
- ix. Main lessons learned?

## APPENDIX 1: WP5: AGREED DEFINITIONS AND DESCRIPTIONS

WP5 is required

“to evaluate the impact of the Learning Stories in each cycle on: teaching practices; engagement with all stakeholders; individualisation; collaboration; creativity; expressiveness; overall transformative effect and the design of the future classroom, including underlying change processes.”

In order to ensure that all partners have a shared and common understanding of these elements, we asked iTEC partners to contribute to our thinking around the terms and phrases presented below. We have discussed all the contributions and considered authoritative sources provided by partners as well as others that we have identified ourselves.

The descriptions and definitions below are working definitions for WP5. They will serve to guide and inform our evaluation and we would like to thank all those who so kindly made such valuable contributions to our thinking.

Term/Phrase	Working Definition	Sources/References
1) “teaching practices”	The processes, procedures, strategies and methodologies used by a teacher when planning lessons, teaching students and reviewing/evaluating.	



<p>2) “stakeholders”</p>	<p>There are two groups of “stakeholders” that we refer to in our Research Questions (see: section 2.1). We differentiate the two groups in the following way:</p> <p style="text-align: center;">1. <i>“What are <b>stakeholder</b> perceptions of the impact of Learning Stories on . . . “</i></p> <p>These are “<b>School-based stakeholders</b>”, ie: Students, Teachers, ICT Co-ordinators (where appropriate), Head Teachers.</p> <p>We refer to this group of stakeholders as “<b>S-B stakeholders</b>”.</p> <p style="text-align: center;">2. <i>“Teaching practices including . . . Engagement with a wider range of <b>stakeholders</b>”</i></p> <p>These are “<b>Learning Story-specific stakeholders</b>” with whom a teacher may engage whilst teaching with a particular Learning Story and with whom the teacher would not usually engage. These may include, for example, parents, members of the community, local/national/international subject experts and/or professionals, students from other countries etc.</p> <p>We refer to this group of stakeholders as “<b>LS-S stakeholders</b>”.</p>	
<p>3) “individualisation”</p>	<p>We are aware that individualisation and personalisation are concepts which are defined in various ways. In some cases, they are used interchangeably. We have adopted “individualisation” as it was originally specified in the call documentation (rather than “personalisation”). However, where personalisation is used specifically (for example, in literature referred to in the Knowledge Map) we will use it rather than</p>	<p>Campbell, R.J., Robinson, W., Neelands, J., Hewston, R. and Mazzoli, L. (2007). Personalised learning: Ambiguities in theory and practice. <i>British Journal of Educational Studies</i>, 55(2), 135--154.</p> <p>Department for Education and Skills (2007).</p>

	<p>“individualisation”.</p> <p>“Individualisation” requires intentional teacher consideration of and provision for the learning needs of individuals within a group or class of students. It is not about letting students work and/or learn alone.</p> <p>“Individualisation” includes elements of “personalisation” in that it . . .</p> <p>“has an emphasis on:</p> <ul style="list-style-type: none"> <li>• identifying what individuals already know, what they need to do to improve and how best they can do so.</li> <li>• . . . developing effective teaching and learning skills through a range of whole class, group and individual teaching, improving learning and ICT strategies so as to best transmit knowledge, to instil key learning skills and to accommodate different paces of learning.” (DfES, 2007)</li> </ul> <p>“Personalisation” was introduced into educational policy by the New Labour Government in the UK in 2004, influencing its use in a European setting (OECD, 2006) and Australia. However, it has been conceptualised and interpreted in different ways both in academic and government literatures (Campbell et al, 2007). Miliband (2006) identified five components of personalised learning: using assessment for learning (ensuring children understand how they are doing and how they can improve), providing teaching and learning strategies that build on individual needs, enhancing curriculum choice, facilitating a radical approach to school organisation, and greater involvement of the wider community.</p>	<p><i>Primary and Secondary National Strategies: Pedagogy and Personalisation</i>. London: DfES. <a href="http://www.teachfind.com/national-strategies/pedagogy-and-personalisation">http://www.teachfind.com/national-strategies/pedagogy-and-personalisation</a> Accessed: 31/10/11</p> <p>Education, Audiovisual and Culture Executive Agency P9 Eurydice (2011). <i>Key Data on Learning and Innovation through ICT at School in Europe 2011</i>. Brussels: EACEA. <a href="http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/129EN.pdf">http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/129EN.pdf</a> Accessed: 23/06/2011</p> <p>Miliband, D. (2006). <i>Choice and voice in personalised learning</i>. In <i>Schooling for tomorrow: Personalising education</i>, OECD, Paris, pp 21--30.</p> <p>Organisation for Economic Co-operation and Development (2006). <i>Schooling for tomorrow: Personalising education</i>, OECD, Paris.</p>
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	<p>In the EACEA P9 Eurydice report (2011, p96), the two terms are defined differently as:</p> <p><b>Personalised learning:</b> Pupils learn in ways that are relevant to their own background, experiences, and interests. They can choose the topics they will learn about, the tools or strategies they will use, and the types of work products they will create.</p> <p><b>Individualised student-centred learning:</b> Teachers make it possible for individual pupils to work at their own pace, or they adjust instruction based on individual pupils' skill levels and learning needs.</p>	
4) "collaboration"	<p>"Collaboration" is the way individuals work together in order to achieve a goal and Michinov and Michinov (2009:43) suggest that "(collaborative) learning is a result of interaction or transaction between students."</p>	<p><i>Michinov, N. &amp; Michinov, E. (2009) Investigating the relationship between transactive memory and performance in collaborative learning. Learning and Instruction. 19 (43-54)</i></p> <p>See also:</p> <p><i>Smith, B. L., &amp; MacGregor, J. T. (1992). "What Is Collaborative Learning?". National Center on Postsecondary Teaching, Learning, and Assessment at Pennsylvania State University. <a href="http://learningcommons.evergreen.edu/pdf/collab.pdf">http://learningcommons.evergreen.edu/pdf/collab.pdf</a> (Accessed: 1.2.11)</i></p> <p><i>Stahl, G., Koschmann, T., &amp; Suthers, D. (2006). Computer-supported collaborative learning: An historical perspective. In R. K. Sawyer (Ed.), Cambridge handbook of the learning sciences (pp. 409-426). Cambridge, UK: Cambridge University Press. Available at: <a href="http://GerryStahl.net/cscl/CSCL_English.pdf">http://GerryStahl.net/cscl/CSCL_English.pdf</a> (Accessed: 1.2.11)</i></p>

5) "creativity"	<p>"Creativity" expresses an open-minded way of approaching a task or a challenge in order to come up with new or unconventional solutions to a given task. "Creativity" begins with imaginative activity and the National Advisory Committee on Creative and Cultural Education (NACCCE) suggests that "creativity" is:</p> <p>"Imaginative activity fashioned so as to produce outcomes that are both original and of value." (1999:30)</p>	<p>Loveless, A., Burton, J. and Turvey, K.(2006) <i>Developing conceptual frameworks for creativity, ICT and teacher education. International Journal of Teaching for Thinking and Creativity. 1,1.(3-13)</i> (Accessed: 1.2.11)</p> <p>NACCCE. (1999). <i>All our futures: Creativity, culture and education. Sudbury: National Advisory Committee on Creative and Cultural Education: DfEE and DCMS.</i> <a href="http://www.cypni.org.uk/downloads/alloutfutures.pdf">http://www.cypni.org.uk/downloads/alloutfutures.pdf</a> Pages 30-32 (Accessed: 1.2.11)</p>
6) "Expressiveness"	<p>"Expressiveness" is a basic ability to transform and communicate clearly, thoughts and ideas through language (spoken, written and non-verbal communications [facial expression/body language or NVCs]). "Expressiveness" can also be evidenced through the languages of music, art and movement.</p>	
7) "21 <sup>st</sup> Century Skills"	<p>"21<sup>st</sup> century skills" implies the skills and habits of mind that allow people to participate actively in society using all forms of media available. They are required as individuals need to think and reflect critically on what is happening around them and to develop creative solutions that serve personal and social needs.</p> <p>Digital and media literacies feature predominantly in educators' notions of what skills are required for life in the 21<sup>st</sup> Century. (See: "<b>Digital Literacy</b>" below)</p>	<p>(2003). enGauge® 21st Century Skills: <i>Literacy in the Digital Age</i>. North Central Regional Educational Laboratory and the Metiri Group. Department of Education. USA</p> <p><a href="http://eric.ed.gov/PDFS/ED463753.pdf">http://eric.ed.gov/PDFS/ED463753.pdf</a></p> <p>(Accessed 10.2.11)</p>
8) "Digital literacy"	<p>"Digital literacy" is the ability to locate, organize, understand, analyse and evaluate <a href="#">information</a> using <a href="#">digital technology</a>. It involves a working knowledge of current <a href="#">technology</a> and an understanding of how it can be used.</p> <p>Digital Literacy involves skills that are seen to go beyond</p>	<p>Hague, C. &amp; Payton, S. (2010). <i>Digital literacy across the curriculum</i>. Bristol: Futurelab.</p>

	<p>functional practices which enable ICTs simply to be used. Instead, “digital literacy” demonstrates the ability to enable: “critical, creative, discerning and safe practices when engaging with digital technologies in all areas of life” (Hague &amp; Payton, 2010, p. 19)</p> <p>According to Jenkins et al (2006:4), the new skills include:</p> <p><b>Play:</b> the capacity to experiment with one’s surroundings as a form of problem-solving</p> <p><b>Performance:</b> the ability to adopt alternative identities for the purpose of improvisation and discovery</p> <p><b>Simulation:</b> the ability to interpret and construct dynamic models of real-world processes</p> <p><b>Appropriation:</b> the ability to meaningfully sample and remix media content</p> <p><b>Multitasking:</b> the ability to scan one’s environment and shift focus as needed to salient details.</p> <p><b>Distributed Cognition:</b> the ability to interact meaningfully with tools that expand mental capacities</p> <p><b>Collective Intelligence:</b> the ability to pool knowledge and compare notes with others toward a common goal</p> <p><b>Judgment:</b> the ability to evaluate the reliability and credibility of different information sources</p>	<p>See also:</p> <p><a href="http://ec.europa.eu/information_society/tl/edutra/skills/index_en.htm">http://ec.europa.eu/information_society/tl/edutra/skills/index_en.htm</a> (accessed 1.2.11)</p> <p>Leu, D. J., &amp; Zawilinski, L., Castek, J., Banerjee, M., Housand, B. C., Liu, Y., &amp; O’Neil, M. (2007). <a href="http://teachers.westport.k12.ct.us/ITL/wkspmaterials/NCTE%20chapter.pdf">http://teachers.westport.k12.ct.us/ITL/wkspmaterials/NCTE%20chapter.pdf</a> (Accessed: 1.2.11)</p> <p>Jenkins, H., Clinton, K., Purushotma, R., Robison, A.J. and Weigelin (2006).</p> <p>Occasional Paper on Digital Media and Learning: <i>Confronting the Challenges of Participatory Culture: Media Education for the 21st Century</i>. MacArthur Foundation</p> <p><a href="http://digitalllearning.macfound.org/atf/cf/%7b7e45c7e0-a3e0-4b89-ac9c-e807e1b0ae4e%7d/jenkins_white_paper.pdf">http://digitalllearning.macfound.org/atf/cf/%7b7e45c7e0-a3e0-4b89-ac9c-e807e1b0ae4e%7d/jenkins_white_paper.pdf</a></p> <p>(Accessed: 2.2.11)</p>
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	<p><b>Transmedia Navigation:</b> the ability to follow the flow of stories and information across multiple modalities</p> <p><b>Networking:</b> the ability to search for, synthesize, and disseminate information</p> <p><b>Negotiation:</b> the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.”</p>	
9) “Educational Scenario”	<p>“A narrative description of a preferable learning context in an abstract level that does not take into account technical details or other concrete problems.”</p> <p><i>From D10.1, p.55</i></p>	<i>From D10.1, p.55</i>
10) “Learning Story”	<p>“A narrative description of a learning context that is more concrete than an educational scenario and is more helpful to teachers when designing their lesson plans. A learning story refers to several learning activities and is an exemplification of them working together.”</p> <p><i>From D10.1, p.56</i></p>	<i>From D10.1, p.56</i>
11) “Learning Activity”	<p>“Activity identified in a Learning Story that must be carried out by one or more persons. A learning activity is larger than a task. A typical learning story will include 3-8 learning activities. A learning activity refers to the tools and resources that are needed to successfully complete it. It also includes information such as motivation, preparation instructions, and guidelines.”</p> <p><i>From D10.1, p.56</i></p>	<i>From D10.1, p.56</i>

12) "Innovation/change "	<p>On the pedagogical level innovations are defined in terms of novel didactic solutions reflecting theoretical shifts (e.g., from a behaviourist to a constructivist perception of the learning process) or technological changes – as in ICT implementation. Pedagogical innovations may take the form, for example, of novel instructional formats, increased delegation of responsibility and control over the learning process to the students, or alternative methods for the assessment of learning. (Mioduser et al, 2003, p26)</p> <p>The definition of pedagogical change and innovation will vary from country to country (Kozma, 2003): 'innovation often depends on the cultural, historical, or developmental context within which it is observed' (p17).</p>	<p>Mioduser, D., Nachmias,R., Tubin, D. &amp; Forkosh-Baruch, A. (2003) Analysis schema for the study of domains and levels of pedagogical innovation in schools using ICT. <i>Education and Information Technologies</i>, 8(10), 23-36.</p> <p>Kozma, R.B. (Ed.) (2003) <i>Technology, innovation and educational change: A global perspective</i>. Eugene, OR: International Association for Technology in Education.</p>
13) "Transformation"	<p>Transformation is a term commonly found in educational literature and policy rhetoric, particularly in relation to the use of technology to support teaching and learning. It means more than change alone; rather it is radical or fundamental change (Fisher, 2006). Here we are adopting the following definition that: <i>'[t]ransformation is significant, systematic and sustained change'</i> (Caldwell, 2009, p4). That is it <i>'implies a profound or fundamental change, a metamorphosis that involves some radical innovation, not just incremental innovation. The difference is important'</i> (Hargreaves, 2003, p1 cited in Fisher, 2006, p294). Furthermore, a significant change in a teacher's practice must be multidimensional including changes to resources, teaching approaches and beliefs (Fullan, 2001).</p>	<p>Fisher, T. (2006) Educational transformation: Is it, like 'beauty', in the eye of the beholder, or will we know it when we see it? <i>Education and Information Technology</i>, 11, 29-303.</p> <p>Fullan, M. (2001) <i>The new meaning of educational change</i> (3rd edn). New York: Teachers College Press.</p> <p>Caldwell, B.J. (2009) <i>The power of networks to transform education: An international perspective</i>. London: Specialist Schools and Academies Trust.</p>
14) "Impact"	<p>"Impact is the overall achievement of an intervention on the educational system and can be described by a variety of qualitative indicators such as 'improvements in national test' or 'improved learning in schools' depending on the policy target.</p>	<p><i>From DoW, Part B: page 71 of 79</i></p>

	<p>It is the end point of an intervention involving input, process, output and outcome. Isolating the variable that caused the impact is problematic in education.”</p> <p><i>From DoW, Part B: page 71 of 79</i></p>	
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## APPENDIX 2: INSTRUMENTS FOR CASE STUDY VISIT

This appendix contains the instruments required for the case study visit, in separate sheets which will be easy to print if required:

- Teacher interview schedule
- Student group interview schedule
- Headteacher interview schedule
- ICT co-ordinator interview schedule
- Observation Note Sheet for National Pedagogical Co-ordinators (optional)

## **Teacher Interview Schedule**

### **Training**

1. How did the training help you overall? (eg: the training resources/support materials that were used)
2. With hindsight, what else could have been included in the training?
3. What kinds of activities have you undertaken in the iTEC Teacher Community? How has the Teacher Community helped you to change your practice? Can you give us an example?

### **Learning Stories**

4. How does the lesson I have just observed fit with the implementation of the Learning Story overall? (One of a series of lessons? A single lesson?)
5. Have you needed to make any changes to the Learning Story? What changes have you made (so far)? Why?
6. How successful has the Learning Story been (to date)? In what ways? Why? What factors have contributed to the success (so far)?
7. How, if at all, has your involvement changed your pedagogical approach? (Think about: roles, assessment, individualisation, collaboration, creativity, expressiveness/communication, engagement with a wider range of stakeholders)
8. Have there been any other changes or unexpected outcomes as a result of your involvement in the project?
9. What challenges have you faced (so far) in implementing the Learning Story? Were there any challenges in relation to the organisation of the school or the design of the classroom? How did you overcome the challenges?
10. What kind of support have you received in this process? From whom? How was this helpful? What additional support might have been beneficial?
11. How has the Learning Story fitted the needs of the curriculum? In what ways, if any, has your planning changed in order to accommodate the Learning Story?
12. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?

## **Student Group Interview Schedule**

### **Learning Stories**

1. What are the differences and similarities between the lesson I have just observed and any related previous lessons and the kinds of activities you usually engage in at your school?
2. What do you think about technologies used in these lessons? How do they compare with the technologies that you use outside school?
3. How did you learn how to use the use these technologies? Were there any difficulties at all?
4. What have been the main challenges for you in these lessons? Have there been any particular challenges in relation to how you were learning? If so, how did you overcome these challenges?
5. How did you feel in these lessons? What did you like most? Why? What, if at all, did you not like? Why? Would you like to do more learning in this way? Why/why not?

## **Head Teacher Interview Schedule**

### **Learning Stories**

1. How does the Learning Story fit with the school vision/strategy/pedagogical and/or curriculum planning? Will your experience lead to any changes in the future?
2. How does the Learning Story fit with the current school culture and practices? What changes have occurred through the implementation of Learning Stories?
3. To what extent does the Learning Story meet the curriculum needs?
4. What challenges have you faced/are you facing in resourcing the technical requirements for the Learning Story? How have you overcome/are you overcoming these challenges?
5. Is the implementation of the Learning Story impacting on teaching practices? If yes, how? Can you give an example?
6. Is the implementation of the Learning Story impacting on teacher attitude? If yes, how? Can you give an example?
7. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?
8. Would you support the continued use of the Learning Story in your school? What will you put in place to ensure that this happens? What impact would this have in terms of your management and leadership of the school? Are there any external factors affecting the continuing use of the Learning Story in your school?

**ICT Co-ordinator interview schedule****Training**

1. What do you think about the technical training?
2. What do you think about the pedagogical training?
3. How did the training help your teachers overall?
4. With hindsight what else should have been included in the training?
5. What additional training and/or support did you offer your teachers? What worked well? What would you do differently next time?

**Learning Stories**

6. How did the Learning Story fit with the school ICT strategy/plans?
7. Did you need make any changes in the Learning Story? What changes did you make? Why?
8. How successful was the Learning Story? Why? What factors contributed to the success?
9. What challenges did you face in resourcing the technical requirements for the Learning Story? How did you overcome these challenges?
10. What other challenges did you face and how were they overcome?
11. Has the Learning Story implementation impacted on teaching practices? If yes, how? Can you give an example?
12. Has the Learning Story implementation impacted on teacher attitude? If yes, how? Can you give an example?
13. In your professional judgement, has the Learning Story implementation impacted on student attainment, motivation and engagement? If yes, how? Can you give an example?
14. How innovative was the Learning Story in relation to current practices at your school?
15. Will your involvement lead to any changes in your future planning?

### Observation Note Sheet for National Pedagogical Co-ordinators (optional)

This observation note sheet is offered to support NPC's observation of their case study teacher's lesson. NPCs may choose not to use it and to make notes of their own in their own way. However, the headings below provide the focus of the observation.

This observation sheet (or NPC's own notes) can be used as a prompt during teacher and student interviews and it can also be used as an aide memoire when writing the Case Study Report. It is intentionally brief and straight forward for ease of use.

Date:	Learning Story:
Number in class: Age:	Subject: Technology:
How is the teacher addressing: <i>(check "Definitions" in the Evaluation Plan)</i>	
Individualisation:	
Collaboration:	
Creativity:	
Expressiveness:	

How is the teacher integrating innovative technological tools within their pedagogy?
What is innovative about the way the teacher is teaching?
How are the students responding to the learning activities?
Is the classroom setting/setup appropriate for implementing this Learning Story? How?
Is there teacher/student engagement with others beyond the classroom? Who? How?
Is there anything else you would like to note?

## **APPENDIX 3: CHECKLISTS FOR CYCLE EVALUATION**

### **CHECKLIST: At beginning of Cycle**

- ☐ Identify 3 teachers from 2-3 schools to participate fully in the evaluation
- ☐ Arrange translation of research instruments (these may be revised prior to each cycle; revisions will be kept to an absolute minimum)
- ☐ Introduce case study teachers to iMmS
- ☐ Make all teachers aware of iTEC Teacher Community
- ☐ Arrange case study (see below)

### **CHECKLIST: Prior to case study visit**

2-3 weeks before

- ☐ Seek permissions (as appropriate) to visit school and arrange date of visit
- ☐ Request schedule for visit
  - Lesson observation
  - Teacher interview
  - Student group interview
  - Head teacher interview
  - ICT Co-ordinator interview
- ☐ Contact teacher and request relevant documentation (lesson plans, resources etc)

1-2 weeks before

- ☐ Familiarise yourself with the interview questions
- ☐ Decide how you will capture the data (audio record, video record etc)
- ☐ If recording (the lesson and/or student interview), you may need to check with the school about obtaining informed consent to participate from the students or their parents (in accordance with national and local policies)
- ☐ Decide what other equipment you will need

2-3 days before

- ☐ Check everything is okay with the teacher; reassure the teacher that your role is purely observational
- ☐ Remind the teacher that you require the relevant documentation if you have not already received it



- ☐ Check that the schedule for your visit is still okay and that everything required has been organised
- ☐ Inform the teacher and school of your time of arrival
- ☐ Check that consent to participate has been obtained if required for all students

**CHECKLIST: During case study visit**

- ☐ Keep to schedule
- ☐ Collect any documentation not received prior to visit
- ☐ Obtain informed consent from interviewees prior to each interview
- ☐ Set up for the lesson observation in negotiation with the teacher
- ☐ Observe lesson and make notes as required
- ☐ Interview teacher (after the lesson)
- ☐ Interview a group of students (after the lesson)
- ☐ Interview head teacher
- ☐ Interview ICT co-ordinator
- ☐ Collect lesson evaluation form if teacher is required to produce one as a matter of course

**CHECKLIST: After case study visit**

- ☐ Notify WP5 that the case study has been conducted
- ☐ Collect any missing documentation not obtained prior to or during the case study visit
- ☐ Listen to the recordings of interviews again and supplement any notes taken with more detail and verbatim quotations
- ☐ Produce case study report (in English) and send to WP5
- ☐ In Cycles 3, 4 and 5 arrange transcription and translation of all data from one of the case studies and send it to WP5
- ☐ Arrange date for NPC interview by WP5

**CHECKLIST: At end of Cycle**

- ☐ Ensure all participating teachers complete the online Teacher Questionnaire
- ☐ Ensure case studies all completed
- ☐ Ensure each case study teacher completes iMmS

## **APPENDIX 4 CASE STUDY PRO-FORMA**

This pro-forma to be completed by the NPCs (adapted from Kozma (Ed.), 2003) is comprised of two sections. Section A contains a list of questions about the case study requiring checking of tick boxes. Section B is a narrative describing the case study under a number of headings (with prompts). It will be provided as a separate document (a Word form) with guidance on how to name each case study report.

### **Section A**

1) How would you characterise the leadership style of the school head teacher (tick most appropriate)?

- ☐ Active involvement in the innovation
- ☐ Supportive but not directly involved
- ☐ Neutral
- ☐ Against the innovation

2) Does the Learning Story fit with the current school policies, curriculum and plans (tick most appropriate)?

- ☐ Not at all
- ☐ To some extent
- ☐ Fully

3) Will the school policies and/or plans be changed in the future as a result of participating in iTEC (tick most appropriate)?

- ☐ Yes, definitely
- ☐ Yes, probably
- ☐ No

4) In what curriculum area did the observation of the innovation take place?

- ☐ Mathematics
- ☐ Physics
- ☐ Chemistry
- ☐ Biology/life science
- ☐ Earth science
- ☐ Language/mother tongue
- ☐ Foreign Language
- ☐ Creative Arts (music, visual art, drama)
- ☐ History
- ☐ Geography
- ☐ Civics/Citizenship
- ☐ Economics
- ☐ Vocational subjects
- ☐ Computer science/ICT/informatics
- ☐ Physical education
- ☐ Other: please specify - \_\_\_\_\_

5) Does this case provide evidence of (tick all that apply)

- ☐ New assessment procedures
- ☐ Constructivist pedagogies
- ☐ Use of new learning spaces
- ☐ Effective use of digital tools
- ☐ Individualisation
- ☐ Social/Collaborative learning
- ☐ Creativity
- ☐ Expressiveness
- ☐ Engagement with a wider range of stakeholders
  - ☐ Parents
  - ☐ Students from other schools
  - ☐ Teachers from other schools
  - ☐ Higher Education Institutions (or similar)

- ☐ Business/Industry
- ☐ Government agencies
- ☐ Business/Industry
- ☐ Other: please specify - \_\_\_\_\_

6) Does this case contain an explicit statement that the pedagogical activities of the teacher have changed due to the innovation?

- ☐ Yes
- ☐ No

7) Does this case describe the impact(s) of the innovation on the teacher(s) in terms of (tick all that apply):

- ☐ Acquisition of new pedagogical skills
- ☐ Acquisition of new ICT skills
- ☐ Acquisition of collaborative skills
- ☐ Development of positive attitudes
- ☐ Negative outcomes

8) Does this case contain an explicit statement that the activities of the students have changed due to the innovation?

- ☐ Yes
- ☐ No

9) Which technologies/software were used in the implementation of the Learning Story (tick all that apply):

- ☐ Desktop computer
- ☐ Laptop/netbook computer
- ☐ Tablet computer
- ☐ Mobile phone/smart phone
- ☐ Handheld device
- ☐ Learner response system

- ☐ Games based learning
- ☐ Virtual worlds
- ☐ Simulation
- ☐ Interactive whiteboard
- ☐ Touch screen devices
- ☐ Widgets
- ☐ e-Portfolios
- ☐ Collaborative environments
- ☐ Online assessment
- ☐ Virtual classroom/learning platform/course management system
- ☐ Social software (blog, wiki, social networking site, social bookmarking site)
- ☐ Other: please specify -

10) Where do the learning activities take place (tick all that apply):

- ☐ In the classroom
- ☐ In the computer lab
- ☐ In the school library
- ☐ In the school, but not in the classroom, computer lab or school library
- ☐ Outside school buildings but in the school grounds
- ☐ Outside school during normal school hours
- ☐ Outside school outside normal school hours

11) Does this case contain an explicit statement that there has been an impact due to implementation of the Learning Story (tick all that apply)?

- ☐ Yes, on teacher motivation and engagement
- ☐ Yes, on learner motivation and engagement
- ☐ Yes, on learner attainment
- ☐ Yes, on other: please specify \_\_\_\_\_

12) Does this case describe problems and/or solutions in relation to implementing the Learning Story in terms of (tick all that apply):

	Tick if	Tick if solution

	problem is mentioned	is mentioned
Resources and equipment	<input type="checkbox"/>	<input type="checkbox"/>
Technical support	<input type="checkbox"/>	<input type="checkbox"/>
Pedagogical support	<input type="checkbox"/>	<input type="checkbox"/>
Teacher-related issues	<input type="checkbox"/>	<input type="checkbox"/>
Student-related issues	<input type="checkbox"/>	<input type="checkbox"/>
Curriculum-related issues (including lack of time in the curriculum to include the innovation)	<input type="checkbox"/>	<input type="checkbox"/>
Issues related to support for the innovation (from teachers, parents, administrators etc)	<input type="checkbox"/>	<input type="checkbox"/>
Technical problems (e.g. hardware, network)	<input type="checkbox"/>	<input type="checkbox"/>
Policies (e.g. national, state or local policies work against the innovation)	<input type="checkbox"/>	<input type="checkbox"/>
Organizational-related issues (including limitations of time for teachers to work on the innovation)	<input type="checkbox"/>	<input type="checkbox"/>

13) Does this case suggest that the implementation of the Learning Story will be sustained beyond the pilot cycle?

- ☐ Yes, definitely
- ☐ Yes, probably
- ☐ No

If Yes, is supportive evidence given?

- ☐ Yes
- ☐ No

14) Does this case suggest that the implementation of the Learning Story will be transferred to other classes within the school or to other schools?

- ☐ Yes, definitely

☐ Yes, probably

☐ No

If Yes, is supportive evidence given?

☐ Yes

☐ No

## Part B Narrative report of case study

Please note that there will be more space for responses in the actual pro forma.

**REMEMBER:** Any claims made such as assertions about impact on learning should be evidenced by giving a justification or clear example of how the impact manifested itself (i.e. support for the claim being made). Using more than one source of data (your own observation, what the students said etc) will help to justify the teacher's claims.

Describe the participants' perceptions of the training and support offered (if applicable): \_\_\_\_\_

Provide an overview of the implementation of the Learning Story, drawing on the observation and all interviews. (How was it structured? Was it adapted and if so how? What was the role of technology? How did the students perceive the experience? How innovative was it? What was the fit with school policies/plans?):  
\_\_\_\_\_

What did the participants perceive were the success factors behind the implementation? \_\_\_\_\_

What were the challenges that participants faced (including students)?  
\_\_\_\_\_

What, if any, solutions were identified in relation to the identified challenges?  
\_\_\_\_\_

What was the impact on pedagogy?  
\_\_\_\_\_

What was the impact on other factors (teacher attitude, learners' attitudes, learners' attainment, other stakeholders, school policies/plans, organisational issues, the curriculum)? \_\_\_\_\_

Were there any unexpected outcomes and if so what were they?  
\_\_\_\_\_



