Training Guidelines

e-Jobs-Observatory.eu

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SECTION 3

These Training Guidelines are based on the results of extensive research conducted within the framework of the Leonardo da Vinci project e-VIRTUE which took an in-depth look at the following specialized professions related to Virtual Learning (VL):

I. **Architecting a digital learning strategy,** developing and implementing of an organisation's strategy for the use of learning technologies.

II. **Designing blended learning solutions,** creating designs for new learning programmes.

III. **Developing digital learning content – full-time specialist role**, developing digital learning content in all its forms.

IV. **Developing digital learning content (one part of a broader teaching/training role),** designing and/or develops simpler forms of digital learning content, in addition to planning and conducting traditional instruction.

V. **Tutoring online**, ensuring the successful delivery of extended online and blended distance-learning programmes and supporting students as they engage in these programmes.

VI. **Facilitating virtual classroom sessions,** designing and delivering real-time group sessions using web conferencing tools.

As one of the primary results of the e-Virtue project, these training guidelines are intended to offer guidance for European training institutions and all others involved in drafting curricula concerning which dealing with the knowledge, skills and competences that are actually needed in order to excel in these professions, not only at a national, but at the European level.

In order to obtain representative guidelines, we collaborated closely with training institutions as well as policy makers and experts in the field of the specific VL professions in five European countries: France, Germany, Greece, Poland and the United Kingdom.

THE TARGET GROUPS

This manual is designed to guide those involved in training in a wide variety of settings – training centres, companies, community locations and other training sites. Thus, Training Guidelines present relevant information for all the stakeholders interested in finding out which knowledge, skills and competences are required to succeed in the labour marker in the field of Virtual Learning services across the EU. More specifically, the present Training Guidelines are mainly addressed to:

- **Vocational Education and Training (VET) organizations** which are interested in adapting their training offer to the market needs, in order to fulfil the constant and increasing demand of qualifying virtual learning professionals at the European level. As the role profiles for virtual learning professions reflect the market needs, they, in conjunction with the Training Guidelines, will enable VET institutions tailor their courses according to them.
- **Employers and/or Human Resources Managers**, in particular of SMEs, developing in-house training modules. Both the developed role profiles for virtual learning professions and the Training Guidelines will enable these professionals determine, whether (foreign) job applicants and employees have the knowledge, skills and competencies required at European level in the field of virtual learning.
- **(Potential) Employees, in particular of SMEs**, identifying personal training needs. Both the role profiles for Virtual Learning professions and the Training Guidelines will support (potential) employees gain insight into knowledge, skills and competencies required at the European level in the field of Virtual Learning, enabling them to determine, whether they are sufficiently skilled.

HOW TO USE THIS MANUAL

This manual does **not** claim that there is only one way to structure a learning experience. In fact, there may be as many ways of creating a good training plan as there are different types of training courses and training institutions.

The difficulty with designing any type of training guide is that it can never be all things to all users. At the same time, it must be useful to all its readers.

For this reason, this training guide:

- does **not** provide a step-by-step method for determining learning units,
- is **not** a series of recipes,
- is **not** a fill-in-the-blank-type guide.

Instead, in these training guidelines we aim to describe some approaches to designing training:

- offering some ideas on the process of developing a learning unit
- showing you some examples of how it can be done.

MANUAL SECTIONS

The manual is organized into three sections:

Section 1 provides an overview of the manual and of the basic principles underlying facilitating learning events. These principles cover key areas that all facilitators should keep in mind when undertaking any training programme. This Section 1 is basically an outline of all the 'what, who, and how' details of the training for use by trainers.

Section 2, the most extensive section, consists of training guidelines for each of the six role profiles, like mapping out a road trip or creating a journey. For each role profile a description of the specific role is provided along with a presentation of the suggested learning units structured from an output-oriented perspective is offered, which means a specification of learning outcomes as recommended by the European Qualification Framework. Thus, each learning unit suggests the learning outcomes

that participants will be able to achieve as a result of completing the training, in order to be qualified to assume virtual learning-related positions in the European labour market. Furthermore, each role profile unit provides guidelines on which training methods, activities and additional reading may be used so that participants meet the learning objectives most effectively.

Finally, **Section 3** presents the European Qualification Framework (EQF), the e-Competence Framework (eCF), the European Credit System for Vocational Education the European Quality Assurance in Vocational Education and Training (EQAVET), and Training (ECVET) systems. In addition, it describes the e-Jobs Observatory, as the main initiative for ensuring quality, harmonization and standardization of vocational training for these six role profiles at the European level and explains why the Virtual Learning role profiles are in line with the standards proposed by the e-Jobs Observatory.

Section 1

BASIC PRINCIPLES OF FACILITATING LEARNING EVENTS

- *entry behavior*
- *learning event*
- *assessment*

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INTENDED PURPOSES

This section should begin to create an awareness of issues around designing and facilitating learning events. By the end of the section, you will be able to answer questions such as these:

- How can you determine the entry behaviour of your participants?
- How can you plan and manage a learning event?
- How can you evaluate the participant and the training programme itself?

INTRODUCTION

The learning process is fundamental to training. In other words, to all those activities that are undertaken to enable a person to perform known tasks well (Mahood, 2011). It is therefore vital that the facilitator have a basic understanding of the process in order to assess the most effective approach to training in a given situation.

In general terms, research on how adults learn more effectively shows that training tends to be more successful when:

- Participants have been involved in defining or refining their own learning objectives;
- The content is focused on real problems faced by the participants;
- Meaningful evaluation and feedback is provided to the participants.

These principles are based on constructivist pedagogy (Discoll, 1994; Richardson, 2003), which implies in the learning/teaching approach we propose in these guidelines, among with the 'communities of practice' approach and problem based learning, which is the paradigm that this document is based on (Keppel, et al, 2003).

1.1 ENTRY BEHAVIOUR

Surprisingly little attention has been given to how participants' expectations and attitudes relate to decisions to select a particular learning programme. So, this sub-

section aims at making you aware of the importance of knowing:

- which specific skills participants must have prior to beginning the instruction,
- any participant personal characteristics that may be important to consider in the design of the learning event.

> *'Entry behaviour includes the prerequisite knowledge, attitudes or skills which the learner already possesses that are relevant to the learning task or subject matter and that you may require learners to demonstrate **before** beginning your module. This includes previous education and experience that the student brings to the new learning context. The ultimate goal of the module being to advance the learner from where he is (entry behaviour) to where you would like him to be (having mastered the learning objectives or terminal behaviour).'*

1.1.1 Some Essential Questions

To determine the entry behaviour, you should ask yourself:

- What must the participant be able to do **before** he begins this training session? In other words: *which are the specific skills that the participant must be able to perform in order to begin*?
- Who are the participants in the training session?
- What special interests do they have?
- What general motivation do they have?
- What special problems or concerns do they have?
- What language(s) do they speak or want the instruction to be conducted in?
- How much time do the participants have available for training?
- What is the total number of trainees per group?
- Where are they located?

1.1.2 Helpful Tips

- Avoid '*there are no prerequisites for this training programme*.' This can mislead a trainee into thinking s/he can succeed when, in reality, s/he may fail to complete the module satisfactorily because there are lacking certain

knowledge or skills. On the other hand, it is crucial to assess entry behaviours and to set appropriate pre-requisites, because failing to do so may cause the trainer to fail to achieve the goals and objectives set for the learning event.

- If at all possible, ensure a diversity of backgrounds as this may be a great asset to the instruction, because it contributes a wide range of opinions and can foster critical thinking and creative problem-solving. Strive for balance, do not try to overregulate through entry requirements, but do not admit those who you know cannot succeed.
- Ask trainees to think about one particular moment in their life or work when they felt either powerful, powerless or empowered, and to be prepared to tell this story when they come to the first training session.
- Ask trainees to identify what they already know and what they don't know about a particular topic.
- Prompt learners to start solving a problem, applying existing knowledge.

1.2 LEARNING EVENT

A learning event is any planned and managed experience that helps those involved learn new knowledge, skills, attitudes and behaviours. So, a learning event is a simplified description of the learner's learning activity.

This section describes some principles and practices that can help these events go well.

1.2.1 Principles and Practices

I. In designing your learning event, think carefully about its purpose and your expectations, and how these fit the needs of the participants and relate to their individual roles and objectives, as well as those of the groups and organizations they may be a part of.

II. You should set objectives which are achievable, realistic, measurable, positive, important, time bound and specific.

III. We learn better if we are actively involved in the learning process. Some examples of participatory learning methods, which allow interaction between the learners and the trainer include discussion in a group, brainstorming, role

play, case studies, consultation with specialists, critical incident, problem-solving, error-encouragement framing (instead of error-avoidance), emotion-control strategies etc.

IV. Think about how people leave the event and whether their organization will encourage them to put their learning into practice. If they do not put it into practice, from the organization's point of view, the learning event could very well be a waste of effort.

1.2.2 Helpful Tips

Here are six extra tips for **selecting training methods**:

1. Consider what are your training goals? New skills, new techniques for old skills, better workplace behaviour?
2. Look at the learning outcomes and consider which methods will best achieve these.
3. Consider the participants' experience and expectations. Who is being trained? New employees, seasoned employees, upper management?
4. Consider your skills, experience and confidence as a trainer/facilitator.
5. What is your training budget? Consider any special facilities, equipment, time or other requirements needed to use the methods.
6. Use a variety of methods to stimulate the senses but do not overload.

1.3 ASSESSMENT

This section presents some key issues relating to assessment in training. Although some writers use the terms 'assessment' and 'evaluation' for different purposes (Kirkpatric & Kirkpatric, 1997), these distinctions are not consistent in the literature on the topic. In this section, we use these two terms as synonyms.

Assessment, and especially 'authentic assessment', which engages students in applying knowledge and skills in the same way they are used in the real world outside of school (Hart, 1994), is an on-going process that involves planning, discussion, consensus building, reflection, measuring, analysing and improving based on data and artefacts gathered about a learning objective.

1.3.1 Principles and Practices

I. There is no 'cookbook' approach to the evaluation of training, because to evaluate something is to determine its value and value is relative. What is of great value to one person is of little or no value to another. So, here comes the next principle:

II. The assessment design can be adjusted for each training programme to meet the specific purposes of the evaluation, which depends on the:

- objectives,
- contents,
- participants,
- communication,
- timing, and
- overall framework to be utilized.

III. Measure the results of how the trainee will be able to apply what s/he has learned. For instance, ensure that a discussion or written exercise, or the development of a work plan includes practical application visualization (e.g. ask online tutors to design online activities and their appropriate feedback).

IV. We should mention that all the processes we propose are in line with the European Quality Assurance in Vocational Education and Training (EQAVET)✹.

1.3.2 Helpful Tips

 Here are five tips for **evaluating a learning session**:

1. Plan the evaluation when you are planning the learning session
2. Be clear about what you want to evaluate before you start
3. Ensure that any feedback to participants is clear and understandable
4. Provide time for feedback from the participants

✹ For further details, please refer to Section 3.

5. Select different forms of assessment, including concept maps, interviews, questionnaires, trials, focus groups, checklists, etc. Different kinds of assessment appeal to learners with different learning styles and they help keep things interesting.

☑ Remember that evaluation is **about the whole training process** and not just a single the training event.

CONCLUSION

Even if you are an experienced trainer or facilitator, or new to training or lack experience in facilitating learning, there are many issues which need to be carefully considered.

You need to have a clear understanding of important aspects in developing training sessions such as:

- the participants with the specific six role profiles and their backgrounds,
- why you are going to do the training and what you want to communicate,
- what learning and assessment methods might be most appropriate for the workshop that you are planning.

CHECKLIST

Use this checklist to help evaluate how you have structured your training:

Has the training plan taken account of what the participants need to know and achieve as a result of this training?	Yes ☐ No ☐
Do you know what 'good performance' is, in other words what a good performer can do according to his/her particular role profile?	Yes ☐ No ☐
Do you know what gaps exist between what the participants know how to do and what they need to know to carry out their roles successfully?	Yes ☐ No ☐
Will training help fill this gap?	Yes ☐ No ☐
At the outset, do the proposed training methods meet the skills, knowledge and attitudes (learning objectives) to be taught?	Yes ☐ No ☐

Do you plan on actively engaging participants in their learning experience through discussion and a variety of activities?	Yes ☐ No ☐
Do you plan on encouraging participants to share their expertise and experiences with others in the training?	Yes ☐ No ☐
Have you built in adequate evaluation to assess the training process, the participant learning, and application?	Yes ☐ No ☐

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Driscoll, M.P. (1994). *Psychology of Learning for Instruction*. Boston: Allyn and Bacon.

Docebo (2014). *E-learning Market Trends & Forecast 2014-2016 Report.* Retrieved 14, June 2014 from: http://www.docebo.com/landing/contactform/elearning-market-trends-and-forecast-2014-2016-docebo-report.pdf

Hart, D. (1994). *Authentic Assessment: A Handbook for Educators*. New York: Dale Seymour Publications.

Keppel, M., Elliot, K., Kennedy, G., Elliot, S. & Harris, P. (2003). Using authentic patient encounters to engage medical students in a problem-based curriculum. In S. Naidu (ed.), *Learning and Teaching with Technology: Principles and Practices* (pp. 85-96). London: Kogan Page.

Kirkpatric, D.L. & Kirkpatric, J.D. (2009). *Evaluating training programs*. Berret-Koehler Publishers.

Mahood, E.D. (2011). *Working paper 1.06.* SynaireticResearch, Stuttgart.

Owston, R. (2013). Blended learning policy and implementation: Introduction to the special issue. *The Internet and Higher Education, Vol 18,* pp. 1-3.

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Section 2

TRAINING GUIDELINES FOR VIRTUAL LEARNING

ROLE PROFILES

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- *Role profile main tasks*
- *Learning units*
- *Learning outcomes*
- *Best practices*
- *Further reading*

2.5 The case of the facilitating virtual classroom sessions

2.5.1 Short description

2.5.2 Learning units (modules) and learning outcomes

- Best practices to address this lesson unit
- Reading for this learning unit

2.6 The case of the tutoring online

2.6.1 Short description

2.6.2 Learning units (modules) and learning outcomes

- Best practices to address this lesson unit
- Reading for this learning unit

2.1 The role of Architecting a digital learning strategy

2.1.1 Short description

The digital learning architect, also known as the digital learning manager or learning technologies manager, is responsible for the development and implementation of an organisation's strategy for the use of learning technologies, as derived from the business strategy. This role may be undertaken by a learning technologies specialist, by a manager with overall responsibility for learning, by external learning consultants or some combination of these.

2.1.2 Learning units (modules) and learning outcomes

The learning units (modules) suggested here are based on key e-competences derived from the European e-Competence Framework (e-CF)[1] for the architecting an digital learning strategy role profile, along with the expected learning outcomes:

UNIT 1 Needs Identification

This learning unit presents ways of consulting with internal / external key stakeholders, such as senior and middle managers, solution suppliers, sponsors, IT professionals, trainers, and end users, in order to clarify their needs. It discusses how to manage the relationship to ensure that the needs of these stakeholders are taken into account in the design of the digital learning solution but without compromising on the effectiveness of the solution. It suggests ways of presenting alternative proposals and negotiating agreement to a solution.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ discuss the principles of user-centred design to stakeholders
- ☑ distinguish between the roles of order-taker and trusted consultant
- ☑ analyse customer requirements systematically

[1] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

- ☑ present the costs and benefits of alternative solutions
- ☑ match the needs of stakeholders with existing systems and services
- ☑ analyse the impact of functional/technical changes on key stakeholders

Best practices to address this lesson unit

- **Role play:** Ask learners to prepare questions for a meeting with a project sponsor to identify detailed requirements based on a given brief. Conduct a role play of the meeting. Debrief the role-play to determine which questions were most useful, which could have been phrased differently and which were missing. In the debrief distinguish between trusted consultant and order-taking behaviour. Alternatively use **interactive scenarios** to achieve the same purpose.

Brainstorming: **(1)** Have learners brainstorm ideas to determine potential solutions to a stated requirement. To get the best results, encourage learners to participate fully and ensure that everyone has a chance to contribute. Their first goal is to quantify the gap between the current situation and what is required. They then brainstorm potential solutions that will achieve the project's goals and objectives. They move on to analyse the alternatives in terms of time, cost, business impact and risk. Finally they identify the preferred option and decide how they will present this. [Note: We 'd recommend not following the traditional brainstorming group method but have participants generate ideas individually (in private) for a period first, then contributing them in the group discussion. It gives more introverted members the opportunity to consider ideas without being overcome by the social aspect and groupthink of brainstorming.]

(2) Discuss the difference between the "order-taker" and "trusted consultant" and list the attributes of someone who has the professional role of a "trusted consultant".

- **Role play**: Have learners role play the presentation of their proposals to the project sponsor and handle any objections.
- **Interviews**: Learners might conduct "interviews" with authentic stakeholders to engage in needs assessment. (Such an authentic activity will follow role plays during which students can rehearse different strategies of enquiry).

Reading for this Learning Unit:

Titcomb, A. (2010). *Need Analysis.* Arizona: The University of Arizona. Retrieved from:

https://extension.arizona.edu/evaluation/sites/extension.arizona.edu.evaluation/files/docs/needs.pdf

This is a synoptic evaluation concept sheet about definitions, steps and examples, techniques and methods, cautions and pitfalls of need analysis.

UNIT 2 Digital learning Strategy Alignment

This learning unit looks at the nature of the architect a digital learning strategy role and its purpose in finding ways to harness technology in support of an organisation's learning and development strategy.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ describe the role of the architect a digital learning strategy
- ☑ analyse the likely impact of future developments in business processes and in the use of available technologies
- ☑ identify and analyse long term user / customer needs
- ☑ review and analyse the possible risks and benefits of new digital learning strategies

Best practices to address this lesson unit

- **Research** real-life examples of professionals responsible for architecting of digital learning strategy roles and review their responsibilities**.**
- **Conduct interviews** with people undertaking this role or watch videos of these interviews.
- **Review and discuss** examples of digital learning strategies**.**
- **Research** and analyse the L&D strategy for their organisation and identify opportunities for digital learning.

Reading for this learning unit:

Simon, G. (2008). *The Challenge of Strategic Alignment.* UK & USA:

FSN & Oracle Corporation. Retrieved from:

http://www.oracle.com/us/solutions/business-intelligence/064027.pdf

This report explores the role of Scorecards and dashboards in strategy execution and explains how to identify conflicts from a sprawling mass of information and how to keep a strategy agile and flexible in the face of increasingly volatile markets.

Andolsen, A. A. (July/August, 2007). Does Your RIM Program Need A Strategic Alignment? *The Information Management Journal*, pp. 35-40. Retrieved from: http://www.arma.org/bookstore/files/Andelson.pdf

This article defines strategic alignment and describes the process-driven approach to strategic alignment.

Kettleborough, J. (2012). *Seeing Eye to Eye: How People Professionals Can Achieve Lasting Alignment and Success Within Their Business.* UK (AuthorHouse UK).

This book gives practical guidance on the changes necessary to create alignment with your business.

UNIT 3 Digital learning Strategy Development

This learning unit addresses the design and structure of solutions supporting the digital learning strategy, including the identification of alternative approaches as well as return on investment propositions. It considers the possible and applicable sourcing models and presents cost benefit analysis and reasoned arguments in support of the selected strategy. Furthermore, it discusses ways to ensure compliance with business and technology strategies and ways to develop a communication plan to support the digital learning strategy, maximize take-up and address political, financial, and organisational interests.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ explain the elements of a digital learning strategy
- ☑ conduct a review of current strengths, weaknesses, opportunities and threats related to an organisation's learning and development
- ☑ identify and systematically review alternative strategies
- ☑ develop a value proposition
- ☑ conduct a risk analysis
- ☑ develop a financial model to support a digital learning strategy
- ☑ develop an analysis of the skills needed to support a learning strategy
- ☑ generate short and long term performance reports (e.g. financial, activity and value creation)

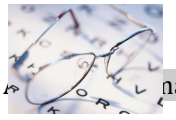
Best practices to address this lesson unit

- Use **case studies** as a basis for practising the various skills involved in strategy development. For example, ask students to identify digital learning strategies, propose alternative strategies and analyse the skills and resources needed to support a strategy.
- **Debate** alternative ways to integrate digital learning into an organisation's learning and development strategy. Or: Given a proposal for a digital strategy that has been rejected by an organisation's executives, with the reasons, propose alternatives and agree the best.
- **Develop** a digital learning strategy for a real-world organisation

Reading for this Learning Unit:

Brandon, B. (Ed.) (2007). *Handbook of e-Learning Strategy.* Santa Rosa: The eLearning Guild. Retrieved from: http://theelearningcoach.com/wp-content/uploads/downloads/2010/06/strategy_ebook.pdf

This e-Book applies strategy to digital learning from various points of view. It talks about the importance of a strategic perspective, it focuses on technology strategy and discusses how to make the best of digital learning tools with a solid strategy behind us in order to achieve our digital learning goals.



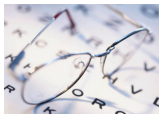
Marshall, S. (2012). An analytic framework to support eLearning

strategy development. *Campus-Wide Information Systems*, *Vol. 29* (No. 3), pp.177 – 188.

The purpose of this paper is to discuss and demonstrate the relevance of a new conceptual framework for leading and managing the development of learning and teaching to digital learning strategy development.

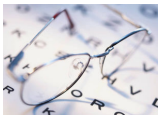
MacKeogh, K. & Fox, S. (2009). Strategies for Embedding e-Learning in Traditional Universities: Drivers and Barriers. *Electronic Journal of eLearning, Vol. 7* (No. 2), pp. 147 – 154.

The paper examines digital learning strategies in higher education, locating the institutional context within the broader framework of national and international policy drivers which link digital learning with the achievement of strategic goals such as widening access to lifelong learning, and up-skilling for the knowledge and information society.



http://www.towardsmaturity.org/index/employer-stories/

Towards Maturity is a not-for-profit benchmarking and research organisation that aims to promote good practice in L&D. Their website has case studies from several organisations.



Hubbard, R. et al. (2013). *The Really Useful eLearning Instruction Manual: Your toolkit for putting elearning into practice.*

Practical guidance and helpful tips from world-leading digital earning experts.

Important Note: Digital Learning readiness analysis is also something that should be taken into account by a future digital learning manager. There are many checklists available in the web as far as digital learning readiness of organizations is concerned:

- http://www.qou.edu/arabic/researchProgram/eLearningResearchs/assessingOrganizational.pdf
- http://www.online-journals.org/index.php/i-jac/article/view/1885/2115
  or a checklist for training organizations:
- http://de.slideshare.net/clintos/elearning-organistional-capability-checklist

This learning unit explores the latest developments and trends in technology. It suggests innovative solutions for the integration of new technology into existing products, applications or services or for the creation of new solutions.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ identify credible sources of information
- ☑ develop a method for continuous updating on technology trends
- ☑ identify vendors and other providers of promising solutions
- ☑ match technology opportunities to business needs

Best practices to address this lesson unit

- **Enquiry-based activity:** Conduct a literature review to identify and suggest six technology trends that could assist your organisation to develop and deliver learning solutions more efficiently and effectively, and to improve flexibility, scalability and accessibility. Or: Conduct a literature review to identify at least at least one technology trend that appears less likely to support digital learning (e.g. drones) and ask learners to identify a way that it *could* be used for learning.
- **Develop a curated list** of credible information sources**.** E.g. get them to create a scoop.it page, or ask learners to identify a suitable way to do this using technology.
- **Problem solving**: Working in a group, identify promising technological solutions and possible vendors for a given strategy.
- **Review**: Learning the history of digital (learning) technologies, to have the learner acquiring a wider vision on innovation.
- **Attend** a major specialized event / convention, to meet the state of the art and gather first hand return on experiences.

Reading for this Learning Unit:

Nyberg, A. & Palmgren, S. (2011). *Using Indicators for Technology Monitoring* (Master of Science Thesis). Chalmers University of Technology, Göteborg. Retrieved from:

http://publications.lib.chalmers.se/records/fulltext/142450.pdf

This thesis investigates how technology indicators can be used to systematically monitor developments in a given technology field, and proposes steps toward an applicable framework.

http://blog.talentlms.com/elearning-trends-follow-2015-infographic/

This infographic presents an attractive summary of key trends in business that are impacting on L&D.

UNIT 5 Purchasing

This learning unit focuses on how to apply a consistent procurement procedure in support of the digital learning strategy, including deployment of the following sub-processes: specification of requirements, supplier identification, proposal analysis, evaluation of the energy efficiency and environmental compliance of products, suppliers and their processes, contract negotiation, supplier selection and contract placement. Furthermore, it discusses ways to ensure that the entire purchasing process is fit for purpose, adds business value to the organisation and is compliant to legal and regulatory requirements.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ determine typical purchase contract terms and conditions
- ☑ describe the factors that drive pricing of typical L&D services
- ☑ analyse received proposals / offers
- ☑ manage the purchasing budget more effectively
- ☑ lead purchase process improvement
- ☑ explain typical purchase contract terms and conditions
- ☑ verify that purchasing processes respect legal issues including IPR
- ☑ match learner/staff/technology suppliers needs with existing products
- ☑ manage copyright and intellectual property

Best practices to address this lesson unit

- **Brainstorming**: Brainstorm the problems that could arise in a relationship with a supplier. Identify ways to avoid these problems or to mitigate them should they arise.
- **Review** actual digital learning supplier contracts and purchasing procedures. Identify their strengths and weaknesses, and make suggestions to address the weaknesses.
- **Conduct interviews** with those responsible for purchasing digital learning products and services, as well as with providers. Identify good practices.
- **Group work**: In groups of three or four discuss negotiation terms, conditions and pricing. What is our experience with this topic? What were the best parts of our experience? Discuss the implications of these experiences for you in the future.

Reading for this Learning Unit:

Bedey, L., Eklund, S., Najafi, N., Wahren, W. & Westerlund, K. (2008). *Purchasing Management.* Gothenburg: Chalmers. Retrieved from: http://publications.lib.chalmers.se/records/fulltext/90488.pdf

This book addresses some of the key issues in purchasing. It may give an idea of current developments in purchasing, it might also provide a presentation of a coming generation of purchasing professionals.

UNIT 6 Relationship Management

This learning unit presents ways to establish and maintain positive business relationships with and between internal and external stakeholders involved in the implementation of the organisation's digital learning strategy. It discusses also how to maintain regular communication with these stakeholders, in order to address needs, concerns or complaints, in accordance with organisational policy.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ maintain regular communication with key stakeholders in order to ascertain needs, concerns and complaints

- ☑ deploy empathy in dealing with these stakeholders
- ☑ identify potential win-win opportunities
- ☑ establish realistic expectations to support the development of mutual trust
- ☑ monitor on-going commitments to ensure they are being fulfilled
- ☑ communicate good and bad news to avoid surprises

Best practices to address this lesson unit

- **Group activity: (1)** Start each class with a 'two truths and one lie' exercise to establish culture of interaction and collaboration, (tell two truths and one lie about yourself and allow participants to ask questions about the truths and lies. You can lie as much as you like about questions to do with your lie, but you must be truthful when being asked about your truths). This is a very successful exercise because learners get to know one another, laying the groundwork for future collaboration.

  (2) A group exercise in which various factors (internal and external) change during the project. These are introduced at appropriate points during the exercise and the learners must decide what, if any, action they need to take to communicate and maintain stakeholder relationships.

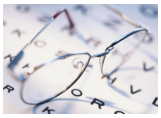
  (3) An exercise or **scenario** in which you have a range of stakeholders on a project, some more powerful than others, some more interested than others, and devise a strategy for communication with each of them, at the outset of a project. Who is an ally, who needs to be managed. If a scenario you can then throw in a 'surprise' like one getting promoted away or something going seriously wrong in the project and ask them to decide what to do.

- **Role play**: Based on a given scenario, practice how to communicate good or bad news.
- **Brainstorming**: Working in a group, discuss how to engage key stakeholders and maintain regular communication with them. Identify the challenges and ways of mitigating them.
- **Experiment**: Conduct non-violent communication (NVC) training and group experiment.

Reading for this Learning Unit:

Kumar, V. & Reinartz, W. (2014). *Strategic Customer Relationship Management (CRM) Today.* Retrieved from: http://www.drvkumar.com/wp-content/uploads/2014/07/Ch01.pdf

This publication discusses the concept of CRM, the relevance of strategic CRM, the evolution and growth of CRM and CRM from a business strategy perspective plus a customer value management approach.



LeFever, L. (2013). *The art of explanation.* New Jersey: Wiley.

A perfect reading (plus videos) and framework for exercises for explaining your ideas more clearly.

UNIT 7 Business change management

This learning unit discusses how to manage the implications of new digital learning solutions and how to manage the change involved, taking into account structural and cultural issues. Also, how to maintain business and process continuity throughout the change, monitoring the impact, and taking any required remedial action.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ analyse costs and benefits of business changes
- ☑ select appropriate ICT solutions based upon benefit, risks and overall impact
- ☑ construct and document a plan for implementation of process enhancements
- ☑ apply project management standards and tools
- ☑ identify business advantages and benefits of adopting emerging technologies
- ☑ analyse future developments in business process and technology application
- ☑ review and analyse effects of implementations

Best practices to address this lesson unit

- **Debate**: Ask learners to identify and debate the potential positive and negative reactions of key stakeholders to a new digital learning solution. For instance, you can ask them to imagine a digital learning solution that does X,

where is either the learner's choice or something specified e.g. an app that measures the level of attention you give to meetings, an applet that allows you to bookmark interesting websites easily, really user-friendly video editing software. Ask them then to identify ways to reduce the risk of negative reactions or respond to them if they occur.

- **Brainstorming:** Brainstorm a list of the types of business decisions that may be facilitated by cost-benefit analysis include whether or not to add employees, introduce a new technology, purchase equipment, change vendors, implement new procedures, and remodel or relocate facilities.

Reading for this Learning Unit:

ENVEC (2007). *Managing change.* Retrieved from: http://www.oursouthwest.com/SusBus/mggchange.pdf

This guide will help managers think creatively about how they manage change, whilst avoiding many of the pitfalls that other companies have encountered.

2.2.1 Short description

The professional role of designing blended learning solutions, is performed by a professional, also known as learning solutions designer or learning consultant, bended learning designer or even learning programme designer, who is responsible for creating the top-level design for a learning intervention, whether or not the decision is ultimately taken to include a digital learning element. These skills must be in place if digital learning is to be applied appropriately.

2.2.2 Learning units (modules) and learning outcomes

The learning units (modules) suggested below are based on the key e-competences derived from the European e-Competence Framework (e-CF)[2] for the designing blended learning solutions role profile, along with the expected learning outcomes:

UNIT 1 Needs Identification

This learning unit focuses on the nearly same issues as the learning unit 1 in the case of the architecting a digital learning strategy role profile. In addition to looking at the underlying need and learning requirement, it places particular emphasis on analyzing the characteristics of the target audience (their demographics, prior knowledge, level of interest, independence as learners and preferences) and practical constraints and opportunities, in particular the availability of tools, skills, equipment, facilities, budget and time, as well as the geographical dispersion of the target audience.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ analyse the underlying need / business requirements of project sponsors / internal or external customers

[2] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

- ☑ analyse the learning requirement and determine the implications for the learning solution design
- ☑ analyse the characteristics of the target audience and determine the implications for the learning solution design
- ☑ analyse the practical constraints and opportunities and determine the implications for the learning solution design
- ☑ describe how to behave as a trusted consultant in relationships with the project sponsor / customer, in particular to resist the temptation to act as an 'order taker' and deal professionally with situations in which investigation shows there to be no real learning requirement
- ☑ use appropriate research methods, benchmarks and measurements methods

Best practices to address this lesson unit

- **Role-play:** Present the learner with a brief statement of requirement for a solution. Have the learner develop a set of questions to ask the project sponsor. Then role-play that interview.
- **Interactive scenario:** Alternatively, use a series of interactive scenarios to model the process of interviewing a project sponsor.
- **Collaborative learning:** Have a group analyse the findings of an analysis to determine the implications this has on the design of the solution.
- **Brainstorming**: Have a group of learners develop a checklist of questions to ask a project sponsor.
- **Debate:** Qualitative data or Quantitative data? Where can the data come from for an effective analysis, apart from the project sponsor? How valuable are subject experts? Should the opinions of subject experts on learning design be taken into account? What is user-centred design (or in this case learner-centred design)? How relevant and useful is this?

Reading for this Learning Unit:

Van Den Berg, G. & Wein, T. (2013). *Three Crucial Questions about Target Audience Analysis (TAA).* Retrieved from: http://www.bdinstitute.org/wp-content/uploads/2013/09/2013-Van-den-Berg-Wein_Crucial-Questions-about-TAA.pdf

This article attempts to provide practical, policy-relevant answers to three crucial

issues: (1) Why is everyone explaining TAA in different ways? (2) What kind of research is right for my TAA? and (3) How do I know if the contractor I am about to commission for TAA is any good?

UNIT 2 Design of learning solutions

This learning unit discusses how to diagnose individual and group competence, identifying skill needs and skill gaps. Also, how to review training and development options and select appropriate methodology and media taking into account the individual, project and business requirements. Furthermore, it discusses ways to coach and / or mentor individuals and teams to address learning needs.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ determine the broad category of learning requirements (knowledge/skills, attitudes/behaviours, etc.).
- ☑ follow pre-existing guidelines and conventions to select educational and training methods appropriate to the situation and learning media, including various forms of digital learning which are suited to the chosen methods
- ☑ go beyond pre-existing guidelines and conventions to create richer blends that better meet the requirements of particular situations
- ☑ bring in new media options that provide additional efficiencies and opportunities for learning

Best practices to address this lesson unit

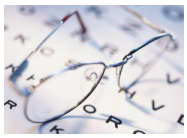
- **Active reflection:** Ask learners to self-reflect and honestly determine their foundation skills at a practical level (the skills they use every day for a variety of personal, social and work purposes), at a policy level (as part of their routine practice) and in the work context (with impact of workforce safety, compliance and productivity). Ask learners to reflect on how these skills could be further developed.
- **Research** alternative forms of design documentation as used in real practice by professionals responsible for designing blended learning environments e.g. face to face, offline media and online media. Which delivery channel provide us with the best learning solution taking into account specific strategies and

social contexts?

- **Case study**: **(1)** Review case studies in which problems have been encountered in the design of a learning solution and determine how a better design could have avoided some of these issues.

  (2) A case study of a business need, with information about constraints, which a number of groups propose blended solutions for; then **debate** the proposals to find the strongest blend.

Reading for this Learning Unit:



Shepherd, C. (2015). *More than Blended Learning*. Eastleigh: The More Than Blended Learning Company.

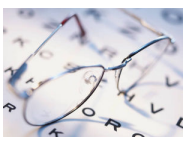
This book is, in itself, a blend of learning solutions offerings, including video cases, tools and templates, explainer videos and interactive materials. For more details: www.morethanblended.com

Brandon, B. (Ed.) (2008). *Best of The eLearning Guild's learning solutions.* San Francisco: Pfeiffer.

This book provides an enormous collection of excellent ideas, case studies, best practices, and reflective thinking from an incredible group of industry practitioners – nearly two hundred of them. Especially for eLearning instructional design professionals this book may offer ideas of various learning solutions.

Clark, R. & Mayer, R.E. (2011). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning* (3rd Edition). Pfeiffer.

The book contains design principles that are written to increase learning while debunking many popular theories about good design. The book also contains the most current research and includes new topics (e–learning for educators, new delivery technologies, social media, and more) and offers helpful guidelines.



Krug, S. (2006). *Don't Make Me Think! A Common Sense Approach to Web Usability* (2nd Edition). Berkeley, California USA: New Riders.

Since *Don't Make Me Think* was first published in 2000, hundreds of thousands of Web designers and developers have relied on usability guru Steve Krug's guide to help them understand the principles of intuitive navigation and information design. Witty, commonsensical, and eminently practical, it's one of the best-loved and most recommended books on the subject.

Graham, C.R. (2004). Blended learning systems: definition, current trends and future directions. In C.J. Bonk and C.R. Graham (Eds). *Handbook of Blended Learning: Global Perspective, Local Designs.* San Francisco, CA: Pfeiffer Publishing [Retrieved from http://www.click4it.org/images/a/a8/Graham.pdf]

This chapter introduces the term "blended learning" and discusses the various concepts of blended learning. The text outlines the current trends in designing blended learning environments and point at the advantages of various blended learning models in education.

UNIT 3 Documentation Production

This learning unit focuses on how a designer of a blended learning solution produces documents the learning design. The documentation is likely to include top-level statements of an overall design concept and full design specifications, describing the objectives, the structure of the solution, the content to be covered, the media to be used, the learning strategies to be used.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ use tools for production, editing and distribution of professional documents
- ☑ observe and deploy effective use of corporate document standards
- ☑ prepare and make use of document templates
- ☑ organise and control content management workflow, including appropriate approval processes
- ☑ keep documents aligned to the solution during the entire design and development lifecycle

Best practices to address this lesson unit

- **Case study**: Review case studies in which problems have been encountered in

the design and development of a learning solution and determine how better documentation could have avoided some of these issues.

- **Research** alternative forms for design documentation as used in real practice by designing blended learning. Compare the relative merits and de-merits of the different formats. In particular look to see how documentation can be supplemented by other activities and media, e.g. prototyping.
- **Research** the relative advantages and disadvantages of agile design as opposed to the traditional ADDIE model (Analysis, Design, Development, Implementation, Evaluation).
- **Practical**: Create design documentation to support a real-life project.

Reading for this Learning Unit:

Guitar, M. (2009). *4 Steps for Documentation Improvement.* Retrieved from: http://www.productionmachining.com/articles/4-steps-for-documentation-improvement

This article explains how quality documentation can be improved. Whether you use a simple word processing programme such as Word to document your processes, or a more sophisticated documentation software programme, organizing your material and identifying the simplest way to meet your needs is the key to documentation success.

http://elearningindustry.com/subjects/elearning-articles/elearning-project-management

Reading material could come from this interesting resource which refers to managing eLearning projects, tips, considerations and the stages for creating an effective training program.

UNIT 4 Relationship Management

This learning unit presents ways to establish and maintain positive business relationships between stakeholders (internal or external) involved in the implementation of the organisation's digital learning strategy deploying and complying with organisational processes. It discusses also how to maintain regular communication with learners / staff / technology provider, and how to address

needs through empathy with their environment and managing supply chain communications. Furthermore, it defines ways to ensure that stakeholder needs, concerns or complaints are understood and addressed in accordance with organisational policy.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ define and meet learner / staff / technology provider needs
- ☑ deploy empathy to customer needs
- ☑ identify potential win-win opportunities for customer and own organisation
- ☑ establish realistic expectations to support development of mutual trust
- ☑ develop guidelines on how to monitor on-going commitments to ensure fulfilment
- ☑ communicate good and bad news to avoid surprises

Best practices to address this lesson unit

- **Group activity:** Start each class with a 'two truths and one lie' exercise to establish culture of interaction and collaboration, (tell two truths and one lie about yourself and allow participants to ask questions about the truths and lies. You can lie as much as you like about questions to do with your lie, but you must be truthful when being asked about your truths). This is a very successful exercise because learners get to know one another, laying the groundwork for future collaboration.
- **Exercise:** Various factors (internal and external) change during the project. These are introduced at appropriate points during the exercise and the learners must decide what, if any, action they need to take to communicate and maintain stakeholder relationships.
- **Role play**: Present different scenarios and practise with students communicating good or bad news to clients using functionally appropriate language.
- **Case study**: Present a case study to students and ask them to brainstorm and reflect on the different ways of monitoring various commitments present in the case study.

Reading for this Learning Unit:

Kumar, V. & Reinartz, W. (2014). *Strategic Customer Relationship*

Management (CRM) Today. Retrieved from:

http://www.drvkumar.com/wp-content/uploads/2014/07/Ch01.pdf

This publication discusses the concept of CRM, the relevance of strategic CRM, the evolution and growth of CRM and CRM from a business strategy perspective plus a customer value management approach.

LeFever, L. (2013). *The art of explanation.* New Jersey: Wiley.

A perfect reading (plus videos) and framework for exercises for explaining your ideas more clearly.

2.3.1 Short description

The professional role of developing digital learning content (full time specialist), is performed by a specialist -also known as instructional designer, web content developer, multimedia developer or digital learning producer- who designs and/or develops digital learning content in all its forms, i.e. tutorials, simulations, games, assessments, videos, podcasts, troubleshooting guides and simple reference material. S/He undertakes sophisticated projects that require the skills only normally found in multi-disciplinary teams including creative, technical and content specialists. This will normally be a full-time position.

2.3.2 Learning units (modules) and learning outcomes

The learning units (modules) which are suggested are based on key e-competences derived from the European e-Competence Framework (e-CF)[3] for the developing e-learning content (full time specialist) role profile, along with the expected learning outcomes and are as follows:

UNIT 1 Needs Identification

This learning unit presents ways of working with internal / external key stakeholders, such as project sponsors, blended learning solutions designers, trainers and end users, and articulating and clarifying their needs for digital learning content. It discusses how, using user-centred design techniques, the proposed content can meet the articulated requirements.

Note that, sometimes the requirement may be for digital learning content that stands alone and the developing digital learning content will be required to work directly with the project sponsor to clarify the need. In other cases, the requirement may be for content that sits within a broader curriculum and in this case the need is

[3] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

not to identify the underlying business need but to determine from the designer blended learning solutions what the specific purpose is for the required content.

Learning outcomes

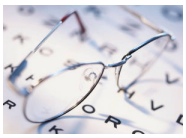
After completion of this learning unit, the learner will be able to:

- ☑ analyse the underlying need / business requirement of project sponsors / internal or external customers
- ☑ analyse the specific learning objectives for the learning content
- ☑ analyse the characteristics of the target audience for the learning content
- ☑ analyse the practical constraints and opportunities affecting the design and development of the learning content

Best practices to address this lesson unit

- **Role-play:** Present the learner with a brief statement of requirement for a learning content. Have the learner develop a set of questions to ask the project sponsor. Then role-play that interview.
- **Interactive scenario:** Alternatively, use a series of interactive scenarios to model the process of interviewing a project sponsor.
- **Group activity:** Have a group analyse the findings of an analysis to determine the implications this has on the design of the content.
- **Checklist**: Have a group of learners develop a checklist of questions to ask a project sponsor.
- **Action research:** Have a group of learners interview a sample of the target audience for some learning content. Following this, discuss how useful this process was and formulate recommendations for conducting this process in the future and how they would address a situation where learning needs did not match stakeholder requirements.

Reading for this Learning Unit:



Titcomb, A. (2010). *Need Analysis.* Arizona: The University of Arizona. Retrieved from:

https://extension.arizona.edu/evaluation/sites/extension.arizona.edu.evaluation/files/docs/needs.pdf

This is a synoptic evaluation concept sheet about definitions, steps and examples,

techniques and methods, cautions and pitfalls of need analysis.

UNIT 2 Design of learning solutions

This learning unit discusses how to design solutions that address identified requirements for knowledge, skills and competences. It looks at how to structure a solution to ensure proper preparation, application and follow-up for the learner; also how to select appropriate strategies for learning and to make appropriate use of new technologies.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ determine objectives for a learning solution, taking account of the information gathered during needs analysis;
- ☑ structure a solution to ensure adequate preparation, opportunities for practical application of new skills and knowledge, and follow-up beyond the formal conclusion of the solution;
- ☑ select educational and training methods appropriate to the type of learning required and the characteristics of the target population;
- ☑ select appropriate media, incl. various forms of digital learning, for each of the chosen methods;
- ☑ when choosing media, look to provide cost-efficiencies and to take advantage of opportunities for greater scalability, accessibility and flexibility;
- ☑ balance the methods and media within a solution to ensure the learner has adequate support when needed from trainers/experts/facilitators as well as from peers; that there is an appropriate balance between synchronous (live) and asynchronous (self-paced) activities

Best practices to address this lesson unit

- **Video analysis:** Ask learners to review the case studies of successful blended solutions available at http://morethanblended.com/collection and to analyse how these solutions were structured. Bring together to discuss as a group and look to generalise about the characteristics of effective structures.
- **Research** different social contexts for learning, i.e. learning alone, learning

one-to-one, learning in a small group/cohort, learning within a wider community: What are the advantages and disadvantages of each approach?

- **Research** face-to-face, offline media (books, CDs, etc.) and online media. When should we use these delivery channels taking into account our chosen learning strategies and social contexts?
- **Case study**: Review case studies in which problems have been encountered in the design of a learning solution and determine how a better design could have avoided some of these issues.
- **Practical application**: Have learners create designs for solutions from a given needs analysis. Review and provide feedback.
- **Coaching**: Work with learners to review their real-life designs for solutions.

Reading for this Learning Unit:

Shepherd, C. (2015). *More than Blended Learning*. Eastleigh: The More Than Blended Learning Company.

This book is, in itself, a blend of learning solutions offerings, including video cases, tools and templates, explainer videos and interactive materials. For more details: www.morethanblended.com

Brandon, B. (Ed.) (2008). *Best of The eLearning Guild's learning solutions.* San Francisco: Pfeiffer.

This book provides an enormous collection of excellent ideas, case studies, best practices, and reflective thinking from an incredible group of industry practitioners – nearly two hundred of them. Especially for eLearning instructional design professionals this book may offer ideas of various learning solutions.

UNIT 3 Documentation Production

This learning unit focuses on how a specialist digital learning content development produces documents to describe the learning design. This documentation is likely to include: i) top-level design concepts, ii) design specifications, which describe the objectives, the structure of the content, the subject matter to be covered, the media to be used, the learning strategies to be used, etc. and iii) scripts and storyboards,

which define the detail of each element of the content, including text on the screen, voiceover and specifications for graphics and other audio-visual assets.

Learning outcomes

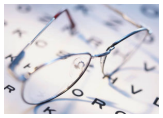
After completion of this learning unit, the learner will be able to:

- ☑ use tools for production, editing and distribution of professional design documents
- ☑ effectively interpret and apply corporate document standards
- ☑ prepare and make use of document templates
- ☑ organise and control content management workflow, including appropriate approval processes
- ☑ keep documents aligned to the solution during the entire design and development lifecycle

Best practices to address this lesson unit

- **Case study**: Review case studies in which problems have been encountered in the design and development of learning content and determine how better documentation could have avoided some of these issues.
- **Research** alternative forms for design documentation as used in real practice. Compare the relative merits and de-merits of the different formats. In particular look to see how documentation can be supplemented by other activities and media, e.g. prototyping.
- **Research** the relative advantages and disadvantages of agile design as opposed to the traditional ADDIE model (Analysis, Design, Development, Implementation, Evaluation).
- **Practical**: Create design documentation to support a real-life project.

Reading for this Learning Unit:



Guitar, M. (2009). *4 Steps for Documentation Improvement.* Retrieved from: http://www.productionmachining.com/articles/4-steps-for-documentation-improvement

This article explains how Quality documentation can be improved. Whether you use a simple word processing programme such as Word to document your processes, or a more sophisticated documentation software programme, organizing your material

and identifying the simplest way to meet your needs is the key to documentation success.

UNIT 4 Relationship Management

This learning unit presents ways to establish and maintain positive business relationships between stakeholders (internal or external) involved in the design, development and delivery of digital learning content. It discusses also how to maintain regular communication with learners / staff / technology providers, and how to address their needs through empathy and by managing supply chain communications. Furthermore, it defines ways to ensure that stakeholder needs, concerns or complaints are understood and addressed appropriately.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ communicate effectively with technical and creative specialists, making full use of their expertise without allowing them to dominate the design process.
- ☑ communicate effectively with subject experts, gaining the benefit of their experience and expertise without allowing them to overly influence the learning design.
- ☑ communicate effectively with project sponsors to ensure they are kept fully up-to-date with progress and understand clearly what the resulting content will be like.
- ☑ use empathy to fully understand the perspective of different stakeholders.
- ☑ establish realistic expectations to support development of mutual trust.
- ☑ monitor on-going commitments to ensure requirements are fulfilled.
- ☑ communicate good and bad news to avoid surprises.
- ☑ deal professionally with complaints.

Best practices to address this lesson unit

- **Group activity:** Start each class with a 'two truths and one lie' exercise to establish culture of interaction and collaboration, (tell two truths and one lie about yourself and ask others to vote on which is the lie). This is a very successful exercise because learners get to know one another, laying the groundwork for future collaboration.

- **Interactive scenarios:** Learners are presented with a problem situation and have to determine how to resolve it including what and how to communicate with stakeholders throughout. The exercise is then debriefed and discussed.
- **Case studies:** Learners work in groups to review case studies of content development projects. They decide how the relationships were managed well and how they could have been better managed.
- **Guest speaker:** Different stakeholders are interviewed by learners to determine how they like to work with specialist digital learning content developers and the challenges they have encountered.
- **Project debriefs:** Learners work on a real-life content development project and then participate in a debrief with all stakeholders to discuss how they could have worked better together.

Reading for this Learning Unit:

Kumar, V. & Reinartz, W. (2014). *Strategic Customer Relationship Management (CRM) Today.* Retrieved from: http://www.drvkumar.com/wp-content/uploads/2014/07/Ch01.pdf

This publication discusses the concept of CRM, the relevance of strategic CRM, the evolution and growth of CRM and CRM from a business strategy perspective plus a customer value management approach.

UNIT 5 Quality Management of the digital content

This learning unit focuses on how to design, develop and use a policy to maintain and enhance the quality of digital learning content.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ illustrate how methods, tools and procedures can be applied to implement an e-quality policy for digital learning content
- ☑ evaluate and analyse process steps to identify strengths and weaknesses
- ☑ assist process owners in the choice and use of measures to evaluate effectiveness and efficiency of the overall process
- ☑ monitor, understand and act upon quality indicators
- ☑ perform quality audits

Best practices to address this lesson unit

- **Peer review:** Learners develop tools to allow their peers to review the quality and provide objective feedback of the content that they have designed and developed.
- **Quality indicators:** Learners work in groups to develop indicators of quality in digital learning content.
- **Benchmarking**: Learners could be asked to identify, share and use their knowledge of the best procedures in other companies in order to their quality processes. (Benchmarking can be a powerful method for breakthrough thinking, innovation, and improvement, and for delivering exceptional bottom-line results).

Reading for this Learning Unit:

Grifoll, J., Huertas, E., Prades, A., Rodriguez, S., Rubin, Y., Mulder, F. & Ossiannilsson, E. (2010). *Quality Assurance of eLearning.* Helsinki, Finland: ENQA. Retrieved from: http://www.enqa.eu/indirme/papers-and-reports/workshop-and-seminar/ENQA_wr_14.pdf

This report gives a general overview of the matters and challenges faced within the sector of quality assurance in digital learning.

Bari, M. & Djouad, R. (2014). Quality Frameworks and Standards in eLearning Systems. *International Journal of the Computer, the Internet and Management, Vol 22* (No. 3), pp. 1-7. Retrieved from: http://www.ijcim.th.org/past_editions/2014V22N3/2Page1.pdf

This paper investigates the existing quality frameworks and standards dedicated to the digital learning systems.

http://www.towardsmaturity.org/index/employer-stories/

Towards Maturity is a not-for-profit benchmarking and research organisation that aims to promote good practice in L&D. Their website has case studies from several

organisations.

UNIT 6 Technology Trend Monitoring

This learning unit explores the latest developments and trends in technology. It suggests innovative solutions for the integration of new technology into existing products, applications or services or for the creation of new solutions.

Learning outcomes

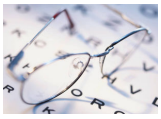
After completion of this learning unit, the learner will be able to:

- ☑ identify credible sources of information
- ☑ develop a method for continuous updating on technology trends
- ☑ identify vendors and other providers of promising solutions
- ☑ match technology opportunities to business needs

Best practices to address this lesson unit

- **Enquiry-based activity:** Conduct a literature review to identify and suggest six technology trends that could assist your organisation to develop and deliver learning solutions more efficiently and effectively, and to improve flexibility, scalability and accessibility. Or: Ask learners to suggest technology trends that may assist in delivering digital learning. Identify at least one technology trend that appears less likely to support digital learning (e.g. drones) and ask learners to identify a way that it *could* be used for learning.
- **Develop a curated list** of credible information sources**.** For instance, use scoop.it to develop this list. Additionally, ask learners to identify a suitable way to do the using technology.

Reading for this Learning Unit:



Nyberg, A. & Palmgren, S. (2011). *Using Indicators for Technology Monitoring* (Master of Science Thesis). Chalmers University of Technology, Göteborg. Retrieved from: http://publications.lib.chalmers.se/records/fulltext/142450.pdf

This thesis investigates how technology indicators can be used to systematically monitor developments in a given technology field, and proposes steps toward an applicable framework.

2.4.1 Short description

The developing digital learning content (part-time), also known as an instructional designer, is a teacher/trainer who designs and/or develops simpler forms of digital learning content including reference materials, slides, assessments, screencasts, interview videos, podcasts, etc. This role will normally be just one aspect of a general teaching/training role. In some cases, the role may also be undertaken by a subject specialist who is not a learning professional. An essential aspect of this role is that the person is likely to be designing and developing this content to support the teaching or training for which they are responsible, in the way that a teacher creates slides or handouts for their classes. This can be contrasted with a full-time content developer who could create content for any subject or purpose and who has no teaching or training responsibilities.

2.3.2 Learning unit (module) and learning outcomes

The learning unit (module) which is suggested here is based on key e-competences derived from the European e-Competence Framework (e-CF)[4] for the developing e-learning content (part-time) role profile, along with the expected learning outcomes:

UNIT 1 Design and Development of digital learning content

This learning unit focuses on how to define the objectives for the digital learning content, how to decide on an overall approach, and the way the content will be structured. It also discusses how to prepare the written and spoken elements of the content, how to arrange interactive elements and test items, such as questions, simulations, games, surveys or assessments, how to source or develop audio-visual components, how to use authoring tools to build the content and how to test and refine the content.

[4] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ define learning objectives for a piece of content
- ☑ write clearly and concisely for screen and voiceover
- ☑ create or source suitable imagery (photos, illustrations, diagrams) and perform whatever simple edits are required to suit the intended purpose
- ☑ record audio to a high quality and perform simple edits to this audio
- ☑ describe the conditions necessary for successful shooting of video material
- ☑ create videos that clearly explain the use of a software application or website
- ☑ effectively combine text, images and other media elements to create slide shows, web pages and PDFs that conform to established design principles
- ☑ effectively integrate interactivity into multimedia materials in order to create tutorials and scenarios that conform to established design principles and deliver on their learning objectives
- ☑ write assessment activities that validly and reliably test the achievement of specific learning objectives
- ☑ choose the most appropriate tools for the development of different forms of content

Best practices to address this lesson unit

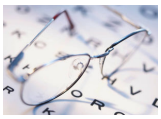
- **Visualisation**: Have learners develop materials that meet a design brief to convey a message using images alone. Test these on other learners. Discuss as a group.
- **Practical application (Writing)**: Have learners develop web articles or PDFs to meet a design brief using text and still images. Test these on other learners. Discuss as a group.
- **Using sound**: Have learners develop podcasts to meet a design brief using audio alone. Test these on other learners. Discuss as a group.
- **Practical application (Sound and Image)**: Have learners develop screencasts and narrated slide shows to meet a design brief, which needs to be in PeckaKucha format, which means “the sound of conversation” in Japanese (a presentation software format that lasts exactly six minutes and forty seconds). Test these on other learners. Discuss as a group.
- **Assessments**: Have learners develop e-assessments to accompany any of the

content they have developed previously. Test these on other learners. Discuss as a group.

- **Interactive tutorials and scenarios**: Have learners develop interactive materials to meet a given design brief. Test these on other learners. Discuss as a group.
- **Active Reflection**: Ask learners to identify their favourite content on the Internet and explain why.
- **Guest experts**: Ask professional graphic designers, audio engineers, videographers and software engineers to talk about and demonstrate their work and answer questions.
- **Demonstrations**: Review with your learners examples of successful digital learning content. Ask them to reflect on the reasons why the content has been well received by learners.
- **Prototyping**: Ask learners to built specifically low fidelity prototypes that focus on content, structure and interaction to avoid people focussing on visual design standards, colours, fonts etc.
- **Tools research**: Conduct a web search to find examples of tools to meet different purposes, e.g. editing images, sound and video; creating PDFs and web articles; creating interactive content.

Important note: Content development is like a craft skill. It requires a great deal of practice over many years, ideally working alongside others who can provide informed feedback. Do not expect to see these skills develop in a few days or weeks.

Reading for this Learning Unit:



Forni, K. (Ed.) (2013). *Tips on Effective eLearning Instructional Design*. Santa Rosa: The eLearning Guild. Retrieved from: http://www.click4it.org/images/f/fa/62_Tips_for_Effective_eLearning_Instructional_Design.pdf

This e-book presents 62 tips from 12 experts that focus on topics from spaced repetition to recycling digital learning assets, and from managing digital learning design standards to designing learning for mobile devices.

Clark, R. & Mayer, R.E. (2011). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of*

Multimedia Learning (3rd Edition). Pfeiffer.

The book contains design principles that are written to increase learning while debunking many popular theories about good design. The book also contains the most current research and includes new topics (e–learning for educators, new delivery technologies, social media, and more) and offers helpful guidelines.

Krug, S. (2006). *Don't Make Me Think! A Common Sense Approach to Web Usability* (2nd Edition). Berkeley, California USA: New Riders.

Since *Don't Make Me Think* was first published in 2000, hundreds of thousands of Web designers and developers have relied on usability guru Steve Krug's guide to help them understand the principles of intuitive navigation and information design. Witty, commonsensical, and eminently practical, it's one of the best-loved and most recommended books on the subject.

2.5.1 Short description

The professional role facilitating virtual classroom sessions is performed by a specialist, also known as virtual/online classroom teacher/trainer/instructor/facilitator is a teacher/trainer who designs and delivers real-time group sessions using web conferencing tools (these are also sometimes called 'webinars'). These sessions are the online equivalent of sessions held in physical lecture rooms and classrooms and could take the form of lectures, seminars, workshops, coaching or instruction. This role will normally be just one aspect of a general teaching/training role or will be undertaken by a subject expert. Some professionals facilitating virtual classroom sessions may also take on the broader role of tutoring online, in which they have overall responsibility for overseeing and delivering all aspects of an online learning programme.

2.5.2 Learning units (modules) and learning outcomes

The learning units (modules) which are suggested are based on the key e-competences derived from the European e-Competence Framework (e-CF)[5] for the facilitating virtual classroom sessions role profile, along with the expected learning outcomes and are as follows:

UNIT 1 Design/Preparation of the live lesson/session

This learning unit focuses on the research and analysis of the learning objectives and audience characteristics for the session. It also explains how prepare a design for the session, based on this analysis. Moreover, this unit discusses how to develop visual aids to support the session, and how to rehearse to ensure the smooth running of the session.

Learning outcomes

After completion of this learning unit, the learner will be able to:

[5] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

- ☑ interview stakeholders in order to gather the information needed to plan the session
- ☑ structure an effective virtual classroom session
- ☑ write a virtual classroom session plan
- ☑ determine the capabilities of the major virtual classroom platforms

Best practices to address this lesson unit

- **Debate**: **(1)** Synchronous virtual classroom v physical classroom: benefits and drawbacks.

  (2) Synchronous learning activities v asynchronous learning activities: benefits and drawbacks.
- **Role-play**: Have learners interview a project sponsor to determine the needs for an imaginary virtual classroom session.
- **Practical application**: Design a virtual classroom session to meet a given brief. Document this design the tools introduced earlier in the course and submit for review.
- **Web research**: Group activity to find out the features and benefits of various virtual classroom tools.
- **Active reflection**: Have learners participate in webinars and virtual classroom sessions and reflect on the materials and processes involved in them. Ask them to develop a set of evaluation criteria and apply them to a specific webinar.
- **Brainstorming:** Consider everything you need to prepare before you say 'welcome' to your virtual audience and start your session.
- **Scenarios:** Give learners several scenarios where the needs analysis shows that (a) learners are experienced virtual classroom users, (b) learners are experienced virtual classroom users, but with a different platform and (c) learners have no experience of virtual classrooms. What impact will each of these have on the design/content of the session? An important decision at the design stage will be the number of facilitators and whether there will be a host. Perhaps give the learners an existing high level design and then develop that for (a) solo facilitator, no host, (b) solo facilitator, with host and (c) two facilitators, with host. As them to the consider the benefits and risks of each approach.

Reading for this Learning Unit:

Martin, F. & Parker, M. (2014). Use of Synchronous Virtual Classrooms: Why, Who, and How? *MERLOT Journal of Online Learning and Teaching, Vol. 10* (No. 2), pp. 192-210. Retrieved from: http://jolt.merlot.org/vol10no2/martin_0614.pdf

This paper present a study about why instructors adopt synchronous virtual classrooms and how they use them after their adoption.

PittOnline (2014). Conducting Synchronous Sessions. Retrieved from: http://www.online.pitt.edu/faculty/documents/10bestpracticessynchonlinelearnfinal.pdf

Here are the Top 10 Best Practice/ guidelines which are offered by faculty who have experience facilitating synchronous sessions.

Huggett, C. (2013). *The Virtual Training Guidebook.* ASTD Press. ISBN: 9781562868611

Packed with checklists, advice, and how-to features, The Virtual Training Guidebook teaches you how to design, deliver, and implement live online learning.

UNIT 2 Live facilitation/session delivery

This learning unit focuses on ways to facilitate a live online session using web conferencing tools.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ Use virtual classroom software appropriately
- ☑ Engage participants using voice, graphics and other media
- ☑ Elicit regular interaction using text chat, polls, whiteboards, application sharing and other tools
- ☑ Monitor progress and deal appropriately with student requests and comments
- ☑ Address technical problems that may occur
- ☑ Interact appropriately with co-facilitators and guest experts

☑ Describe ways to flex virtual classroom sessions to ensure that they keep to time

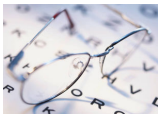
Best practices to address this lesson unit

- **Case Study**: Consider the hypothetical situation of a group of students in a web-based course who are being taught the principles of logical reasoning. They are divided into problem-solving teams to work on logic problems. Each team must meet to discuss how to solve a new type of logic problem. Suppose the members of each problem-solving team are scattered around the globe making it impossible to easily meet in person. The students meet to discuss the problem and work out a new approach and solution in a collaborative web session launched to bring them together. Unfortunately, the student most expert in logical reasoning is unable to attend the on-line session. How could one effectively address this difficulty?
- **Discussion:** How can we use effectively the primary interactivity tools, such as voice interaction, polls, chat, document sharing, whiteboards, breakout rooms during a live online session?
- **Practical application (feedback):** Have learners initially work in pairs to deliver a short session. Obtain feedback from all participants. Ask learners to create action plans to improve future sessions. As the learner becomes more confident, have them moderate longer sessions on their own and debrief every session.
- **Coaching:** Work with a learner before and after a real session to help them establish learning goals and debrief what worked well and less well.
- **Brainstorming:** Two teams brainstorm list of things that could go wrong. Then give them to the other team to describe how best to prevent/ react to such problems

Reading for this Learning Unit:

Yilmaz, O. (2015). The Effects of 'Live Virtual Classroom' on Students' Achievement and Students' Opinions about 'Live Virtual Classroom' at Distance Education. *TOJET: The Turkish Online Journal of Educational Technology, Vol 14* (No. 1), pp. 108-115. Retrieved from: http://www.tojet.net/articles/v14i1/14111.pdf

This article presents the results of a study which was performed to investigate the effects of live virtual classroom on students' achievement and to determine students' opinions about the live virtual physics classroom at distance learning.



PittOnline (2014). Conducting Synchronous Sessions. Retrieved from: http://www.online.pitt.edu/faculty/documents/10bestpracticessynchonlinelearnfinal.pdf

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Huggett, C. (2013). *The Virtual Training Guidebook.* ASTD Press. ISBN: 9781562868611

Packed with checklists, advice, and how-to features, The Virtual Training Guidebook teaches you how to design, deliver, and implement live online learning.

Steed, C. (2011). *Facilitating Live Online Learning*. Engaged Online Learning.

The book is aimed at trainers and everyone who will be facilitating live online small group learning events but is also applicable to managers and others who wish to explore the live online environment. It is packed practical advice and guidance on how to design and deliver engaging and meaningful live online events based on the author's 15 years' experience with designing and facilitating live online learning.

Salmon, G. (2011). *E-Moderating: The Key to Teaching and Learning Online.* New York and London: Routledge.

This is the most quoted and successful guide for digital learning practitioners, supported with research evidence, practical examples and resources. It introduces a seminal five-stage model used around the world at different levels of education, across disciplines and contexts. The new editions contains guidelines for moderating for podcasting and virtual worlds.

Tripp & Tyler (2014, January 22). *A Conference Call in Real Life.* [Video file]. Retrieved from: https://www.youtube.com/watch?v=DYu_bGbZiiQ

A very hilarious but great starting point is this virtual conference on YouTube, which is not particularly a training session but rather a telephone conference, but still great fun to watch and bringing the class in the mood for the topic.

2.6.1 Short description

The professional role of online tutoring Is performed by a specialist, also known as virtual/online facilitator/moderator/programme lead or e-tutor, who is responsible for ensuring the successful delivery of extended online and blended distance-learning programmes and to support students as they engage in these programmes. Tutoring online may also provide support to those learning informally on-the-job, outside the scope of a formal programme, often through content curation. Furthermore, a professional in this role may play some role in the design of online activities and assignments for individuals and groups that take place within a programme. Note that one of the roles of tutoring online may be to act as a virtual classroom facilitator. However, not all virtual classroom sessions' facilitators are also tutoring online.

2.6.2 Learning units (modules) and learning outcomes

The learning units (modules) which are suggested are based on the key e-competences derived from the European e-Competence Framework (e-CF)[6] for the tutoring online role profile, along with the expected learning outcomes and are as follows:

UNIT 1 Learner Communications

This learning unit focuses on how the tutoring online communicates with the learners before and after the lesson/session; how s/he may respond to learner requests and issues, related either to technical problems that students are experiencing with the content, or to the subject matter of the content, recording relevant information. This unit also determine ways to ensure resolution or escalates incidents in accordance with predefined service level agreements (SLAs) and how to monitor solution outcome and resultant customer satisfaction.

[6] The European e-Competence Framework (e-CF) (http://www.ecompetences.eu) provides 40 general and comprehensive e-Competences classified according to five main ICT business areas (PLAN-BUILD-RUN-ENABLE-MANAGE), specified at five proficiency levels related to the European Qualifications Framework (EQF). For further details, please refer to Section 3.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ effectively question users to establish symptoms indicating learner satisfaction levels
- ☑ analyse symptoms to identify broad area of user error or technical failure
- ☑ deploy support tools to systematically trace source of error or technical failure
- ☑ provide instructions to learners on how to progress issues
- ☑ record and code issues to support growth and integrity of online support tools
- ☑ communicate with learners about their expectations, preferences, and when and how they learn best
- ☑ use such communicative functions as providing explanations, defending a point of view, arguing a course of action or justifying their decisions

Best practices to address this lesson unit

- **Role Play:** *Mrs Lupton*, Linda's 56 years old tutoring online, has received no reply to her emails to Linda, and she worries that Linda may become a drop out. *Linda* is 36 years old, mother of two children and full-time worker. She usually takes her online courses late at night, after her children are in bed or early in the morning before work. Naturally, she describes herself as time-poor and points to the lack of time as one of her main difficulties in her online education. Mrs Lupton decides to make a telephone call to Linda in order to facilitate her learning 'journey' into the online course. (Each role play character receives information designed to be read only by the learner play the part. This information allows the learner to be realistic in her/his portrayal of the character. And remember: *The best tutors understand where their student's problems lie. This allows them to tailor their tutoring to learners' needs).*
- **Brainstorming**: How can we avoid the 'Lone Ranger' syndrome (which refers to distant learners, who may feel alone or disconnected from their social world) in online learning? Which strategies increase interaction in online classroom?
- **Discussion**: The main topic of the discussion is 'What contributes to student success in a course delivered online?' The discussion will focus on the three actors involved in the process of students learning online, 1) the institution, 2) instructor and 3) the learner.

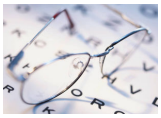
Reading for this Learning Unit:

Shepherd, C. (2015). *More than Blended Learning*. Eastleigh: The More Than Blended Learning Company.

This book is, in itself, a blend of offerings, including video cases, tools and templates, explainer videos and interactive materials. For more details: www.morethanblended.com.

Higgison, C. & Conelius, S. (2001). *The Online Tutoring e-Book.* Edinburgh: Heriot-Watt University. Retrieved from: http://www.fredriley.org.uk/callhull/otis/t2-06.pdf

One of the key questions that this paper wants to answer is 'to what extent and how do the roles and skills of the *tutoring online* differ from those employed in face-to-face teaching?' Through case studies and online discussions it attempts to clarify the role of the tutoring online.



Mupinga, D., Nora, R. & Yaw, D.C. (2006). The learning styles, expectations, and needs of online students. *College Teaching, Vol 26* (No.1), pp. 185-189. Retrieved from: http://web.simmons.edu/~brady/CE/Reading%202.pdf

This study establish learning styles, expectations, and needs of college students taking an online course. Further, the study explores how the identified characteristics can be incorporated in designing effective online instruction.

UNIT 2 Progress Management

This learning unit focuses on how to implement and guide the evolution of a digital learning intervention, and how to ensure, in consultation with experts if necessary, efficient control and scheduling of software or hardware modifications to prevent multiple upgrades creating unpredictable outcomes. Through this learning unit, tutoring online will deal with evolving issues such as time delays or technical problems and become familiar with ways to monitor activity reports in the VLE and learner communications. This learning unit will enable the tutor to adjust the course

programme to address issues such as slow learner progress or technical barriers and to minimise service disruption as a consequence.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ share functional and technical specifications with ICT teams in charge of the maintenance and evolution of ICT solutions
- ☑ manage communications with ICT teams in charge of the maintenance and the evolution of information systems solutions
- ☑ analyse the impact of functional / technical changes on users
- ☑ anticipate typical actions required to mitigate the impact of changes (training, documentation, new processes etc.)

Best practices to address this lesson unit

- **Case Study:** If the audio feed echoes, the video is delayed, or a laptop runs out of battery juice (things that are no different from the kind of disruptions that might happen during an in-person session), how will you use your troubleshooting plan to resolve such problems quickly, and then get back to tutoring? (Remember, even the best planning and preparedness can't prevent the occasional glitch.)
- **Debate:** Organize a discussion in which students debate the benefits and limitations of the Web 2.0 tools.

Reading for this Learning Unit:

Chu, S. K. W., Kwan, A. C. M., & Warning, P. (2012). Blogging for Information Management, Learning, and Social Support during Internship. *Educational Technology & Society*, *15*(2), 168–178. Retrieved from: http://ifets.info/journals/15_2/15.pdf

This study investigates the use of web logs to facilitate information management, learning, and mutual support for internship students.

Wheeler, S. (2010). Open Content, Open Learning 2.0: Using Wikis and Blogs in Higher Education. In Ehlers, U.-D. & Schneckenberg, D. (Eds.), *Changing Cultures in Higher Education*. Springer-Verlag Berlin Heidelberg.

This paper focuses on the use of open content social software (wikis and blogs) as

online supporting and enabling tools for students in higher education. The paper presents arguments from both strategic and pedagogical perspectives and focuses particularly on the reality of pedagogical change where self-directed and self-organized 'informal' learning, open content, and open learning are challenging the traditionally accepted roles of both students and teachers.

UNIT 3 Live Facilitation/Session Delivery

This learning unit focuses on ways to facilitate a live online session using web conferencing tools or virtual worlds. It explains how to design and facilitate online learning activities and how to employ computer technology effectively in the classroom.

Learning outcomes

After completion of this learning unit, the learner will be able to:

- ☑ Identify learner/customer needs
- ☑ apply appropriate software
- ☑ communicate (incl. in foreign languages if useful)
- ☑ moderate an online session independently
- ☑ use such communicative functions as providing explanations, defending a point of view, arguing a course of action or justifying their decisions

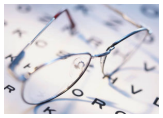
Best practices to address this lesson unit

- **Case Study**: Consider the hypothetical situation of a group of students in a web-based course who are being taught the principles of logical reasoning. They are divided into problem-solving teams to work on logic problems. Each team must meet to discuss how to solve a new type of logic problem. Suppose the members of each problem-solving team are scattered around the globe making it impossible to easily meet in person. The students meet to discuss the problem and work out a new approach and solution in a collaborative web session launched to bring them together. Unfortunately, the student most expert in logical reasoning is unable to attend the on-line session. How could one effectively address this difficulty?
- **Brainstorming:** Consider everything you need to prepare before you say

'welcome' to your virtual audience and start your session.

- **Discussion:** How can we use effectively the primary interactivity tools, such as voice interaction, polls, chat, document sharing, whiteboards, breakout rooms during a live online session?

Reading for this Learning Unit:



Yilmaz, O. (2015). The Effects of 'Live Virtual Classroom' on Students' Achievement and Students' Opinions about 'Live Virtual Classroom' at Distance Education. *TOJET: The Turkish Online Journal of Educational Technology, Vol 14* (No. 1), pp. 108-115. Retrieved from: http://www.tojet.net/articles/v14i1/14111.pdf

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Section 3

TRAINING GUIDELINES:

BACKGROUND AND BASICS

FOR ADJUSTMENT AT VIRTUAL LEARNING PROFESSIONS ACROSS EUROPE

- EQF
- e-CF
- ECVET
- EQAVET
- e-Jobs Observatory

TABLE OF CONTENTS

INTENDED PURPOSES

This section should begin to create an awareness of the European standards for transparency and comparability of vocational education and training, which facilitate professional mobility within Europe and on which these Training Guidelines are based on. We hope that, by the end of the session, you will come to terms with questions such as these:

- What is the European Qualification Framework (EQF) and what does it offer?
- What is the European e-Competence Framework (e-CF) and how it is structured?
- What is the aim of European Credit system for Vocational Education and Training (ECVET)?
- What is the European Quality Assurance in Vocational Education and Training (EQAVET)?
- How does e-Jobs Observatory operates?

INTRODUCTION

The main objective of these training guidelines is to present, in a practical way, ***a structure of learning units*** that should be trained by Vocational Education and Training (VET) organisations in the field of 'Virtual Learning professions'.

Because of the European scope of the project and of the nature of the professions that have been defined, the eVirtue project was based on the ***European frameworks of qualifications*** :

- **EQF**
- **eCF**
- **EQF-iServe**

and linked to the ***Credit System***:

- **ECVET**

So, first, we had to define the specific six European professional role profiles, which the eVirtue project investigated, expressed in:

- knowledge
- skills
- competences

three terms which have been defined differently by different European frameworks for qualifications (EQF, eCF, CEDEFOP, etc).

For instance, in the context of the EQF, **knowledge** is described as theoretical and/or factual knowledge. **Skills** are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical skills (involving manual dexterity and the use of methods, material tools and instruments). **Competence** is described in terms of responsibility and autonomy.

In the context of eCF, **knowledge** is described as the set of know-what, and it can be even described by operational descriptions. **Skill** is described as the ability to carry out managerial or technical tasks, which are the 'components' of competences and specify some core abilities forming a competence. **Competence areas** are a set of competences clustered according to specific criteria.

On the other hand, according to CEDEFOPs '*Terminology of European education and training policy*' (2014) knowledge is described as the outcome of assimilation of information through learning; **knowledge** is the body of facts, principles, theories and practices related to a field of study or work. **Skill** is defined as the ability to apply knowledge and use know-how to complete tasks and solve problems, while **competence** has a both-ways definition: 1) the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development) and 2) the ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. CEDEFOP stresses that a competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects (including technical skills) as well as interpersonal attributes (e.g. social or organizational skills) and ethical values. So, CEDEFOP's definitions are more accurate and relevant to the specific research aims of eVirtue project.

3.1European Frameworks for Qualifications:

The need of a common language

The ***European Qualification Framework (EQF)*** acts as a translation device to make national qualifications more readable across Europe. The core of EQF concerns eight reference levels describing what a learner knows, understands and is able to do ('learning outcomes'). Levels of national qualifications will be placed at one of the central reference levels, ranging from basic (Level 1) to advanced (Level 8) (http://www.accreditedqualifications.org.uk/european-qualifications-framework-eqf.html).

The ***European e-Competence Framework (e-CF)*** (http://www.ecompetences.eu) ver.3 is a reference framework of 40 ICT competences that can be used and understood by ICT user and supply companies, the public sector, educational and social partners across Europe. It is structured across four dimensions:

- Dimension 1: 5 e-Competence areas, derived from the Information and Communication Technology (ICT) business processes PLAN-BUILD-RUN-ENABLE-MANAGE
- Dimension 2: A set of e-Competences for each area (40 competences in total)
- Dimension 3: Proficiency levels for each e-Competence (e-1 to e-5 which are related to the EQF levels 3 to 8)
- Dimension 4: Samples of knowledge and skills relate to e-Competences in Dimension 2.

The ***European Credit system for Vocational Education and Training (ECVET)*** (http://www.ecvet-team.eu/en) aims to ease the validation, recognition and accumulation of work-related skills and knowledge acquired during a stay in another country or in different learning situations (formal, non-formal, informal). ECVET does not concern itself with how long or where somebody has learned something, but rather which learning outcomes have been acquired. Those learning outcomes should be grouped into learning units, which will then be assessed and assigned with

ECVET credit points in the destination country. [For the *Relative weight of the units of learning for each Role Profile,* please refer to 3.3 above].

In addition, digital Learning should be regarded as tool or media integrated for specific learning contents into the regular curriculum (and not as mere computer-based or web-based trainings). This is the mission of the designing blended learning solutions, while the architecting a digital learning strategy role is responsible for the development and implementation of an organisation's strategy or the use of learning technologies, as derived from the business strategy. On the other hand, students should be guided through digital learning processes. This requires skilled professionals, who are able to train teachers/coaches on how to handle technical mechanisms and on how to provide pedagogic guidance to their students.

Such a pedagogic guidance should be grounded on in 'behavioural skills' –known in general as 'soft skills'- which have been identified by the project ***EQF-iServe*** project, as the most common/important soft skills that are key factors for successful performance in an e-job position. These twelve soft skills refer to the collection of personal, positive attributes and competencies that enhance relationships, job performance and provide value to the market (such as being able to listen, communicate effectively, be positive, handle conflicts, be trustful, etc.) They are interrelated to technical and business skills, and they play a crucial role to the development of the training guidelines.

The ***European Quality Assurance in Vocational Education and Training (EQAVET)*** (http://www.eqavet.eu/gns/home.aspx) which is a community of practice bringing together Member States, Social Partners and the European Commission to promote European collaboration in developing and improving quality assurance in VET by using the European Quality Assurance Reference Framework (EQAVET Recommendation) in a way which embeds a culture of quality assurance throughout the EU. Embedding a culture of quality assurance for VET among all relevant stakeholders within and across Member States requires a bottom-up approach for the development and ownership of quality processes in VET systems. Building on this principle, the activities proposed are characterised by their flexibility and responsiveness to the emerging policy needs, which will ensure their relevance and usefulness. Thus, EQAVET should be seen in the broader context of the strategic

framework for *European cooperation in education and training* (ET 2020) and the *Copenhagen Process*, which calls for a deeper collaboration in the field of VET where countries work together in developing common responses to shared challenges. For these purposes, a web-tool (http://www.eqavet.eu/qa/gns/home.aspx) has been designed to:

- stimulate further thinking on how to develop or introduce quality assurance mechanisms at a system or VET provider level;
- explore ideas relating to the design of a national or regional quality assurance system;
- assist VET providers to consider or evaluate their own approach to quality assurance;
- examine how other Member States and VET providers are operating a quality assurance system.

3.2The e-Jobs Observatory

The e-Jobs Observatory (http://www.e-jobs-observatory.eu) is one of the main initiatives for ensuring quality and harmonization of vocational training for e-jobs at the European level. The eJobs Observatory, evolved from the ProInterNet (PIN) project and subsequent projects that were co-financed by the European Commission's LLP programmes and ever since it serves as a European stakeholder network working on the:

- improvement of training quality for e-jobs;
- lobbying for the creation of European training standards for e-jobs;
- identifying e-job market needs and training gaps;
- promotion of job-role profiles and training guidelines developed within the various projects initiated under its umbrella.

The VL role profiles developed through the e-Virtue project, are in addition to the already existing role profiles for various sectorial functions on the e-Jobs Observatory. For the successful integration of these role profiles in e-learning, a specific focus area has been developed (http://www.e-jobs-

observatory.eu/focus_areas/e-learning) which provides additional, relevant information about digital learning.

Tools of the e-Jobs Observatory include the e-Jobs Observatory Label of Excellence, which distinguishes training organisations proposing trainings corresponding to market needs, and the e-Jobs Observatory Seal of Market Compliance and Certificate which attests that training courses that are in compliance with labour market-oriented role profiles for virtual learning.

The e-Jobs Observatory is supported by an international network of industry and training organizations. Participation in the platform is open to all qualified bodies and individuals. The e-Jobs Observatory platform is operated by EMF-The Forum of eExcellence.

3.3 Weighting Learning Units in reference to ECVET

According to Section 3.1, ECVET does not concern itself with how long or where somebody has learned something, but rather which learning outcomes have been acquired. Thus, in the case of the eVirtue project, those learning outcomes have been already grouped into learning units, which have then been analyzed and allocated ECVET credit points.

But in the case of Virtual Learning Role Profiles, we must consider that training for such role profiles and qualifications are still far from being standardised and formalised, because these qualifications are still 'young' and will undergo continuous development in the future.

Therefore, what we have done is a weighting of the importance of each unit with regards to the requirements for correspondence with the units of learning outcomes for each specific role profile. The external review of the Training Guidelines has been very helpful for this, since it confirmed the confirmed our own assessment of

importance of units of learning outcomes for each role profile.

We decided upon a percentage approach, which make it feasible for the partnership to decide on the relative weight of units. The qualification represents 100% of the qualification. Depending on local and national circumstances, such a qualification will be assigned a total number of ECVET credits. The ECVET points are then allocated to units on a percentage basis, as you can see on the below Table 1:

		ECVET (%)
The Role of Architecting a Digital Strategy		
UNITS	Needs Identification	15%
	Digital Strategy Alignment	25%
	Digital Strategy Development	25%
	Technology Trend Monitoring	15%
	Purchasing	10%
	Relationship Management	5%
	Business change management	5%
	Total	100%
The Role of Designing Blended Learning Solutions		
UNITS	Needs Identification	20%
	Design of learning solutions	35%
	Documentation Production	25%
	Relationship Management	20%
	Total	100%
The Role of Full Time Specialist developing Digital Content (one part)		
UNITS	Needs Identification	10%
	Design of Learning Solutions	35%
	Documentation Production	20%
	Relationship Management	10%
	Quality Management of the digital content	15%
	Technology Trend Monitoring	10%
	Total	100%

Table 1: ***Relative weight of the units of learning for each Role Profile***

		ECVET (%)
The Role of developing Digital Content (part-time)		
UNIT	Design and Development of digital content	100%
	Total	100%
The Role of facilitating virtual classroom sessions		
UNITS	Design/Preparation of the live lesson/session	60 %
	Live facilitation/session delivery	40 %
	Total	100%
The Role of Tutoring Online		
UNITS	Learner Communications	60 %
	Progress Management	20%
	Live Facilitation/Session Delivery	20%
	Total	100%

Table 1: ***Relative weight of the units of learning for each Role Profile***