Wiki Tools and Skills Guidelines

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WikiSkills:

Wiki Tools and Skills Guidelines

1. Introduction

Phones, computers, and mobile devices are essential tools for managing the economy, transportation, and also in the training sector! The Internet is much more than a series of 1s and 0s; it is a complex human system with its own mechanisms, codes and zones of influence. The pervasiveness of this environment in our lives is so important that the internet has become the breeding ground for the major transition from *Homo Sapiens* to the *Homo Numericus.*

At first glance, this transition appears chaotic, uncontrolled, unpredictable and completely diffuse, especially in wiki environments. But behind this apparent disorder, chaos in motion, it could be that a new fundamental is at work, with very specific properties. And its applications remain largely unknown.[1]

This fast development can sometimes scare or simply demotivate. Why update one's skills if today's technology becomes obsolete tomorrow? Who has never felt helpless and a little stupid in front of his computer? Who has never lost important files? Thought a message was sent by a human being when it was sent by a bot? Got lost within multiple versions of a document exchanged with colleagues? Felt outdated and out-of-touch? Or should we see all this as a challenge? The challenge of developing more social and writing skills and critical thinking, the challenge of generating more opportunities to make our projects successful, to see them adopted by the wider community, the challenge of moving "out of the box" in our professional practices. Anticipating developments and changes is one of the strategic skills that any person must acquire.[2]

And this is the challenge and hope of the project WikiSkillls: getting you to hop into the wiki culture.

2. The Wiki Culture

The development of digital tools is not just a technological revolution that we can watch from afar but rather one that also concerns social skills. In fact, we face complex and rapidly changing habits of our civilization.

Whatever tool of digital communication is being used, there are five fundamental properties that govern the operation of the flow of information in their digital form:

1. **Speed**: the transfer of digital information is almost immediately conveyed by electricity to approximately 270,000 kilometers per second, close to the speed of light.

2. **Decentralization**: Decentralization reduces or removes the vulnerability of information systems. Nobody can take control, since all nodes are potential centres, resulting in thousands of great knots across the globe.

3. **Multilateralism**: Digital communication not only allows teleconferences to some but also virtual communities with thousands, even millions of participants, each contributing in their own way.

4. **Symmetry**: Everyone is on the same level, unlike asymmetric communication media such as print, radio and television where there is one 'creator' and many 'consumers' of information.

5. **Asynchronicity**: Everyone is at their own pace. This is the only property that is not invariable: we can choose to use or not.

These five properties are a key to understanding the digital world.[3] The internet is a new environment that enables us to move from being passive consumers to active co-creators of information and services.

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[1] http://netizen3.org/index.php/Num%C3%A9rique_:_cinqui%C3%A8me_%C3%A9l%C3%A9ment_%3F
[2] http://netizen3.org/index.php/Soci%C3%A9t%C3%A9_en_m%C3%A9tamorphose
[3] http://netizen3.org/index.php/Num%C3%A9rique_:_cinqui%C3%A8me_%C3%A9l%C3%A9ment_%3F

Everyone can offer feedback on products, evaluate a service, publish text without third-party involvement etc. We are no longer separate, but all connected and able to make our contribution.

At the beginning of the era of information technology, computer and internet were perceived as gadgets reserved for a minority of people, whose job it was to work on computers. Nowadays it appears that the internet and computers have reached every country, every town, every person in the world. Or is the internet a new source of inequality?

Economic divide
The most obvious gap is the economic divide. It is found on a global scale which shows huge disparities in access between countries. Victims of the digital divide are numerous, including:
› People, who cannot afford computer equipment;
› People living further away from city centres with no access to Internet;
› Elderly people, who have not yet adapted to the new digital communication system.

Geopolitical fracture
The purely economic factor does not explain a bad internet connection for some countries or regions: some counties or politicians deliberately restrict access to curb the freedom of their own citizens to learn and express themselves.

Cultural divide
The cultural divide is defined as the difference between the old and new way of thinking, a condition caused by the emergence of new practices. In any type of organization, superiors might feel their authority threatened by the ubiquity of digital media. It can cause people to react negatively - and actually reject - resources available on the internet. Example: In a large number of academic courses, Wikipedia is banned a priori as a valid source of references, reflecting distrust vis-à-vis the wisdom of crowds, explained in an article entitled "Wisdom of Crowds". The world of business is also subject to negative reactions and rejection, particularly vis-à-vis social networking platforms, which are perceived as contributing to a loss of productivity more than providing strategic potential. These blockages usually result from a fear of losing control over information.

Educational divide
Users often see the handling of computers as a purely technical obstacle. It is not uncommon to hear "I am taking a Word course so I know how to work with computers." This demonstrates the lack of a broader vision of the Internet as an ecosystem, with not only tools, but actors.

Generational divide
The clash between those for whom internet is natural, and those who do not feel comfortable in front of a screen is an accurate portrayal of today's society. This is the principle of the digital divide between digital migrants and digital natives . Beyond issues of technical manipulation, there is a generational clash in the way of seeing the world, our beliefs and practices.

2.1.   The Wiki Way

There are several types of platforms enabling us to be actors. The wiki is just one of these types.[4]

› **The ease with which pages can be created and updated.**

Generally, there is *no review* before modifications are accepted. Many wikis are also largely *open to the public* and an explicit effort has been made to lower the barrier to participation as much as possible both at the technical level or at the social level.

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[4] The Wiki Way: Quick Collaboration on the Web, Authors: Bo Leuf & Ward Cunningham

According to the "Wiki Way", "Open editing has some profound and subtle effects on the wiki's usage. Allowing everyday users to create and edit any page in a Web site [...] encourages democratic use of the Web and promotes content composition by non-technical users." (Ward Cunningham)

› **Trusting people and the process is a major element in the "Wiki Way".**

It has been observed that in most cases, when editors are given the *freedom* to steer the direction of a project and have developed a *sense of ownership*, they tend to *self-organize* to support the development of the project in a meaningful and positive way rather than let it all fall into chaos.

› **Transparency as a central principle of leadership.**

Every single action made by an editor is *visible* to all other editors. It is *recorded* and stays accessible in the wiki history. This *transparency* makes it possible for every editor to know what is going on, at the global level or at the fine-grain level, a situation that fosters a sense of ownership and *trust*.

› **Collaboration as an effective form of learning.**

Traditional learning environments are often characterized by one-way knowledge transmission processes in which the teacher, as only source of knowledge, assigns a learning activity that is conducted autonomously by the student. Such processes strip learning of its social dimension.

Collaborative learning strategies can strengthen the social dimension of learning, by creating the conditions for learning as a result of group interaction.

2.2. WikiSkills - The Project

WikiSkills is a European project funded by the European Commission aiming to analyze and apply benefits of adopting a wiki-culture within educational settings. Traditional learning environments are often characterized by one-way knowledge transmission processes in which the teacher, as only source of knowledge, assigns a learning activity that is conducted autonomously by the student.

Through WikiSkills participants from different educational sectors, cultures and ages (schools, universities, professional and adult training) learn how to use wikis for their socio-professional development. The project developed, implemented and evaluated an innovative training curriculum focusing on how to make the best use of wiki environments in educational settings, so as to reach high learning objectives and foster a community of learners within Europe.

Through this, WikiSkills promotes innovative pedagogical approaches that foster creativity, competitiveness, employability and entrepreneurial spirit, equity, social cohesion and active citizenship.

WikiSkills…

...provides opportunities for meaningful collaborative learning activities;
...promotes digital literacy, as well as social skills, writing skills and critical thinking;
...develops a sustainable virtual community of practice among the different project countries;
...enables educational communities to contribute to the actual information society;
...empowers civic behaviours, social inclusion, employability and cultural understanding.

2.3.   How wikis work

There is one simple button that is the core of a wiki: the edit button!

Just click on it and see what happens! Edit things and then just click save. And that's it! Like emails or blogs, wikis are very simple to use.

A wiki enables online-group collaboration and asynchronous collaboration[5]

With wikis a group of people can collectively edit text. This text can be viewed and also changed by anyone who wants to contribute and has something to say about a particular matter.

Everybody knows Wikipedia, but wikis are not only for encyclopaedias. Wikis go beyond that![6]

Wikis can be used for many different purposes

Examples include community websites, corporate intranets, knowledge management systems, and note-taking.[7]

1. Co-authoring
     › Technical documentation
     › Q&A
     › Grant requests

2. Meetings
     › Defining agenda
     › Recording participant names
     › Writing reports

3. Brainstorming & community of practice
     › Gathering and publishing of good practices
     › Discussions

4. Project management
     › Listing tasks
     › Completion status

A number of wiki platforms are available – MediaWiki, DokuWiki, XWiki to name a few – and each wiki platform supports a slightly different bundle of features to support collaboration.[8] All of them have some common features.

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[5] Davies, Jonathan. "Wiki brainstorming and problems with wiki based collaboration." Report on a project submitted for the degree of Information Processing in the Department of Computer Science at the University of York. Retrieved April 20 (2004): 2009.

[6] Kane, Gerald C., and Robert G. Fichman. "The Shoemaker's Children: Using Wikis for Information Systems Teaching, Research, and Publication." MIS quarterly 33.1 (2009): 1-17.

[7] http://wikiindex.org/Welcome /   http://www.xwiki.org/xwiki/bin/view/References/WebHome

[8] Web-based platform, Collection of pages with hyperlinks, Editable pages, History of page preserved, Recent changes log

Kane, Gerald C., and Robert G. Fichman. "The Shoemaker's Children: Using Wikis for Information Systems Teaching, Research, and Publication." MIS quarterly 33.1 (2009): 1-17.

3. Using Wikis in Education

Due to their simplicity, wikis are well suited to many types of educational uses. The most essential pedagogical potential of wikis is that wikis are equally suited to be used as teacher's tools and as learning tools when easy joint production is desired. Let's start first to clarify some practical points to think of before using a wiki in an educational context.

3.1.   The different types of information

Information is defined by its content, its meaning. There are three types of information, facts, works and functions:

The **fact** is a piece of information that is obvious, and that cannot be easily challenged. For example, an announcement: "new training session starting tomorrow" or a figure, such as the number of cellphones sold in a country or a year "1995: year of creation of wiki software"

The **functions** are produced and disseminated informations not due to their intrinsic value, but due to their usefulness. These are the procedures, methods, manuals, and information that serve other purposes.

Information can, of course, combine two or even three types of content. "I sell my computer (this is factual information), which will surely make someone happy because it is a good computer. And to buy it you should call me between 9am and 9pm at home (this is the functional information). "

The **works** include artwork and views, improvisations and more broadly, anything that is neither functional nor factual. Works can be absolutely unprecedented and represent the result of maturation, remix, an adaptation of earlier works, with a touch of innovation, difference, which is the very nature of creativity.

"The facts are sacred but comments are free."[9] (Beaumarchais)

Depending on which type of information you intend to get into your wiki platform, the authors and the readers of the wiki will feel differently with regards to the rights that are attached to the content. Do remember that facts can not be protected (facts belong to anyone) whilst it is particularly important to credit creators of "works" (creative texts). Also, it will be much easier for several authors to collaborate on factual or functional information as they hold little sentimental value, whilst it will often be very painful for a creator of original work to see his text modified by other writers. Accordingly, most wikis rather contain factual or functional information.

3.2.   The Wiki Culture and Copyright

Copyright is a legal concept, enacted by most governments, giving the creator of an original work exclusive rights to it, usually for a limited time. Generally, it is "the right to copy", but also gives the copyright holder the right to be credited for the work, to determine who may adapt the work to other forms, who may perform the work, who may financially benefit from it, and other related rights.

In the case of co-writing on a wiki, this creates specific challenges since the work done by one user is going to be adapted by others afterwards.

When participants of a wiki are all staff members of one organization, the issue is generally quite easily solved. A copyright, or aspects of it, may be assigned or transferred from one party to another. In the case of a company and its staff, the copyright of a work is usually transferred to the company itself, and the

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[9] http://netizen3.org/index.php/Les_diff%C3%A9rents_types_d%27informations

participants get a salary in exchange of their work. However, when the participants of a wiki belong to several organisations, when they are governmental staff, or when some of them are volunteers, the default transfer of copyright is not so easy.

> For example, when a wiki is edited both by teachers and students in a school, who should be the owner of the content? The teachers? The students? The school?
> For example, when a training company set up a public wiki, with content produced by company staff members and by the general public, who is the owner of the content?

These issues need to be tackled, by the wiki owner before users start to create content, in order to avoid any future misunderstanding. It may be done in three steps.

Step 1: Decide how the content should be used

If your wiki is successful beyond the original pedagogical goal, it is likely to result in the production of good content which may be of interest to many users.

As wiki owner, decide in advance how you would like content to be reused by others. Do you want it to be private or accessible by everyone? Do you want to allow the reader to copy your text? Would you allow anyone to copy and sell your content?

• In most private company-based wikis, the content is private, copyrighted by the company. No one can access it, read it, modify it, reproduce it without explicit agreement from the company.
• In many wiki websites, the content is free to read and enjoy, but the reader is not allowed to copy and even less to sell it.
• In other wikis yet, anyone can read, modify and reuse the content, even for commercial reasons.

 The choice is really up to you. But do remember to make that choice at the wiki start up!

Step 2: Clarify the publishing license

If no specific decision is made, by default, all content produced is copyrighted (no right to read, modify and reuse without explicit consent). So not setting a specific license on your content is having the same consequence for receivers of the content as setting a restrictive license. In most cases of public wikis, the wiki owner may, at the time of initiation of the wiki (before authors have started to contribute with content), decide to grant rights by choosing a more allowing license. Authors can then make the conscious decision to contribute and publish content if they agree upon the conditions.

For example, one may use and reuse, but not modify. Or one may read but not reuse. Note that if a wiki is public and editable by anyone, choosing a license not allowing to modify the content is clearly counter-productive. Note as well that when a wiki is open to edit by a volunteer public, the public will be less likely to participate if the only owner of the content is ultimately a private company. So, as a wiki owner, think carefully ahead of which license to choose for wiki contributors. Ask yourself – can the licence stated in the terms of use preserve the author's integrity while encouraging reuse and dissemination? Does it encourages community building?

Typical licenses used on wikis are Creative Commons licenses as they are distinct and allow fine tuning of which rights are offered or not. Most public and editable wikis are either CC-BY-SA (content can be modified and redistributed freely) or CC-BY-NC (content can be modified, reused but not for commercial purposes).

Step 3: Craft terms of use

Once a publishing license is chosen, terms of use must be crafted so that all authors are fully aware of what they do, what rights they give up and what rights they keep. Make sure that the situation is clear for everyone.

Terms of use are also necessary for readers so that all of them may know what they are allowed to do or not with the content.

3.3. Learning to Change - Changing to Learn

Wikis embody the idea of a potentially collective, democratic, open, and dynamic design. Therefore, learning with wikis works differently in contrast to formal education. Letting students interact with a wiki community does have the potential to make education and learning more engaging and more sustainable! The following table shows the different characteristics of formal education, sustainable education and sustainable education with wikis.

Formal education	Sustainable education ...	Sustainable education with wikis
The professor has control over the course	The construction of self in the curriculum	Co-construction of the course together
Fixed knowledge	Recognition of uncertainty	Recognition of multiplicity of view points and knowledge paths
The intellect	The value of intuition and feelings	The value of empathy and tolerance
Education	Learning	Global knowledge
The contents	The process	The process and the actors
Learning styles limited	Multiple learning styles	Evolving learning styles
Passive instruction	The participatory and critical inquiry	Be bold and stand corrected
The uncritical learning	The reflective learning	The agile learning
The selection and exclusion	Social inclusion	Reputation over authority
Specialists	Generalists among teachers and students	Nobody knows everything, but everybody knows something
Individualism	Community	Wiki community
The institutional isolation	The social and community involvement	The mandatory collective
Disciplines	The inter and transdisciplinary	Hyperlinked disciplines
Instrumental values	A new sense of the integration of social and ecological ethics and responsibility	Welcoming and respecting all contributors values
Values of competition	Values of cooperation	Values of sharing

Table 1: From formal education to sustainable education with wikis

3.4. WikiSkills Key Competencies

As learning with wikis differs very much from formal learning, many different competencies are being developed while using wikis in education.

With wikis, schools, universities or organisations can not only develop large knowledge pools that can be called up, enhanced and edited by everyone but also fosters skills such as digital literacy, as well as social skills, writing skills and critical thinking.

Therefore, the relevant use of wikis in educational contexts would enable the development of a set Wiki Key Competencies, which are summarised in the following table.

Key Wiki Competencies (KWC)	Description
Creativity and innovation	- Elaborate, refine, analyse and evaluate one's own ideas, - develop and communicate new ideas to others effectively, - Become open and responsive to new and diverse perspectives, - View failure as an opportunity to learn.
Critical thinking, problem solving, decision making	- Examine, analyse and evaluate ideas, arguments, and beliefs, and compare alternative points of view, - Present arguments.
Learning to learn	- Self-manage and reflect critically on learning processes, objects and purposes.
Communication	- Express with clarity and awareness of audience and purpose, - Write, read and understand in mother tongue, - Write, read and understand in additional language, - Monitor the writing process (from drafting to proof reading) - Formulate arguments in a convincing manner.
Collaboration	- Interact effectively with others, - Read others' contributions with patience and honesty, - Work effectively in diverse teams, respecting social and cultural differences, - Guide and lead others (teachers roles), - Find where and how to contribute, and to put abilities at the service of a common objective.
Information literacy	- Access and evaluate information critically and effectively, - Manage information from a variety of sources, - Apply a fundamental understanding of the ethical and legal issues, - Know how to use the information creating or using the structure created in the wiki environment.
ICT literacy	- Access and evaluate ICT tools critically and competently.
Citizenship, local and global	- Display solidarity by contributing to the local or the wider community, - Contribute to the construction of common goods.
Life and career	- Adapt to change, operating in varied roles and responsibilities, - Be flexible, incorporating feedback effectively and negotiating diverse views and beliefs to reach workable solutions.
Personal and social responsibility	- Show interest in and respect for others, - Be willing to overcome stereotypes and prejudices, - Be open to compromise, - Be sensitive to cultural differences, - Resistance to stereotypes and positive attitude towards inter-cultural communication.

Table 2: The WikiSkills Key Competencies

4. The WikiSkills Training

The WikiSkills Training was developed by European partners with background from either education or information technology and wikis. With this ideal mix of know-how an innovative training has been created that does not only focus on technical knowledge regarding wikis but very much focuses on the pedagogical use and the competences being developed while using wikis.

4.1. WikiSkills Training Approach

The WikiSkills project aims to train teachers and trainers from different educational sectors (*primary and secondary school, higher education, professional and adult training*) so they can learn how to use wikis in their teaching contexts. They learn about the different possible educational uses of wikis, and create wiki-based learning scenarios that they will apply with their students.

The WikiSkills training focuses on both technical (i.e. how to create and use wiki environments) and pedagogical aspects (i.e. how to create feasible wiki-based scenarios).

Technical training

The training sessions include a short introductory unit to ensure a *minimum digital literacy level* for all participants. This training unit includes contents related to the basic use of operating systems, web navigation, basic use of e-mail skills and basic use of text editors, as well as set up and use of "export to wiki format" and "publish to wiki" plugins for them.

Furthermore, the unit includes theoretical and practical approaches on:

- *how to create a wiki platform:* hosting a software solution on in-house servers or using a web-based service or wiki-farm; comparison of different wiki applications to gain expertise to be able to choose the most appropriate one for their specific settings.
- *how to use the wiki software:* create and link pages, edit texts, insert multimedia contents, manage users and groups, apply usability criteria to their wikis, organise and find content, set preferences and user options.

Pedagogical training

Besides technical skills, educators learn how to create a feasible wiki-based scenario, and about the teaching methodologies that wikis can support. They specifically learn about *evaluation methodologies* through wiki environments, *classroom management (*organizing roles among students and defining their teaching role), *creation of collaborative scenarios, security and follow-up, intellectual property* and *legal issues*.

We defined a generic training curriculum aiming at structuring a common base of learning for all partners, target groups and environments. In a first section we will detail the generic curriculum. Even if we would like to define some steps and units for the implementation, the curriculum, and so the trainings, will be oriented to active practice more rather than theories: *learning by doing*. the second section aims at describing how each trainer may adapt the generic curriculum to its target group and training settings.

4.2. Generic training curriculum

The WikiSkills project partners defined a generic training curriculum aiming at structuring a common base of learning for all target groups and environments. The curriculum, and so the trainings, will be oriented to active practice more rather than theories: learning by doing.

4.2.1. Prerequisites

Learning objectives: Main goal is to assure that motivation of teachers and trainers receiving the training is strong enough to have them reproducing/adapting/enlarging widely the scenarios to their public.

Wiki-key competences: The 10 wiki-key competences defined in the pedagogical framework, group the specific skills to acquire from wiki tools. They must be present for the development of the scenario.

Description of training activities: Practical exercises. "Learning by doing"

Learning resources involved: presentation (slides) of wiki competences

ICT applications involved: Computer with Web browser and Internet connection

Modality: Depending on each partner (face to face / online / blended)

Time involved: Depending on each partner

Content:

> Learning by doing practically (cognitive transition) instead of learning by receiving theories

> Quite a few prerequisite, so that hey don't arrive to the face-to-face training without theories and practices, they can see that it's an entire emerging culture and socioeconomical "sustainable" environment. These prerequisite should take maximum 45 minutes (ideally 20-30minutes), so that the participants are already involved when they start the training, but not overcharged of preliminary work either.

> Answer to a questionnaire to know more about their web 2.0 practical experiences (accounts in linkedin, facebook twitter, wikipedia, googledoc, social bookmarking such as diigo or del.icio.us, a PAD such as openetherpad,)

> Create 2 accounts (wikipedia + Diigo group eCulture http://groups.diigo.com/group/e_culture/) + post it in a PAD (they can use a pseudo when creating account)

> Choose a video in the list: http://wikiskills.cesga.es/xwiki/bin/view/Wiki-Skills/Wiki+related+videos. Notice : If people refuse to share content publicly (not intimate information but information for common good such as manual) they should be able to have a direct contact with the trainer (preliminary talk) to see if they can overpass these fears and start editing in public spaces, for example using a pseudonym.

> Give them access before the start to a publication so that they can read (books) and vision (video) online

4.2.2.　　Basic Wiki knowledge

Learning objectives
> To know what a wiki is and to get acquainted with the different wiki functionalities
> To be introduced to different examples of wiki environments
> To be able to edit a wiki page
> To be introduced to the wiki culture

Wiki-key competences
> Introduction to the 10 wiki-key competences explaining how they should be developed using wiki tools.

Description of training activities
> Brainstorming: evaluation what participants know about wikis
> Lecture: presentation of wiki functionalities and examples
> Hands-on session: create an account on Wikipedia and/or on the course wiki and edit some pages
> Guided debriefing session: the wiki culture

Learning resources involved
> Slides: presentation of wiki functionalities and examples
> Examples of wiki environments

ICT applications involved:
> One computer per participant
> Projector
> Internet connection

Modality: Depending on target group (f2f/online/blended)

Time involved: Depending on target group

Contents:
Wikis are for:
> Co-authoring (technical, Q&A, grant request...)
> Meetings (Defining agenda, Recording participant names, Writing reports,)
> Brainstorming and community of practice (Gathering and publishing of good practices, Discussions)
> Project management (Listing tasks, Completion status)

4.2.3.   Teaching with wikis

This section aims at describing how each trainer may adapt the generic curriculum to its target group and training settings.

Learning objectives:
> To be able to introduce students to the wiki functionalities
> To be able to introduce students to the wiki culture;
> To be able to introduce students to legal issues;
> To get familiar to the teacher's role within a wiki based learning scenario;
> To get familiar with wiki-based evaluation methodologies;
> To get to know how and in which cases to disseminate wiki projects through social networks;
> To become aware of the opportunities for collaboration among students from different institutions.

Wiki-key competences
> How wiki-key competences affect within the teaching through wikis

Description of training activities:
> Lecture: teaching with wikis
> Good practices: in-depth presentation of examples of use of wikis in the classroom
> Good practices: example of inter-schools scenarios
> Good practices: examples of promotion and dissemination of wikis
> Discussion session

Learning resources involved
> Slides: teaching with wikis
> Examples of wiki-based learning scenarios
> Example of inter-schools scenarios ´

ICT applications involved:
> Projector
> One computer per participant
> Internet connection

Modality: Depending on the trainer and target group (f2f/online/blended)

Time involved: Depending on the trainer and target group

The following grafic shows the layout proposed by the generic training curriculum:
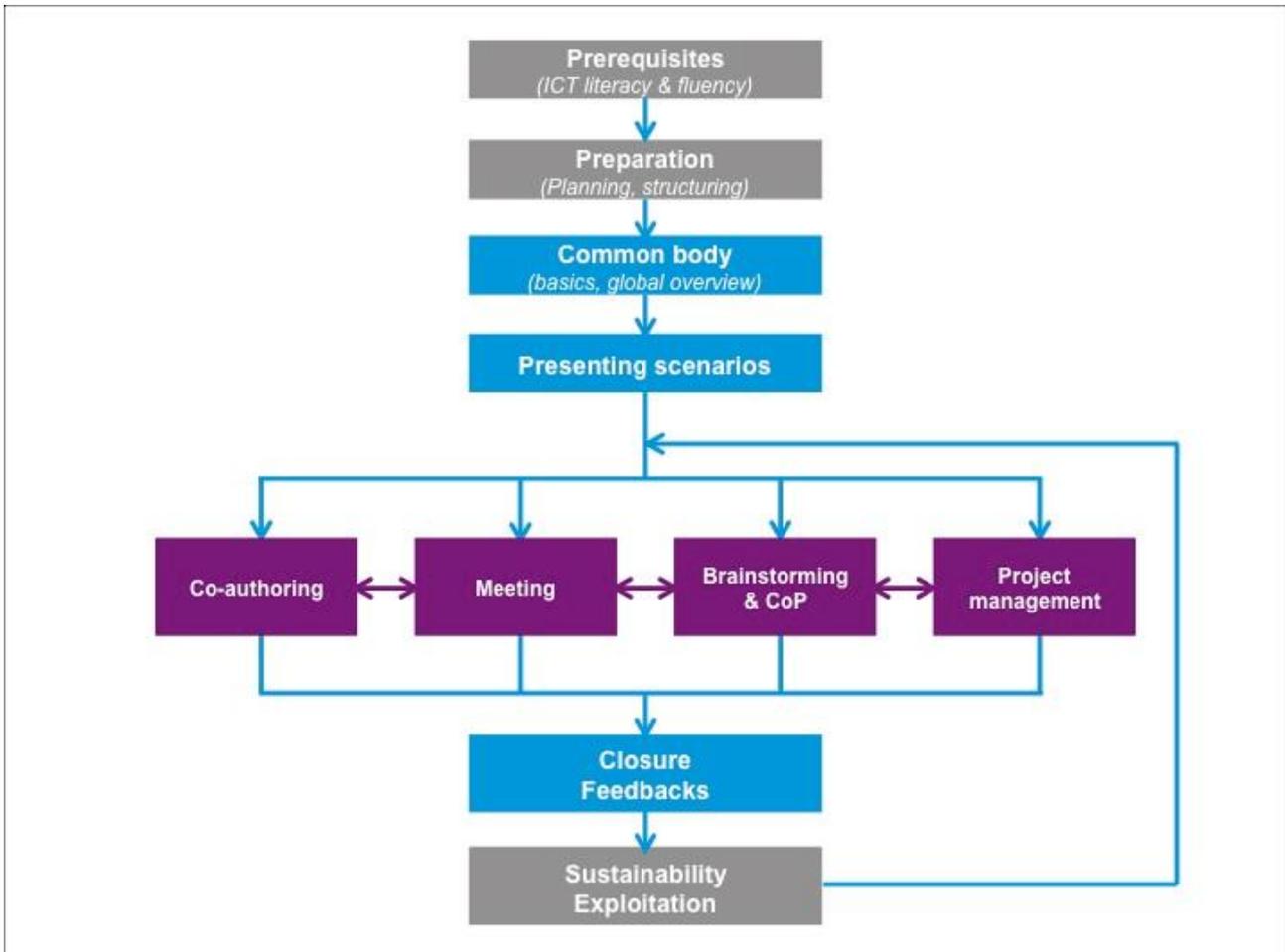
Figure 1: Generic training curriculum

4.3.   WikiSkills Good Practices

In 2013, the WikiSkills project offered training to educational staff and organisations in Switzerland, Austria, Spain, Greece and Belgium. During these workshops different learning scenarios, in which wikis can be used effectively, were developed. Below you can find a selection of these Wiki-Skills scenarios:

4.3.1.   Collective Watching

This scenario is designed for training adult trainers in developing courses, in which they coach their participants to set up a collective watching system.

The scenario will introduce Wikis as a tool to host detailed reports in order to help audience set up the watch system.

Material required:

> beamer
> personal computer

> internet connection

The training session will result in the set up of a means to collect collaborative information on a topic. For example:

> set up of a watch system of a competitor company
> set up of a watch system over a technological trend
> set up of a watch system over a product

The trainer should choose a reasonably realistic scenario based on his audience.

Context

The trainer sets up the context:

1. The trainer will explain the goal of the session: discovering new tools to collectively collect, analyse and publish information on a certain issue.
2. The trainer will discuss what is *quality information* on a topic (accurate, complete, unbiased, understandable, accessible, up to date). Look for arguments for doing that job collaboratively. Various pedagogical methods may be used to support that discussion.
3. The students will share which methodology they currently use, as well as advantages and drawbacks.

Discovery of a wiki and demo by the trainer

What is it? Which uses? Discovery of wiki-based projects (eg. Wikipedia). Main features (editable, history, recent changes, navigation, categories). Quick preview of other features such as bibliographic notes.

Training on a wiki

First propose a wiki instance, secondly propose to create an article together, which will be a summary of the topic originally chosen (for example, if the goal of the training is to set up a watch system for a company, ask students to write down a short article about this company)

Ask each student to

> create a wiki page
> to make a couple of changes
> to look at history
> to look at what others are doing, drop them a comment and modify their text
> focus on writing one page with another person
> create categories
> add bibliographies, notes and references

Ask students to add to the wiki page, links to the Diigo group as a «for more details» or «external sources».

Intellectual property and collective production

Open discussion on intellectual property rights within a collective text (in particular outline the benefits the tracking who added what and when in terms of legitimacy, transparency and attribution). May develop pedagogical tools to stimulate the debate.

To see this wiki-based learning-scenario in detail please go to: http://wikiskills.cesga.es/xwiki/bin/view/Wiki-Skills/Collective+Watching

4.3.2.　Wiki-guide on photography

Within this WikiSkills training students learned how to create a wiki-guide on photography collectively. The purpose is to learn more about how wikis are built while increasing knowledge of photography.

Specific educational objectives

> "The ability to collaborate via the web and networks, both synchronously and asynchronously."
> "Partnerships/cooperation, synchronously and asynchronously, via digital platforms, such as web applications, wikis and mind maps."
> Writing skills
> Photography skills

> Cooperational Skills

Narrative/sequential description of the learning activities

Instructions to students:

Together you will make a basic photography school. It must be very clear so that even a novice understands the content. Use both text and explanatory images (your own or from Wikimedia Commons). You may not straight off copy text without writing in your own words, but gladly retrieve facts and inspiration from other sites / books. Enter the sources!

1. Create user on this wiki.
2. Split into groups, such as: camera settings, composition, lighting, equipment
3. Create the appropriate pages in your area. Post your links in the wiki at suitable locations. Check and edit each other's pages (even outside the groups).
4. For every change you make, you need to comment on what you've done in the summary field above the save button. It will save you a lot of work when you're doing the self-assessment later, because you'll show and describe the edits you made. For example, if adding a picture of a macro lens, you can write "Added a picture of a macro lens".

You should also discuss on the talk pages. You can ask questions or make suggestions for clarifications / improvements that you do not feel confident enough in making yourself. Remember to sign your posts with the button "Your signature with timestamp"!

Learning resources involved

> books
> online resource like wiki site to acquire knowledge from, e.g.
>> o Wikipedia
>> o Wikimedia Commons
>> o Ekopedia
> search engines

Various learning resources which are available, possibly Wikimedia Commons.

Infrastructure & equipment

Trainer and students will need for this workshop:

> Internet connection

> microphone
> camera

Optional: Camera for students to take their own photos. Alternatively, let students use freely licensed photos from Wikimedia Commons.

Prerequisite competences

e.g. to be familiar with

> English writing
> linear algebra

Basic knowledge on photography.

An understanding of how to use Wikimedia Commons.

Typical learning location

> Classroom with computers
> Classroom without computers
> Outside the classroom. Where?
> At home

Classroom with internet-connected computers as well as working outside classroom with internet-connected computers.

Opportunities identified during the implementation of the scenario

When the students get a grasp on wiki, teachers can use the same wiki platform for other topics. Several subjects can be taught on the same wiki platform. In this way teachers can let students work interdisciplinarily and integrate subjects with each other.

By using a MediaWiki your students will easily understand how other Wikimedia projects like for example Wikipedia works. This will open a great opportunity to teach, for example, source criticism. However, Wikipedia can also be used as a stimulating starting point to discuss questions of "social science" perspective (democracy, gender, authority ...).

Obstacles identified during the implementation of the scenario

It can be hard for less motivated students to develop themselves further. It's quick first that they start their own wiki page but it's hard to get them to improve others. This could be about lack of self-confidence.

Praise and get them to develop themselves through pep talk. Assist them in finding information, from which they can read. Play down the importance of the task, to show that it need not be such a big deal.

To learn more about this learning scenario please visit: http://wikiskills.cesga.es/xwiki/bin/view/Wiki-Skills/Students+create+wiki-guide+on+photography

4.3.3.   Collective Notetaking

This curriculum aims at training adult trainers in developing courses where they coach their audience to actively take part in co-reporting the content of a meeting with online collaborative note-taking.

This content can be:

> Decisions
> Minutes
> Ideas

The curriculum will introduce three different types of tools to help audience identify best uses for each :

PAD, wikis, googledocs, see different strenghts and weaknesses here:

https://docs.google.com/spreadsheet/ccc?key=0Apfy6yGvVRcGdDBXcC13aGM1aldQbE5CNklUWWlWUGc#gid=0

Type of webtool	Time	Participants	Chat/discussion	Connexion	Plugins
mediawiki, Xwiki and other GPL-based wiki tools	synchroneous editing	unlimited	discussion pages	urls and links	Numerous
PADs like Etherpad	synchroneous editing with color tracking	16	chat	standalone	None. KISS
Google "docs"	synchroneous editing	No limitation for a workshop	chat + annotation system	may link to other googledrive project	

Table 3: Different type of webtools

Context and tools

Ideally, the trainer will choose a real topic for the meeting, for example:

> Working group coordination meeting (committee, general assembly, piloting team..)
> Brainstorming on a future action (promotion campaign, planning)
> Online teleconferencing

Material required

> Personal computer
> Internet connexion
> Beamer

During the meeting

If you are using a pad to support the meeting you can choose from the following pads that are free of charge:

> http://etherpad.org/public-sites/
> http://www.framapad.org

The trainer sends a link to an etherpad session, created for the training. It is used for coaching the participants step-by-step, to write down minutes of the meeting.

The trainer starts the meeting. All the participants are invited to contribute in co-editing the pad, based on the

inputs of the participants (they can add links, modify the text, transcript in a written form the guidelines given by the teacher). They can also start chatting in the chat of the pad.

Make sure that at least one decision is made and recorded.

Debriefing

After some 10-15 minutes the teacher should hold a debriefing session. The teacher asks students questions such as

> How do you feel? (lost, confident, uncertain etc.)
> What happened? Reflect in particular on how notes were taken and on how the vote took place and was recorded on the pad. Are the notes complete?
> What did you learn?
> How does this relate to the real world? (such as one person taking handwritten notes during the meeting, writing them doing on Word afterwards, sending them by email for approbation one month later)
> What if we had used google docs? What are the differences? Do you know other tools ?
> What is next? What do you want to learn more?

Points to think of

> synchronous editing great
> only one document
> chat feature
> colour feature

Voting trends in collaborative environment (optional)

Open discussion on various voting systems

Allow students to experiment further

Individually on the same document. Or on another pad. Ask them to create a new pad, to make a couple of changes, to look at history, and to share it with others.

At the end of the meeting

Open discussion on options for setting up an archive of the minutes: Trainer discuss with trainees on what to do next. Some examples may include:

> copy paste the minutes and send them by email
> leave it on the pad... (discuss opening own instance of etherpad in the company for more security)
> move it to a knowledge platform such as a wiki.

5. What's next? Wikinomy!

The goal of WikiSkills is to bring the wiki culture into the educational system but wikis can go even further and be of great relevance for companies and organisations.

"The profound changes in technology, demographics, business, the economy and the world as a whole, a new era, marked by the participation of individuals. The participation of a new type has reached a critical threshold that allows new forms of mass collaboration, redesign processes, invention, production, marketing and redistribution of goods and services on a global scale " write the authors of the bestseller Wikinomics.[10]

A little anecdote :

The authors oft he book Wkinomics Don Tapscott and Anthony D. Williams tell how a small gold mining company, Goldcorp Inc., was able to save its business by listening carefully to ongoing changes. Its CEO, Rob MacEwen, while under pressure, told his Board of Directors its new strategy. He had the revelation some time earlier. Upon hearing of Linux software at a meeting for young leaders, he discovered how a certain Linus Torvalds has publicly revealed the software code and allowed thousands of anonymous programmers to correct and to make their personal contribution through the internet. He then had the idea to gather and put online all geological data of the company.

Through a competition, he made a worldwide call to experts. The result was much beyond his expectations: Not only did the competition reveal the presence of large deposits of gold in the company properties, but the company, previously valued at $100 million jumped in value to $ 9 billion. Rob MacEwen believes that cooperation helped save two to three years of exploration. Goldcorp is reaping the benefits of his method of Open Source survey!

A story that shattered an entrenched assumption: "Better keep it a secret! "

Wikinomy is based on collaboration without borders and the use of free and open source digital technologies such as wikis.[11]

With wikinomy billions of USD of exploration can be saved by turning ideas into successful businesses if they are being developed cooperatively. This new business model now gradually replaces the traditional business model.

The wikinomy is based on four key ideas: Open and collaborative work, sharing knowledge and information as well as action at the global level. *"The new company co-innovates with customers and everyone else, shares resources that once so jealously guarded, harnesses the power of mass collaboration and does not behave like a multinational but as a truly global entity."* This technological breakthrough, allowing a drastic reduction of production costs and distribution of information, upsets the economic order we thought well established. Before the internet we could not copy and distribute without substantial financial investment. Consumers could not act and influence product innovation at their disposal. Information protection by IP was easy to maintain, and even to protect legitimate work or expensive investment.

If the situation is changing, this is due to the properties of the functions of digital, we recall here:

> instantaneous (almost immediate transfer of information)
> decentralization (no pivot instance)

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[10] http://netizen3.org/index.php/Wikinomie#cite_note-0

[11] Kane, Gerald C., and Robert G. Fichman. "The Shoemaker's Children: Using Wikis for Information Systems Teaching, Research, and Publication." MIS quarterly 33.1 (2009): 1-17.

- > synchronicity (each is at their own pace)
- > multilateralism (exchanges of many to many)
- > symmetry (everyone is on the same level).

6. Useful Links and Material

> Community links on Diigo

The WikiSkills project has created a *Diigo group*, an online space which provides different kinds of helpful resources in relation to the use of wikis in educational settings. You can find a *set of videos* which include examples of wiki-based scenarios, *good practices* and *tutorials*. You can use select topics of interest by using the tagging system.

Please feel free to contribute to the group, by posting your own resources!

Access the Diigo group at **http://groups.diigo.com/group/e_culture/**

> Bibliography

You may also find an interesting bibliography about wikis and wiki culture on our website : **http://wikiskills.net/useful-links/bibliography/**

> Presentations and leaflets

Several presentations of wikis or the WikiSkills project may be found here: - on slideshare : **WikiSkills presentations and leaflets**

- or on prezi: **Developing-wiki-skills**