

A Pattern Language for Online Trainings

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Abstract

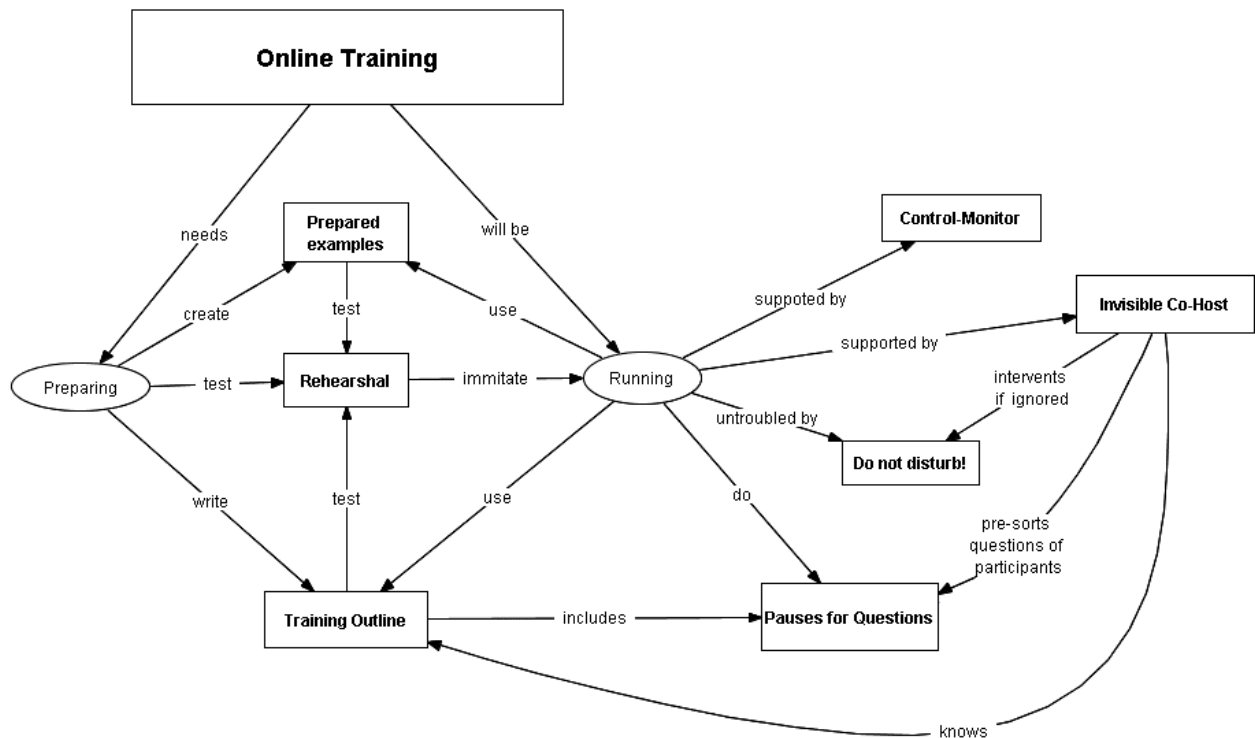
This is a small pattern language for running online trainings. The language starts with an entry pattern ONLINE TRAINING. All other patterns are supporting this pattern and help to make online trainings more alive. Some of the patterns are not exclusive for online uses, for instance PREPARED EXAMPLE or TEST RUN. These patterns could be part of a pattern language for trainings as well. They are included in this collection because they are important for online settings particularly. Another example is PAUSE FOR QUESTION. This should be applied in classroom education as well. But the present pattern description takes special forces into account, i.e. online you have to plan *more* pauses due to the lack of any non-verbal feedback.

Mining Ground

The patterns ground in experiences of online training events of the German information portal e-teaching.org. Since spring 2006 there have been 14 online trainings, hosted by the author and guest trainers. There are usually between 30-50 participants attending the live event. Each event is recorded and can be accessed later. The trainings are open educational resources and can be accessed at¹:

<http://www.e-teaching.org/community/communityevents/schulung/>

Besides our own experiences, we discussed best practices of using the conference system Adobe Connect at a user meeting. Many of the patterns we applied have been in use by others independently, i.e. Invisible CO-HOST, CONTROL MONITOR and of course TEST RUNS. Though we have gathered our experiences using a particular conferencing system, they are not limited to that system. We have tested other systems as well and their functions are quite comparable. The present patterns should be useful for any of the standard web conference systems.



The pattern map shows the relation between the patterns and how they support each other. The map clarifies that some patterns are applied in advance to prepare for the training while other patterns are more important when the actual live training takes place.

Acknowledgement

The author wants to thank his shepherd Nuno Flores for all his help and very thoughtful suggestions. I enjoyed working with Nuno and I think I have not only learned new ideas for this paper but improved my pattern writing style in general. I appreciate all the time Nuno has invested in the shepherding process! I would also like to thank all people who have provided feedback to this paper and the patterns. Many helpful suggestions from the Writer's Workshop at EuroPLoP 2009 have helped to shape this paper as well. Thanks to all participants.

¹ The trainings are in German.

Online Training

Alias: Webcast, Tool Demonstration

Context

Using software applications is a fundamental activity in everyday work life. This applies to teachers, students and employees in the same way. To acquire the desired level of skills, trainings have shown to be an effective way to impart usage scenarios, process steps, tips and tricks. Trainings are suitable to introduce new software products or versions promptly.

Problem

The number of participants is usually limited for classroom trainings. There is a fair amount of costs for travelling to the training site, a loss of working time, and rooms need to be allocated. The calendars of the trainer and the several participants have to be synchronized which is not always an easy thing to do. If potential participants are located at different sites, finding a time suitable for everyone becomes even harder.

Forces

Time For many software applications, there is a need for sophisticated trainings. However, the time resources of trainers are limited. This is true particularly for part time trainers who have other job activities on their agenda as well.

Availability Training services should be available on-demand and just-in-time, for example if new tasks should be coped with, or a new colleague needs to be introduced to the software.

Overview Sometimes people just want to get an idea of a software product without committing to a time intensive training session.

Costs The investment of time and money is a barrier in particular for trainings that are important but not mandatory (or at least judged to be not mandatory).

Special interests For special interest trainings (e.g. a special field of application for standard software) there are usually not enough attendees at a local site while there might be enough interested people on national or international level.

Feedback Training videos offer no way to ask questions, or to signal difficulties in understanding the demonstrated functions.

Solution

Online trainings allow the participation from anywhere independent of the location. If the online training is recorded, the recorded material can be accessed at anytime.

Details

Today's web conference systems allow broadcasting computer screens and actions to many participants as a web cast. A trainer uses a headset and comments his action on the screen. Participants can use a chat window to give feedback and ask questions. To make life easier for the trainer, and to engage in communication with participants, a CO-HOST is a reliable

support. In this case, the training is not led by a single trainer but supported by an assistant who takes care of questions and discussion in the chat.

To check how demonstrated work steps are broadcasted to the participants, a second monitor can work as a CONTROL MONITOR. This monitor shows the broadcasted screen from the perspective of the participants.

Integrate more PAUSES FOR QUESTIONS (“Did you understand everything?”, “Any questions?”) as you would do in your classroom education and use PREPARED EXAMPLES. Plan your trainings to take no longer than 45 minutes (60 minutes being the limit!). People get tired in longer lasting on-line sessions. Shorter sessions, say 15 or 30 minutes, will also do well. While you are hosting an online training you should provide a personal and friendly atmosphere. Don’t forget to smile occasionally even if you cannot see your participants and their reactions.

Obstacles

Preparation Gap There is a huge difference between planning and running trainings. Only if you run and implement the training, the real challenges in operating the software and applying meaningful actions will reveal. Whether the instructional outline works can only be tested if you run the training. Therefore, do a REHEARSAL before starting the training with real participants.

Technical Problems According to Murphy’s law, if anything can go wrong, it will! If anything goes wrong during the live event this could cause inconvenient delays and may let the participants quit even before the event started. Furthermore, technical errors look very unprofessional – even if the trainer or host cannot be accounted for the error. Therefore, always check the technology in advance, fix any broken components, and analyze sources of failure.

Benefits

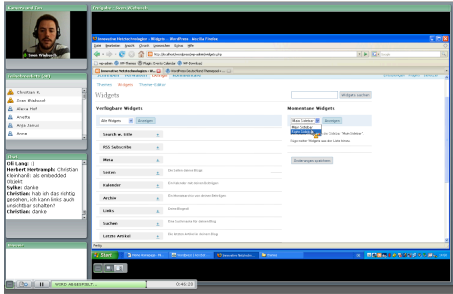
- Participants are not required to travel to a trainings site. This saves time and money. Training sessions can be integrated into the calendar of a regular working day.
- If a participant doesn’t like the training – or realizes that the content does not fit to his learning goals – one can always quit the training without causing any trouble.
- Chat windows enable participants to ask questions during the presentation (an advantage over pure training videos).
- Records allow to watch the training later on and to replay specific sections for a better understanding (an advantage over classroom training).
- No physical rooms need to be allocated or rented.

Liabilities

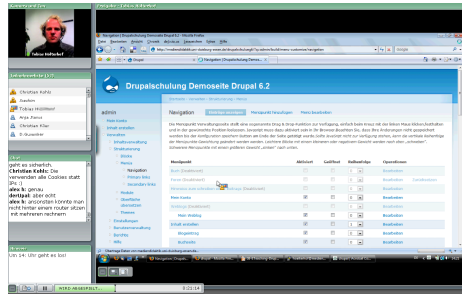
- Cognitive load for the trainer due to the lack of relaxing pauses.
- No hands-on-practice during the training.
- A lack of non-verbal feedback to see whether participants grasp everything.
- More efforts to organize the technical infrastructure for training.
- A fast internet connection is required. Still, some interruptions of audio or video may occur.
- Delayed broadcast of screen operations may cause an asynchrony of audio comments and screen video.

Examples:

The following examples show several online trainings hosted by www.e-teaching.org, each introducing a different software application. Each example was hosted using the same conference system, Adobe Connect. However, there are other tools (see below) which enable to run the same type of event. The trained software applications vary in their screen dynamics. The content management systems Drupal and Wordpress are examples for web based applications where the complete screen content only changes when a new page is loaded.

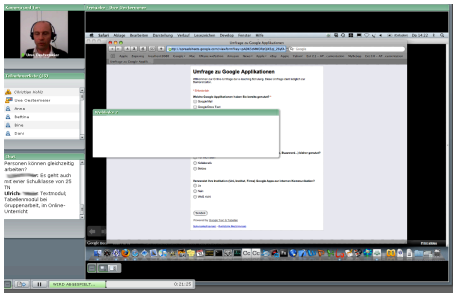


Wordpress training
<http://connect.iwm-kmrc.de/p35287287/>

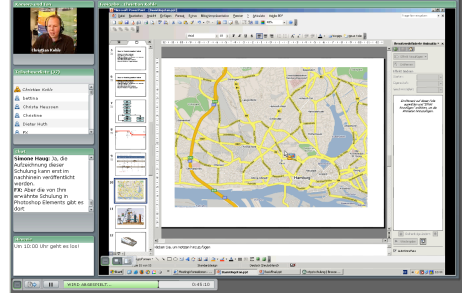


Drupal training
<http://connect.iwm-kmrc.de/p68096301/>

Google Apps is an example where direct manipulation causes more frequent screen changes. In this training the participants were asked to fill out a questionnaire and their answers were evaluated live with Google Spreadsheet. The PowerPoint training is an example for frequent screen changes that occur when a slide is edited or an animation starts. While the editing was broadcasted well, the animation was not smooth because some frames were left out.

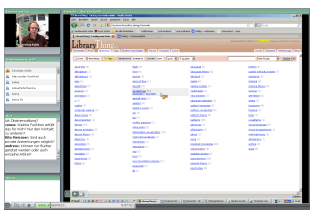


Introduction to Google Apps
<http://connect.iwm-kmrc.de/p27372695/>

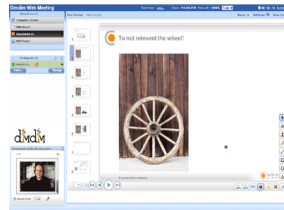


Instructional Animations in PowerPoint
<http://connect.stine.uni-hamburg.de/p65354949/>

Tools



Adobe Connect



DimDim



OnSync

Adobe Connect, OnSync, and DimDim are examples for web based meeting systems that only require a flash plug-in. Hence, most web users can attend trainings without installing anything on their computer. Adobe Connect is very simple to handle and supports screen recording on Mac computers. DimDim is based on open source components and offers free hosting for up to 20 participants. OnSync has very good compressions but is less intuitive than Adobe Connect.

Control Monitor

Alias: Second Screen

Context

In an online training the trainer will demonstrate the use of software on a screen that is broadcasted to participants who are located at another site. In opposition to classroom settings he will not see exactly the same image on the screen. Participants will see the screen in their browser window with a delay of time, lower screen resolution and a lower refresh rate. Furthermore, the broadcasted screen is usually integrated into a conference system which brings additional panels on the screen (e.g. video-image of the trainer, chat window).



Problem

The comments of the trainer should refer to what the participants see on their screens – and not what he sees on his screen. If the audio comments do not fit to the screen video shown, there is a danger of inducing false mental models for the participants.

Forces

Asynchronous streams When speaking his comments, the trainer refers to the process steps he currently applies. However, participants receive the broadcasted screen with a time delay (whereas audio might be delivered without delay).

True-to-detail High frequent changes of what is shown on the screen (e.g. animation, videos or rapid input of text and drawings) will not be broadcasted true-to-detail due to the compression and low bandwidths. For examples, some frames may be left out or the viewer only shows the input of a whole word rather than the singular letters in a text field.

Resolution Since the captured screen is scaled down and broadcasted with lower image quality, details may get lost. In an extreme example, the trainer might see things clearly whereas participants see things only blurred.

Lag Frequent switches between windows frames or scrolling the screen will delay the broadcast since every pixel on the screen changes. However, the trainer will not recognise this because his own screen just acts normally.

Solution

Put a second computer and monitor besides the computer that is used to capture the training. On this second computer one can login as a normal participant. Hence, the trainer can see the screen from the perspective of the participants.

Details

The second monitor does not only show the broadcasted screen but all other panels of the conferencing system as well (e.g. his own video image recorded by the webcam). On his first monitor, the environment of the conferencing system is hidden because the trainer operates the software that is trained.

If the trainer sees a delay on the second monitor, he can mute for a few seconds to reduce the generated amount of data. That will release server capacities and bandwidth.

Obstacles

Missing Eye Contact While looking at the second monitor, the trainer no longer looks into the webcam. He no longer has “eye contact” with his audience because he is looking at some corner of the screen. Therefore, the control monitor should be located close to the primary monitor to avoid moving the whole body of the trainer out of the recorded video image. Not looking into the camera can affect people to think that the trainer is inattentively or unconfidently.

Interference However, if the control monitor is put too close to the primary monitor, the perception of two monitors with almost (but not quite) the same content can irritate and distract the trainer.

Echo Effects The speakers of the second computer have to be turned off. Otherwise, the microphone of trainer might record its own audio output recursively and annoying echo effects occur.

Benefits

- By looking at the second monitor, one changes his audio comments. Rather than saying “Now you see,” one says “In a moment you will see”. Hence, the audio comments are more appropriate to what actually happens on the screen.
- A second monitor enables the trainer to observe chat messages and read them in planned PAUSES FOR QUESTIONS.

Liabilities

- Looking too many times to the control monitor interferes with the work flow, for the operations will still be applied on the primary computer and not on the second one.
- Additional hardware is required.
- Time consuming setup of the trainer’s desktop.
- The trainer frequently looks to the side instead of into the camera which can be irritating.

Examples



If the hosting computer uses an unusual screen format or a very high resolution, a second monitor can help to check what the participants see.

Small laptops or Tablet-PCs are perfect as a second screen because they are easy to setup on your desk and don't take too much space. Also, such small computers usually have a "low" resolution (e.g. 1024x768 pixels) and you can see what happens under "worst" conditions.

Using a second monitor is particularly helpful if there are frequent changes on the screen. In trainings for PowerPoint, Flash and Photoshop, the trainer was frequently checking whether the manipulations were fully captured by the conference system.

In another example, a trainer was not using a control monitor. When he was scrolling quickly up and down on a website (to just show what is at the bottom of the page), he did not realize that no participant ever saw the bottom of the website because it did not last long enough at that position to be captured by the conference system.

Pauses for Questions

Alias: Any questions?

Context

Planning and running an online training to let participants acquire software skills.

Problem

In online settings there is no non-verbal feedback that could indicate whether the demonstrated process steps are understood, whether the pace is appropriate, or whether interest arouses. Without this feedback the trainer cannot adapt the training to the situation and it gets harder to optimize learning effects.

Forces

Visual Feedback Stereotypical signals such as frowning, staring bored, widened eyes, confirming smiles etc. are giving conscious or unconscious feedback to the trainer, indicating whether his style of training is adequate or needs to be adapted. However, in an online training the trainer does not see the participants.

Signaling It should be allowed to ask questions at any time. However, how can a participant indicate need for more information if he cannot simply raise a hand?

Pace Continuous talking of the trainer is stressing and participants need some relaxing time every now and then to process the new information. However, idling moments have different effects in online trainings and seem to be awkward.

Solution

Plan to invite participants to ask questions (“You understood everything?“, “Any questions so far?“) explicitly and more frequently than in classroom trainings. Announce at the beginning of the training that you will include several pauses in which questions can be answered.

Details

Since there is no implicit feedback from non-verbal communication, we have to ask explicitly for feedback more frequently. At the end of the training, too, the trainer should ask for feedback: “Were the amount of information and duration appropriate?“, “Did you miss any information?“, “What would you like to hear the next time?“, “Was the quality of audio and video sufficient?“ Free answers can be typed into the chat window. Some conference systems allow preparing questionnaires in advance. To not forget pauses for questions, it is a good idea to include them explicitly into the informal TRAINING CONCEPT.

To give some relaxing time to the trainer and to involve the participants, one can ask them to contribute: “Do you have an idea for his?“, “Do you know any other example?“, “Does anybody know what I should enter into this field?“ Answers can be typed into a chat window.

Most conference systems offer chat windows and trainers are advised to make use of it.

Obstacles

Lose out questions. While the trainer is demonstrating the software tool, participants can ask questions. Since the trainer concentrates on demonstrating the tool, it is easy to miss some of the asked questions. For this reason, the trainer should announce that he will not answer each question immediately but has planned several halting points to discuss questions.

Switching focus To read the questions, the trainer has to switch from the demonstrated software tool to the conferencing system. To avoid this switch, a second CONTROL MONITOR can help. An INVISIBLE CO-HOST could organize and filter the questions.

Benefits

- Involvement of participants.
- Questions and obscurities can be addressed.
- Causes social awareness.
- Pauses are relaxing the trainer.

Liabilities

- Questions cannot be answered immediately when they occur.
- Not immediately scanning the questions in the chat window makes it hard to understand afterwards which question refers to which section of the training.
- Pauses can be awkward if no participant asks any questions or gets involved.

Examples

Google Apps training:

User: "Are all users required to have an account at Google?"

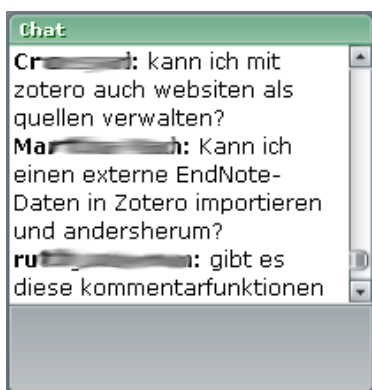
User: "How many people can work simultaneously?"

Flash training:

User: „What kind of braces are required for the command?“

User: "Why is the marker not directly set in the object's layer? Does that not work?"

LibraryThing training:



User: „Can I save website sources in Zotero?“

User: "Can I import external EndNote-files in Zotero and the other way around?"

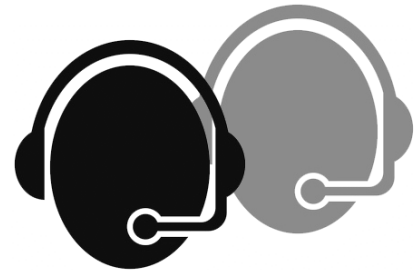
User: "Is this commenting feature available for other document types as well?"

Invisible Co-Host

Alias: Assistant

Context

You are running an ONLINE TRAINING with several participants and you can use a chat window for synchronous communication. A chat window allows participants to ask questions and to give feedback whether they understand everything.



Problem

During the training, a trainer concentrates on his screen actions and his audio comments. His attention cannot be simultaneously and permanently on chat news. Also, chat news can be distracting.

Forces

Awareness Since trainers can not permanently pay attention to the chat window some questions might get lost.

Distraction Participants can chat and communicate with each other. This extends the knowledge exchange and sharing of experiences, however, the trainer is distracted by frequent messages that scroll over the chat window.

Filtering Trainers should address the most important questions at an appropriate time but filtering the most important questions from the chat protocol causes inconvenient delays and binds cognitive resources of the trainer.

Comprehension When checking questions at a later time, for example in a PAUSE FOR QUESTIONS, it is hard to relate general questions to specific training sections, i.e. which demonstrated steps or functions are addressed by the questions.

Solution

Run a training session in a team. Co-located with the trainer is a co-host who acts as an invisible assistant taking care of questions and messages in the chat window. The webcam only captures the trainer, while the co-host works in the back to answer questions, to sort messages and forward the important ones to the trainer.

Details

The training is hosted by a trainer who is an experienced user of a software tool. The assistant does not need to have the same level of expertise as the trainer has. He can answer simple questions directly in the chat window and provide information about organisational issues (e.g. he can answer questions about the duration of the training, whether the training is recorded, how to control the audio volume). His most important task is to filter questions and forward the important ones to the trainer.

Since the co-host always monitors the chat window, he can relate questions in the chat to specific sections of the training (i.e. “this question is about function XYZ”).

The co-host sits next to the trainer without being captured by the camera. This way he can act in the background but can directly give signals to the trainer (e.g. wave a note) or write down questions in large letters.

Obstacles

Intrusion The signals of the co-host can distract and irritate the trainer. For mute communication, hand signals can be agreed upon. Thumb up means: “I have seen there is a question and I will address it in a minute.” Waving the hand means: “OK, there is a questions, but at the moment I cannot address it because I want to finish the section first.”

Briefing The assistant should know the TRAINING OUTLINE. If somebody asks a particular question he can hint that the topic will be demonstrated later.

Benefits

- Relief for the trainer allowing him to concentrate on the training.
- By permanently observing the chat window, questions can be related to specific sections of the training.
- Additional information can be provided in the chat window.
- Concurrent chat makes the training more alive.

Liabilities

- More personal resources are needed.
- Questions and gestures of the co-host can irritate the trainer.
- The co-host needs to have some minimal knowledge about the topic or has to be introduced to it by the trainer.

Examples



Co-Host showing a question to the trainer

User: “How long will the training last?”

Co-Host: “Approx. 45 minutes”

User: “Is the training recorded? Where can I get the link?”

Co-Host: “Yes, the training is recorded. We will publish the link in our events section at e-teaching.org”

User: “Every now and then the sound is gone”

Co-Host: “You can change the bandwidth to Modem connection. Less quality but continuously audio stream.”

User: “What is the difference between comments and pings?”

Co-Host (using his knowledge): “Comments: Visitors can write text comments. Pings: Other blogs can automatically notify the entry that they are referring it.”

User: “Can I add images and videos?”

Co-Host (using the TRAINING OUTLINE): “That’s coming in a minute...”

Do not disturb!

Alias: On-Air

Context

To run an online training there is no need for a special training room and trainers can host the session from their office.

Problem

Extraneous disturbances such as ringing phones, chatting colleagues, students or any operating noises distract the trainer, interfere the quality of audio broadcast and irritate the training flow.

Forces

Usual Fuss Colleagues, guests, or students cannot know that an online training is broadcasted live from your office and that entering the office or knocking at the door will disturb. In particular if you usually have a policy of open doors and people are used to just entering other people's offices, you have to communicate that there is a "special situation".

Interruption To turn off annoying operating noises or to get rid of someone during the training costs time, destabilizes the Zen of a training session and can cause embarrassing situations in the virtual meeting room.

Absence To leave the desktop temporarily is not an option because a virtual training room without a trainer is very irritating.

Solution

Place a sign at your office door to signal colleagues, guests, visitors or students that you do not want to be disturbed at the moment. Explain the reason.

Details

Block the access to your office by locking the door or place something (e.g. a chair) in front of the door. Tell all your close colleagues that you are running an online training. Turn off phones, mobiles, noisy hard drives or air conditioners.

Obstacles

Explanation To not upset your colleagues, do communicate that your request for silence is not arbitrary but for a good reason. Explain in friendly words why people around you have to be quiet for the next 45 minutes.

Defence If an unexpected source of distractions occurs, a CO-HOST can help to turn off a noisy machine, ask people in neighbouring offices to be quiet and get rid of unwelcome visitors. By any means, the trainer should not find himself in a situation where he has to leave his desktop during the training.



Benefits

- Simple and effective, easy to implement
- Everybody knows what is going on
- Running a training without disturbance

Liabilities

- People cannot contact you in an emergency
- Explicit “Do not disturb!” hints can provoke and even invite trouble makers
- People might think you are taking things too seriously

Examples



Radio and TV stations use an „On Air“ signal.



A simple “Do not disturb” print-out decorates the office door when an e-teaching.org event is hosted.

The sign also informs visitors what is going on (e-teaching.org Live-Webcast).

Rehearsal

Alias: Test Run, Dry run

Context

You are planning an online training with several participants and you are currently preparing the structure. The training content and TRAINING OUTLINE are fixed in principle.

Problem

There is a huge difference between planning and running trainings. Only if you run and implement the training, real challenges in operating the software and applying meaningful actions will reveal. Whether the instructional outline works can only be tested if you run the training.

Forces

Complexity You have to try out your PREPARED EXAMPLES to realize that they do not work as planned or are too time consuming and complex.

Elocution The spoken audio comments for each of the process steps have to be clear and to the point. Practice can help. If you are looking for the right words and examples during the training you are risking shakiness in your style of presentation.

Pausing Pauses in online training are much more intensive and seem to be longer; hence, trainers have less time to gather themselves or think about the next steps. Moments of silence (e.g. walking in the training room or looking into the audience) are harder to achieve in virtual environments and often appear to be strange.

Coherence The sequential order of a training requires that information is build on each other and that the structure is coherent. If you only plan theoretically it is easy to lose sight of the big picture and which details have to be presented at which time. As an expert you have everything in your head but that does not mean that you can already communicate it in an instructional way.

Solution

Do at least one test run in advance of the actual training. Use the test run to analyze at which points the training concept can be improved.

Details

It is crucial to speak all comments out aloud in spite of being on your own. By doing so, you get a feeling for the language, how to describe and comment actions. Also, you get a better feeling of how much time you actually need for the training and can adapt the materials accordingly.

To be a skilled user of software is not enough to be a good trainer; you also need to have a good presentation style and skills of communication.



Obstacles

Knowing the traps Known problems of the software to be trained should not surprise the instructor. Rather, he should know the problems and offer solutions. Tackling such obstacles cannot be planned without practically try out the features. The more often you try the same flow of operations, the more likely you will find any potential source of errors.

Passionless It's the same as with everything: the more practice the better you get. But be aware of running too many test runs. You can easily get bored by the content or start oversimplifying concepts. This could effect your motivation when you are running the real training. You might present the content mechanically. Therefore, the final test run should not be immediately before the real training (e.g. just an hour in advance). It's better to test run one day in advance.

Benefits

- The trainer gets more confident in demonstrating and explaining.
- Potential sources of errors are recognized and can be addressed.
- The TRAINING OUTLINE is optimized step-by-step.
- If you have a new idea during the test run, you can just write it down and still change the outline.
- You can interrupt a test run at any time.

Liabilities

- Investment of time
- Having too many pre-phrased sentences makes the training monotonously
- Be aware of false safety and be prepared that still a lot of things can go wrong
- Excitement and stage fright will still be with you on the real training

Examples

- Each online training at e-teaching.org is at least tested one time without audience
- Trainings in classroom settings are very often tested with no or just a small group of participants
- Rehearsals are quite common for theatre performances, concerts or public talks.

Training Outline

Alias: storyline, training script

Context

When planning an online training, surely everybody has a mental picture or a concept in his head of what skills should be acquired. Then comes the moment of the real training and you are excited and more stressed.

Problem

While taking the stress – even stage fright – during the live training into account, one easily forgets important information or jumps over some important sections. Thus, some of the knowledge gaps of the participants may remain.

Forces

Skipping It is tempting to leave out some content sections just to get sooner to the end of the training session.

Sequencing Functions and models should build on each other. The sequence in which software features are presented is crucial for its understanding.

Flippancy Flippancy lets one forget to mention some information, leaving behind knowledge gaps of the participants. Delivering information afterwards is laborious and not all participants might receive it.

Biasing Writing a full trainings storyboard costs a lot of time and limits your flexibility as it builds mental barriers to adapt to individual educational situations.

Solution

Make a list of the most important features and process steps you want to communicate. Write them down as an ordered item list setting the structure of the training.

Details

The items will remind you which information to provide in which order. They are the base structure.

Each item is only an anchor for your presentation – and not a pre-phrased manuscript for your training. You should avoid reading information or descriptions from a manuscript.

The item list could include special sections such as defining the learning goals, PAUSES FOR QUESTIONS, or at which time you will show a PREPARED EXAMPLE.

If you run the training with a CO-HOST, you should give him a copy of the training script. If he knows what will be tackled in the training he can better provide information in the chat.

Obstacles

Tracking For your own orientation, highlight the most important information and the start of new sections using a bold font. For clarity, check all items you have talked about with a pen.

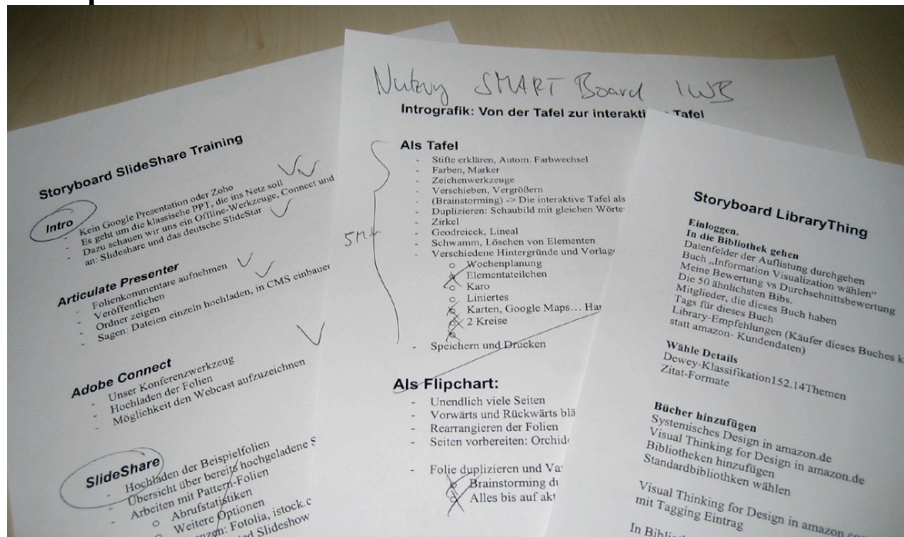
Benefits

- Trainings get better structured
- There is less danger to forget relevant information
- PAUSES FOR QUESTIONS can be integrated explicitly
- You always keep on track
- You resist the temptation to jump over some sections

Liabilities

- Blindly following the script makes the training inflexible
- Having too many details and an inner force to necessarily tackle everything can draw out the training

Examples



The outlines of online trainings for SlideShare, SMART Board interactive whiteboards, and LibraryThing.

Prepared Example

Alias: Tested Example, Working Example

Context

You plan and run a classroom or online training. In order to show typical scenarios or actions, you will enter example data for the sake of demonstrating functions or process steps.

Problem

The search for meaningful examples costs time which is not available during the time of training. If you use meaningless (random) data or materials, you can show the functions of a program but you communicate the purpose ineffectively. Careless chosen example data can cause undesired effects or atypical results.



Forces

Limitation You cannot use a huge number of examples in a single training, hence you have to use good examples (in terms of instructional benefit).

Meaning Examples have an important instructional impact and are not just a means to click through program functions. Meaningful examples not only demonstrate the functions but also show their typical uses and benefits.

Time An example can be meaningful but time-consuming, long-winded, and take up too much time of a training session.

Solution

Prepare your examples with care. Use meaningful input data and actions that apply to the typical needs of the trained audience. If needed prepare materials (images, spreadsheet values) in advance, in order to avoid editing times that show no key functions of the software.

Details

The most simple example that does not skip any relevant information might be the best. Try several examples and decide which one fits best.

Never enter meaningless data such as “abc“, “xyz“ or “slkjssw swkjd“ into an input field! Use examples that are appropriate to the semantic of the input field. This is important to associate the right type of input and to demonstrate the purpose and meaning of the input data.

If you show graphic user interfaces that allow direct manipulation, you should not start wildly but create new objects purposefully. Do not just sketch on a graphic panel or create meaningless objects. This will only raise questions such as “Well, fine! But why do I need this?” If the function is meaningful then you will always find a meaningful example!

Obstacles

Stickiness Due to all the efforts for finding good examples one might be tempted to use them at any price. But one should always adapt to the individual training situation. If one example takes longer than planned (e.g. participants asked some questions) just skip another example. If you use a chat window you can ask participants whether there is need for more examples.

Renewal Do not use examples only because you have prepared them! It's hard to discard an example that has cost you some time to create. But if you find a better one just go for it!

Benefits

- Meaningful examples increase the learning effect
- The trainer is more relaxed during the training if he has not to search for examples
- It helps to avoid unexpected results when using the software
- Good examples can be re-used
- A toolkit of good examples lets you act flexible and offers the opportunity to adapt the training according to the interests of the participants

Liabilities

- It takes a lot of time for preparation
- You may have to adapt examples for each specific group to provide meaningful example data

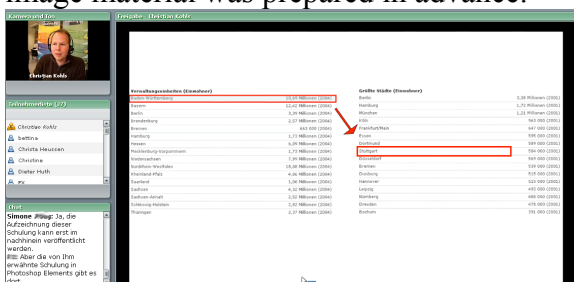
Examples

LibraryThing training (<http://connect.iwm-kmrc.de/p79077399/>)

LibraryThing is an online service to manage your library. To demonstrate the service, an account was created and all books of the trainer were added online (in advance) to show a realistic setting. To demonstrate how a book was added, the trainer chose books from which he knew that meta-data were available in other online libraries. In the actual training he only added books to the list which he had successfully added before to avoid any bad surprises. LibraryThing also shows correlations to other users with similar interests (having similar books or tag clouds). To make sure to use interesting examples, the “live” exploration of correlated tags and users was tested several times in advance. The queries that created the best results were used in the actual training.

Animation in PowerPoint training (<http://connect.stine.uni-hamburg.de/p65354949/>)

PowerPoint offers many ways to animate objects. Usually such animations are distracting but cleverly used they can offer instructional support. This was demonstrated in an online training. Since the training was meant to show how to edit more complex PowerPoint animations, each image and each slide layout was prepared in advance. The purpose of the training was not to show how to create or find interesting images. Therefore, the example image material was prepared in advance.



The screenshot shows a PowerPoint slide with a table. The table has two columns: 'Herausgeber/Verlag (Herausgeber)' and 'Geldter Stelle (Ortsname)'. The first column lists various publishers like 'Klett', 'Fischer', 'C. Bertelsmann', etc. The second column lists cities like 'Köln', 'München', 'Frankfurt', etc. Red highlights are applied to the first row of the table and the 'Geldter Stelle' column header. A red arrow points to the first row. The slide also includes a video feed of the trainer in the top left corner and a list of participants in the bottom left corner.

Animated highlighting of table rows can be used to direct the attention of the audience. In the training it was explained how to create such animated highlighting. The table itself was prepared in advance because the topic was “how to create animations” and not “how to create tables”.