



onTrain

Online Training, the treasure within

B. Online Training

5. Motivating the online learner

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Let's start



To motivate participants online, there are several ways for learners to personally engage with the subject. Adult learners are more motivated to learn - online or in person - when treated as unique individuals with their own goals, interests and lives. Once they recognise that you are on their side, they feel more comfortable contributing to discussions in the online learning environment and associating the topic with their own everyday lives¹.

What am I learning here and why?

The aim of this learning unit is to teach the future online trainer the importance and significance of motivation in online learning scenarios.

What content will I find here?

At the end of the chapter, the prospective online trainer knows what role motivation plays in e-learning, that the learner has to be activated to achieve positive learning results and what the relation is between motivation and interactivity.

What influences our ability to learn?



When adults learn new things, a few factors influence the way we learn.

These factors are:

- ...are linked with **significance** (Am I interested in this topic? Can I use this knowledge in my day-to-day life?)
-

Example: Think about examples that could be interesting to your target group. Sometimes it is an advantage to have more two than examples up your sleeves.

- ...are linked with the individual **biography** (Have I always been curious?)
- ...depends on **motivation** (Am I motivated to learn more about this topic?)

Usually learners are very motivated, but with them come a highly or not at all motivated spouse. In addition, motivation is very fragile – the eagerness one showed in the beginning can quickly turn into frustration. Watch out for this and try to contact participants when you have the feeling they might need help.

- ...depends on our **learning experience** and if we **know how we learn best** (How do I learn most effectively?)

¹ cf. Stanford, Daphne (2016): How to motivate students online: what works and what doesn't – How can we get each of our students to take their transformation or education into their own hands?

Some people like a more practical approach, others want to know more about the backcloth. Some people need to immediately apply what they learned, others take their time. Let everybody find his or her own approach and strategies. Especially older people often know how they can learn best.

What influences our ability to learn?

When it comes to learning at an older age we need to consider how heterogeneous this group is. They come from different socioeconomic backgrounds, they have different health conditions and don't meet the same educational standard. That's why the learning ability and learning behaviour of the elderly can't be standardized².

Learning ability and behaviour depend on...



Source of this graph: own depiction

The learning ability of adults - motivation

Our learning ability depends on our **motivation**. Our interest in learning can stem from intrinsic motivation (from within) and extrinsic (externally) motivation.

The learning ability of adult learners

Since you are about to become a online trainer the topic of motivation is extremely important for you. Through your behaviour you can influence the motivation of the participants and, at best, boost it.



Exercise: Now we'd like you to reflect for a few minutes on what influences **your motivation** to learn.

² cf. GrandExpertS Learning-Unit 2: Methods (author: Elena Coroian, ILI-FAU: here 9.2. What influences learning?)

1. In your opinion: what is your **perfect learning situation** (for example: the time of day - early in the morning/in the late afternoon; place: big/small room; surroundings: alone/in a group, with music playing/silence etc.)
2. What is the ideal constitution when it comes to learning to you? (e.g.. well rested or hyper, relaxed or under pressure, etc.)
3. In your opinion. What do the perfect learning materials look like? (e.g. a highly structured/sorted by topic/from easy to hard/etc.)

If you are not in your ideal learning situation, how do you motivate yourself? What can make you go on learning nonetheless?

Motivation - strengthen the joy of learning

Let's start with a question: Is motivation different for adults? Or is motivation an universal topic and not that age-specific? We can all agree that person at different ages are motivated by entirely different things than a young person!

Motivation leads to success

It is important to remember, that a motivated learner is also as successful learner and that being able to learn effectively is hugely dependent on our motivation. Being interested in and wanting to learn are important requirements for a participant. Every bit of progress can strengthen both. This can result in a motivational spiral towards the learners' goals. Winston Churchill is supposed to have said: "**Success** is not final, failure is not fatal: it is the courage to continue that counts³."

Interactivity and Motivation

” First of all, it is important to clarify what is meant by interactivity? Interaction and interactivity are composed of the Latin terms "inter" (=between) and "agere" (=acting). Both terms describe the mutual influence of individuals, groups, social structures or media. In the English language both terms are used simultaneously as "interaction".

Different forms of interaction can be distinguished from each other⁴:

- **Interaction between learner and trainer:** The interaction between teachers and learners is regarded as a driving element of learning. A learning process is created through information transfer and feedback. This learning process not only informs and motivates learners, but also benefits the teachers themselves.
- **Interaction between learners:** When learners interact with each other, not only cooperative and collaborative learning through work sharing can take place, but also

³ cf. GrandExpertS Learning-Unit 2: Methods (author: Elena Coroian, ILI-FAU: here: 9.4. The Learning ability of adults - motivation.

⁴ Cf. Hill, J.R.; Wiley, D.; Miller Nelson, L.; Han, S. (2004): Exploring research on internet-based learning: From infrastructure to interactions. IN: Jonassen, D.H. (Editor): Handbook of research on educational communications and technology (pp. 433-460). Mahwah, NJ: Lawrence Erlbaum quoted of Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: pp.45.

knowledge communication can be supported. Through the exchange of information between learners, shared ideas or perspectives can additionally contribute to condition and enrich the knowledge structure of individual learners.

- **Interaction between learners and learning content:** This form of interaction is to be regarded as very critical: Resources or teaching materials such as the lecture, textbooks, websites or even learning programs are only a few examples that can be cited as examples for learning content. The task of the learner is to deal with these contents in a forced way in order to appropriate the information represented in the materials and to incorporate it into his own knowledge structure. As a result, however, there can be many different forms of progress in the learning process: from the development of a poor or incorrect understanding, to a superficial examination of the contents, to the development of a deeper understanding.
- **Interaction between learners and computer interface** (learning platform, software, etc.): This is about the different possibilities of mutual influence between software and learner. In teaching and learning contexts, these are different areas of application, such as dealing with learning software, an online information service or an online discussion forum.⁵

Influence of interactivity on the learning process

Above all, interactivity supports a form of learning that can be described as active learning. The more interactive the actions in a learning environment are, the more it is the task and duty of the learner to acquire the information independently as the degree of interactivity increases. Different degrees of interaction can have different consequences. Advantage of interactivity is that the learner can arrange its individual learning path and thus meet their own wishes, needs and ideas. Interactivity contains more than just a technical component.



The overriding goal in the design of interactive learning environments is always to allow the learner to have interactive experiences by having a great influence on the learning process and being able to actively shape it⁶.

Hannon & Atkins (2002)⁷ have developed a model with which they try to map interactivity in the form of effects on learners. Three areas of effect can be distinguished from each other:

- **Promotion of the learner's involvement in the learning process:** the learner acts, the technology recognises this, evaluates the actions and then shows an adapted behaviour (responsive) on the basis of the evaluation. By adapting the technology to the learner and his needs, a potential for further actions opens up.
- **Promotion of understanding building and significance for learning events:** Through interactive action it becomes possible to establish a connection between the real world and the learning situation and thus lends authenticity to this process. This

⁵ Cf. Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: pp.45.

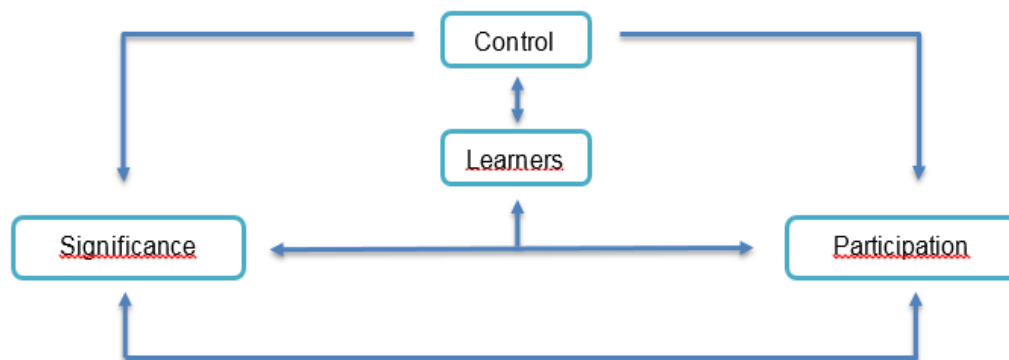
⁶ cf. Rieber, L.P. (1996): Animation as feedback in a computer-based simulation: Representation matters. Educational Technology Research & Development, 44(1); pp.5-22. Quoted from Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: p.52.

⁷ cf. Hannon, J.; Atkins, P. (2002): All about interactivity. Online document, retrieved: 02.07.2004 from <http://learnwebct.vetonline.vic.edu.au/ACTIVE/index.html> quoted from Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: pp.52.

helps the learner to build up a wealth of experience, which helps to transfer the learned knowledge to everyday situations and thus results in understanding. In this way, knowledge acquires a meaning.

- **Communicating a sense of control to the learner:** The fact that the learner is no longer in a passive participant role in online learning environments, but is increasingly involved in the learning process through active participation, makes him even more aware of the relevance of his own actions. In the ideal case, this leads to a feeling of personal responsibility and satisfaction on the part of the learner, which in turn favours the learning process.

These three aspects provide the framework for a learning-centered model of interactivity, in which learning appears as an active and authentic form. Only if all three aspects are fulfilled is it possible for a learner to experience interactivity according to this model.



Interactivity in a learner-centered model (see Hannon, J.; Atkins, P. (2002))

Relation between Interactivity and motivation

Motivation is a fundamental prerequisite for learning processes, be it extrinsic (external) or intrinsic (internal) motivation, foreign or self-directed learning. Interactivity can make a very high contribution by promoting and maintaining motivation (primarily intrinsic) (cf. Burgos, Tattersall, Koper, 2007)⁸. Strzebkowski and Kleeberg (2002)⁹ summarized various design principles that can positively influence learner motivation with the help of interactive software. The following points should be mentioned:

- 1) **Challenge of the learners:** If a learning environment is characterized as more challenging, problem-solving processes can be initiated and the learner motivated. This is primarily the case with active learning, when the learner has to work on tasks independently and has to deal with the solution of these tasks independently. Space

⁸ cf. Burgos, D.; Tattersall, C.; Koper, R. (2007): Re-purposing existing generic games and simulations for e-learning. IN: Computers in Human Behaviour, 23(6), pp.2656-2667, quoted from Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: p.53.

⁹ Cf. Strzebkowski, R.; Kleeberg, N. (2002): Interaktivität und Präsentation als Komponenten multimedialer Lernumgebungen. IN: Issing, L.; Klimsa, P. (Hrsg.): Informationen und Lernen mit Multimedia. Pp.229-246. Weinheim: Beltz PVU. Quoted from Zumbach, J. (2010): Lernen mit neuen Medien – Instruktionspsychologische Grundlagen. IN Hasselhorn, M.; Heuer, H.; Rösler, F. (Hrsg.): Standards Psychologie. W. Kohlhammer Verlag, Stuttgart; Here: pp.54.

for such a learning scenario is provided by interactive learning environments that offer the learner the opportunity to solve problems independently.

- 2) **Generation of curiosity:** Curiosity is always closely related to challenge. Interactive learning environments in particular are best suited for the implementation of research-based learning, as they offer learners the opportunity to develop content themselves using a research-based approach.
- 3) **Freedom of choice:** This point can also promote and maintain motivation. Especially when learners can decide for themselves about their learning pathways, learning pace and learning progress, the interest in developing content autonomously increases at the same time, which enhanced the self-efficacy of their own actions.

It is precisely the last point of freedom of choice or self-determination in the learning process.

Examples



Please have a look at the following puzzle: During a successful raid Halvar and his men capture ten sacks full of gold coins. Gordon, the ship boy of the hijacked frigate, tells Halvar that he has heard that there is a sack of counterfeit coins under it. However, he did not know what it was. He only knows that each real coin weighs 10g and the fake ones only 9g. Halvar, a player and pirate with a soft core, makes a suggestion to the ship's boy: "You may take as many coins from each sack as you like and place them on the scales on the aft deck. Then you may take a look at the display. If you can tell me which sack is the wrong one, you may keep 10 gold coins." What does Gordon have to do?

Did you guess the answer to the puzzle? (You will find the solution below.) Would you like to continue working on the puzzle until you come to the solution? Are you angry because you can't come up with the solution?

In each of these cases you behave according to the theory of intrinsic and extrinsic motivation. Puzzles create a motive of curiosity - we want to know how something works, what the result is. The goal is to explore the puzzle and find the solution. In science, this incentive is described as exploration. The result is that most people want to guess the puzzle they once started - so they are intrinsically motivated¹⁰.

Solution: Take one coin from the first bag, two from the second, three from the third, and so on. Now put the coins on the scales. The difference to 550g is the number of the bag with the counterfeit coins.

¹⁰ Cf. Schelk, A. (2011): Leitfaden „Leistungsmotivation – Entstehung, Verlust und Einflussmöglichkeiten“. BBJ Consult AG (Hrsg.): Modell „Auf Umwegen zum Berufsabschluss“ Servicestelle Nachqualifizierung Westbrandenburg. Perspektive Berufsabschluss, Förderinitiative Abschlussorientierte modulare Nachqualifizierung. p.10. online: http://www.perspektive-berufsabschluss.de/downloads/Downloads_Projekte_Nachqualifizierung/Nachqualifizierung_Potsdam_Leitfaden_Leistungsmotivation.pdf (Stand: 20.08.2019)

Exercises



As we have just heard, motivation is essential for learning success. Conversely, this means that without motivation there can be no learning success in online learning environments.

Exercise 1: Characterise factors of motivation



It is therefore your task as a trainer to design the online learning environment and the learning materials in such a way that they are interesting and motivating for the participants. As a first step, try to put yourself in the position of a participant who is participating in an online course for the first time.

1. What would reduce your motivation?
2. How could these motivation blockers be removed?
3. How would you turn negative aspects that reduce motivation in learning into positive aspects?
4. What ideas do you have?

In general: Think about which negative aspects can prevent motivation and write them down. Now think about how you can translate these factors into positive ones in order to solve the motivation blockade.

Exercise 2: Influence motivation



As an exercise in a forum, ask the question: "Which aspects do you think (and the learners themselves are asked) influence your own motivation when learning online (positive as well as negative)?"

Consider:

- What would you do to motivate yourself for a particular online course?
- What would your personal motivation strategy look like to stay motivated in an online course with a very high percentage of self-organisation throughout the course?



You can read more about self-determination and self-regulated learning in the chapter 3 "**New role of the learner**".

Summary



Learners know what learn lifelong means and what role motivation plays in it. They are aware that motivation is the key to learning success. In this way, online trainers can best support and encourage learners to achieve their own learning goals. The trainers are also able to recognise the connection between motivation and interactivity and use it sensibly for their own learning scenarios.

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