



Motivational Measures for Heterogeneous Groups in Web-Based Adult Education

Sonja Klante¹, Martin Steber², Carmen Biel³

Abstract

The paper reports on the development of the online learning portal OWL (by the German Institute for Adult Education, funded by the Federal Ministry of Education and Research) aiming at a new approach for the professional development of adult educators. We are trying to answer the question of how to keep this heterogeneous group motivated to improve teaching skills in an online environment by building on Gilly Salmons Five-Stage-Model.

The OWL space is currently in development and is planned to be finalised in early 2019. Therefore, we are reporting on the implementations but also take conceptual considerations into account.

Keywords: *Motivation, learning accompaniment, structure and orientation;*

1. Motivation and e-learning

In further education, the teacher usually is in a strong exchange with learners. The teacher can react on students losing attention and motivation and has the chance to individually respond. Motivated learners enjoy learning, are more willing to accept challenges and are strongly engaged [1]. Since the OWL-project aims at contributing to a professionalization of adult education in general it is important to keep the adult educators that are acting as learners motivated and have a strong focus on the improvement of their teaching qualities.

By looking at motivation in online learning environments two perspectives are relevant: First motivation by an *instructional design* and second motivation seen as a *trait of the learner*. Whilst the second element is difficult to approach due to a large heterogenic target group, the first element has a big impact on the design. The individual motivation is influenced by different basic factors [2]. These include for instance: active participation and interaction, fun in dealing with learning materials, variety and optional possibilities in the learning system, possibility for social interaction and many more. Above all, a lack of personal feedback and recognition has been proven to be a challenge in e-learning [3].

Learners' motivation is to be seen as one critical factor for the effectiveness of an e-learning-space, because it plays an important role for an effective transfer of knowledge. Furthermore, it should be considered, that intrinsically motivated learners are more eager to explore the learning environment itself [4]. That's why regarding motivational factors in the e-learning process can help to improve the presentation of the learning content.

2. The Open Webbased Learning Space (OWL)

High quality adult education starts with the design of learning arrangements, which is usually done by the teacher [5]. As this is a sign for pedagogical quality, it is surprising that only a minority of adult educators in Germany hold an initial pedagogical qualification. This is due to the fact that no certification or formal qualification is needed to engage as an adult educator in Germany.

Considering this, the German Institute for Adult Education asked 1,305 adult educators to express their needs when it comes to professional development [6].

Building on these insights, we are developing the OWL-space to professionalize adult educators. Focusing on pedagogical-psychological knowledge and skills as central competencies to the conceptualization, implementation, delivery and evaluation of teaching and learning in adult education, a main challenge of the OWL-Space is the necessity to transfer knowledge into action [7].

The OWL implementation tries to address both types of learners, the ones who seek solutions to current challenges and those who obliged to further educate themselves [8], without hindering one or the other.

¹ German Institute for Adult Education, Germany

² German Institute for Adult Education, Germany

³ German Institute for Adult Education, Germany



Therefore, the learning arrangements in OWL are designed along a twofold strategy: (1) along a situated learning approach based on action oriented goals for the intrinsically motivated learners that likes to tackle their challenges and (2) along competence dimensions based on learning goals for those extrinsically motivated learners that were told to professionalize [9].

3. Using Salmons model to address motivational questions

There are many different models on building a motivating learning environment. But what makes Gilly Salmons' model that special, that the OWL-space is applying to it? A brief look into two other well received models helps to understand: Chan and Ahern, for instance, are transferring the Flow Theory on a classroom setting [10]. Their focus foremost aims at the instructional design of a learning environment. This is important but focusses too much on intrinsic motivation on its own. Keller created the ARCS-model [11] (attention, relevance, confidence and satisfaction) that creates a profound base for a motivational learning platform. Both models are missing the important aspect of learners' differences. Salmon considers this matter by designing exchange possibilities and social interaction with other learners [12]. To consider the main parameters of motivation in the OWL-space, Salmons Five-Stage-Model provides a coherent model to base online learning design and activities upon [12]. The "scaffolding" model offers an idea of structured e-learning activities which have the purpose to create greater motivation, interaction and participation in e-learning courses. The different areas considered are building on each other. They are indicated as (1) "Access and Motivation", (2) "Online Socialization", (3) "Information Exchange", (4) "Knowledge Construction" and (5) "Development".

4. How OWL builds on the Five-Stage-Model

Setting up a web-based platform according to the five stages guarantees a minimum measure of motivation. Regarding the large amount of content and several different ways to approach the different participants' needs, the portal ensures that users stay oriented and meet their individual expectations. In the following, the application of the model is taken into account both in the current state of development and in the future development of the project.

4.1. Access and motivation

As some adult educators are unfamiliar with online learning, it is important to show how to use the learning platform whilst already using the content that is interesting and relevant. When searching the internet for specific solutions the OWL-content can be found and used by adult educators. For saving their progress and getting further content-suggestions the participants are pointed to the possibility to register on the learning platform. With an extra "how-to"-introduction the benefits of the portal shall become clear und further questions of usability will be answered. The progress of registered learners is saved and can be seen at the dashboard where there is also the possibility to get help from an online-tutor.

4.2. Online socialization

In order to bridge between individual needs and achievements, learners have different options in using the platform. Learners on the one hand can develop on their general competences along individual learning goals or can choose a situated learning approach along their action goals. Whatever users choose, all progress and interaction will be tracked by the system for that learners can combine the different learning-strategies. Furthermore, the system combines all information in order to provide recommendations for next learning steps.

To get connected and raise awareness of the heterogeneity of the target group, a general forum allows supra-regional and multidisciplinary community-building. By different types of assessments, learners that are at the same level and interested in the same topics are connected. The assessments are designed to lead the learners directly to the content that fits best to their needs and level. By this immediate feedback the self-efficacy of learners is enhanced, furthermore, users are socialized by being sent on the same mission [13].

4.3. Information exchange

Interaction and exchange can take place in two ways: Interaction with the content and its included tasks and interaction with tutors and other learners.

The content tries to take account of individual learning styles [14]. By using different and varied types of content and tasks, it tries to utmost the probability that users can learn in their preferred learning-style.



The renunciation of content-load and dividing the content into small units called “learning objects” (input material and tasks/exercises), should make it easy for the learners to get involved and exchange.

The learning objects are arranged as learning paths. Although there is a pre-structure, learners are still able to decide whether to follow the path or to continue elsewhere. By tracking the activities, it is always possible to continue or reset an already begun learning path. By applying different degrees of difficulty, the OWL-space ensures that learners are successful according to their own prerequisites. Currently, we are facing the challenge to gain a critical mass of forum users. Without a regular and closely exchange the social effect of the forum might blow out. This means that especially in the beginning it is important to invest work to get the forum running. Learning on the same content and sometimes working on tasks collaboratively gains trust in each other.

4.4. Knowledge construction

By a huge variety of tasks that promote critical thinking, creativity and practical application, the platform builds links to personal experience. From this stage onwards, learners should be able to use the platform for their individual reasons.

The tasks vary between knowledge-building, reflecting and transfer. By this construction the learners build on their own internal representations of knowledge and are enabled to link it directly to personal experience. Therefore, the user is challenged on a balanced level by providing just the right amount of structure. Learners can choose whether to stop the session and continue somewhere else, to skip a lesson or to continue.

On their dashboard, learners can see their progress and get recommendations for next learning steps. They can see if other learners respond to their comments and task-solutions in forums. This way, a kind of social basis is constructed.

4.5. Development

At this stage, the participants' responsibility for the learning progress is strong – for their own as well as for their group. Within that level of motivation, participants know where to find what they are searching for, they are eager to continue and require less support.

Still, learners get regulated feedback about their progress, accomplished tasks and recommended next learning steps. Also, there is feedback at the end of learning paths about open and untouched content and tasks. Significant at this stage is that learners are learning independently and are using the social network within the platform to discuss learning goals and content on their own.

5. Conclusion

The Five-Stage-Model by Salmon establishes a useful framework for the OWL-space to enable learners' motivation. All the stages build on each other and accompany the user through the platform which promotes the gain of motivation. Nevertheless, it is a big challenge to apply the model in pure form on our OWL-space. Different requirements make it difficult to meet all the needs of the model due to technical, didactic or social issues. It also is challenging to find a good balance between motivational but also evaluable tasks for learners. By gaining experience during operation, the OWL-space can be improved constantly. This way, it has the chance to motivate its users best possible. Ideally this means to meet most of learners' needs, adapt individually based on learning progress and ensure learners' interaction with each other.

Acknowledgement

This work is funded by the Federal Ministry of Education and Research Germany with the funding code W142300.

References

- [1] Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. In: *American Psychologist*, 55(1), S. 68–78.
- [2] Spitzer, D. R. (1996): Motivation: The Neglected Factor in Instructional Design: In: *Educational Technology*, 5, S. 45-49
- [3] Vath, N., Hasselhorn, M. & Lürer, G. (2001): *Multimedia-Produkte für das Internet - Psychologische Gestaltungsgrundlagen*: München: Oldenbourg



- [4] Kuo, Y. C., Walker, A. E., Belland, B. R., & Schroder, K. E. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distance Learning*, 14(1), 16–39.
- [5] Hattie, J. (2009). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. Routledge, New York
- [6] Schöb, S., Sahlender, M., Brandt, P., Fischer, M., & Wintermann, O. (2015). Information und Vernetzung – Bedarfe und Erwartungen von Lehrkräften an online-gestützte Fortbildungsangebote. Retrieved from <http://www.die-bonn.de/doks/2015-erwachsenenbildner-01.pdf>
- [7] Schrader, J. „Fortbildung von Lehrenden der Erwachsenenbildung: Notwendig? Sinnvoll? Möglich?: Bedarf und Angebot im Überblick“; Schrader, J.; Hohmann, R.; Hartz, S. (Eds.) *Mediengestützte Fallarbeit. Konzepte, Erfahrungen und Befunde zur Kompetenzentwicklung von Erwachsenenbildnern*, Bielefeld, Bertelsmann, 2010, 25-68
- [8] Vath, N., Hasselhorn, M. & Lür, G. (2001): *Multimedia-Produkte für das Internet - Psychologische Gestaltungsgrundlagen*: München: Oldenbourg
- [9] Biel, C., Scholze, T., Schöb, S. & Debus, K. (2017). OWL - Open Web-Based Learning Space for Professional Development of Adult Educators. In Pixel (Hrsg.), *Conference Proceedings. The Future of Education* (S. 169–173). Padua: LibreriaUniversitaria. Retrieved from <http://conference.pixel-online.net/FOE/files/foe/ed0007/FP/3797-ENT2461-FP-FOE7.pdf>
- [10] Chan, T. S., & Ahern, T. C. (1999). Targeting motivation—Adapting flow theory to instructional design. *Journal of Educational Computing Research*, 21(2), 151–163.
- [11] Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York: Springer.
- [12] Salmon G. (2000) *E-moderating: the key to teaching and learning online* Kogan Page London. Salmon G. (2003) *E-moderating (2nd edn)* Routledge Falmer London.
- [13] Artino, A. R. (2008). Motivational beliefs and perceptions of instructional quality: Predicting satisfaction with online training. *Journal of Computer Assisted Learning*, 24(3), 260–270.
- [14] Schrader, J, (2008). *Lerntypen bei Erwachsenen: Empirische Analyse zum Lernen und Lehren in der beruflichen Weiterbildung. Analysen und Beiträge zur Aus- und Weiterbildung. 2. ergänzte Auflage*. Klinkhardt Verlag, Bad Heilbrunn.