Project no. 619347

EAGLE- EnhAnced Government LEarning

Objective ICT-2013.8.2 Technology-enhanced learning;

c) Holistic learning solutions for managing, reaching and engaging learners in the public administrations

Small-scale Collaborative Project (STREP)
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Deliverable. 4.2

Autonomous Learning Motivations and Attitudes

WP 4 - LEARNING – OER Learning for e-Enabling

(Critical Skill 2)
Lead Participant: ZAHW

Approval Panel	**Name / Partner short name**	**Department / / Function**	**Date**
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Executive Summary

As detailed in the project's Description of Work (DoW), EAGLE's main objective is to equip employees in rural local government with a holistic solution for professional development based on the use of Open Educational Resources (OER) and Open Source (OS) tools to support and foster autonomous learning at the workplace.

This document will describe the analysis of the attitudes and motivations for autonomous learning in rural municipalities derived from inputs received from the work done in the elicitation's requirement processes (WP2). This analysis outlines attitudes and motivations toward the appropriation of EAGLE solution by the target users. This information is essential for the development of the EAGLE learning concept (Task 4.4).

The basic mechanisms of attitude and motivation, which are relevant for any measures of EAGLE project success, are described. On this basis the results of the country report information in Deliverable D2.2. provided by WP2 are analysed. Not only the attitude of the learners in all levels of a municipality but also the attitude of potential OER authors and of stakeholders to autonomous learning, which are not involved personally in a specific learning process plays an important role in the change management process are considered.

In the conclusion section the considerations of a positive attitude and motivation respective to autonomous learning are described. These are aspects to be taken account of for an iterative process throughout the future projects steps, The interdependencies between the aspects of this document and the work of the other work packages are described, which involve technical, organizational and pedagogic aspects as well.

Country-specific divergences may have only minor influences on the platform but they must be considered for the sustainability of the platform and its content as well as for the change management strategies for the different countries. These aspects influence attitude and motivation indirectly.

Glossary

Attitude

The term attitude means, “a favourable or unfavourable evaluative reaction toward something or someone, exhibited in one’s beliefs, feelings, or intended behaviour[1].

Autonomous Learning

Autonomous Learning as defined for the EAGLE project covers all the learning activities needed by a professional in his or her job to obtain knowledge and skills needed to fulfil his or her tasks. The learner is autonomous in searching and choosing learning offers that are appropriate to his/her problem.

The term covers the use of well-structured classes and curricular in professional development as well as *ad hoc* activities to cover short-term information needs that resolve a newly arising problem. The contents include conceptually all sources from conventional face-to-face (f2f) courses to advanced ICT and mobile support. To be an autonomous learner the learner also needs meta information about the available appropriate contents and self-assessment means to choose the content suitable to his or her actual knowledge level and needs.

CPD

Continued Professional Development

HTP

Human Technology Performance

PCE

Professional Continuing Education

RLG

Rural local Government

Stakeholder

Stakeholder is use in the sense of IT and organizational projects: Stakeholders are at one hand, persons or groups, which are directly influenced by the outcome of a project or topic, e.g. learners or users of the platform. At the other hand stakeholders are persons or groups which can influence aims and outcome of a project or which are not directly affected but have a certain interest in the results of a project.

TEL

Technology Enhanced Learning

[1] Myers, p. 36 David G Myers (2003). Social Psychology, 7th edition. Hope College. Worth Publishers

1 Introduction

As detailed in the project's Description of Work (DoW), EAGLE's main objective is to equip employees in rural local government with a holistic solution for professional development based on the use of Open Educational Resources (OER) and Open Source (OS) tools to support and foster autonomous learning at the workplace. The use of OERs aims to provide flexible and cost-effective learning solutions to Public Administration (PA) in Rural Local Governments (RLG), supporting community based knowledge building processes.

This document will describe the analysis of the attitudes and motivations for autonomous learning in rural municipalities derived from inputs received from the work done in the elicitation's requirement processes (WP2), the aim of this analysis is to outline potential contextual and cultural elements that could affect attitudes and motivations toward the appropriation of EAGLE solution by the target users. This information is essential for the development of the EAGLE learning concept (Task 4.4).

Not only the attitude of the learners in all levels of a municipality but also the attitude of stakeholders to autonomous learning, which are not involved personally in a specific learning process plays an important role in the change management process. These stakeholders are denominated and their roles for the change management process are described.. The relation of attitudes and motivation of the learners is described and analysed based on the country report information provided by D2.2.

The mechanisms of attitude and motivation, which are relevant for any measures of EAGLE project success, are described and analysed based on the inputs from WP2. These are motivations of the learners, potential OER authors as well.

In the conclusion sectionthe key aspects of an improvement or maintaining a positive attitude and motivation respective to autonomous learning are discussed. These are the are base for a future iterative process throughout the next projects steps in which the aspects will be regarded, evaluated as far as possible and adjusted if necessary. The interdependencies between the aspects of this document and the work of the other work packages are described, which involve technical, organizational and pedagogic aspects as well.

Country-specific divergences considered as well. They may have only minor influences on the platform but they must be considered for the sustainability of the platform and its content as well as for the change management strategies for the different countries. These aspects influence attitude and motivation indirectly.

2 Clarifications of relevant fundamentals

2.1 Relationship of WP 4 tasks to the whole project

EAGLE learning system design is based on developing technology that support autonomous learning at the PA (Public Administration) context in local rural areas, using OERs. This

deliverable contributes to the understanding of contextual and cultural aspects that influence attitudes toward and motivation to learning autonomously

Fehler! Verweisquelle konnte nicht gefunden werden. shows this EAGLE iterative process using the Human Technology Performance (HTP) model, which is extensively used to support the integration of technologies developed to enhance work practice in an organization. It describes an iterative process focused in the development and implementation of particular interventions that aim to scaffold the progression of the user performance in relation to the integration of the new technology to the work practice. A deeper description on how this model is used to set the strategy of introducing EAGLE platform is described in D4.4.

The present task is related to the contextual analysis and, considering that it can not be evaluated the causal analysis of determined performance, since the platform is not yet tested by the users, the causa analysis is related with the potential reasons behind the encountered attitudes and motivations of our target users.

The present deliverable provides necessary information to contextualize the learning design developed in Task 4.4. This information is allowing educational designers to understand the context and culture in which further users of the EAGLE learning system are currently immersed. This contextualization is fundamental to setting the starting point of the iterative EAGLE implementation process and to making critical design decisions to minimize risks and optimize results.

2.2 Scope of D4.2

The Deliverable supports – of course – the objectives of the EAGLE Project. All considerations concerning attitude and motivations are restricted at those objectives[2]:

> *EAGLE's main objective is to equip employees in Rural Local Government (RLG) with a holistic training solution based on Open Educational Resources (OER) and Open Source (OS) tools, supporting learning of critical transversal skills such as ICT literacy and professional management of change situations.*

For this document an objective formulated in section 1.1.5 "Relevance to the call" is of special interest:

> *Stimulation of the take-up of learning technologies in local government: The stimulation of the take-up of learning technologies depends very much on integration of learning in general in the work process and motivation for learning. The project will tackle these challenges by developing a learning-enhanced work process for local government with the validation partners and test it with all involved local government validation and associated partners. Motivational strategies are one of the core elements of the curriculum for e-enabling.*

These objectives implicate that there will be a broad use of the new possibilities. So the acceptance of the project results by the practitioners especially in the target group of rural

[2] Proposal EnhAnced Government Learning (EAGLE) 2013 – EU **619347**

PA is a critical issue. This deliverable presents some basic considerations to resolve the interdependency between attitude and motivation at one hand and acceptance and frequency of utilization at the other. In the analysis part, the correlation between this general considerations with the results of the interviews and workshops documented in D 2.2 lead to the conclusions and recommendation for the advancement in the project.

2.3 Autonomous Learning

In anticipation of one insight in the document the term “learning” is used in the sense of “autonomous Learning” as defined for the EAGLE project. The term covers all the learning activities and teaching methods needed by a professional in their job to obtain knowledge and skills needed to fulfil their tasks. The learner is autonomous in searching and choosing learning options appropriate to his/her problem.

It covers the use of well-structured classes and curricular in professional development as well as ad hoc activities to cover short-term information need to resolve a newly arising problem. The contents include conceptually all sources from conventional f2f courses to advanced ICT and mobile support. To be an autonomous learner he or she needs also meta information about the available appropriate contents and self-assessment means to choose the content suitable to his or her actual knowledge level.

This is however only a pragmatic definition for this document and not an issue of principle.

Autonomous Learning refers to a process where individuals take the initiative in diagnosing their learning needs, formulating learning goals, identifying learning resources, choosing and implementing appropriate learning strategies, and evaluating learning outcomes [Siadaty, 2012][3]. Autonomy is not a binary state; in fact work and organizational environments could offer a great variety of autonomy levels regarding learning (from traditional professional development until informal learning based on personal enquiries).

In traditional Continued Professional Development (CPD), the learning goals and surrounded conditions are determined by the instructional design of the training provided, while in autonomous learning at the work place, there is no structure or instructions given to the learner so the learning goals and learning styles/behaviour are self-defined, based on personal motivation or interests, and it is the individual who decides when the learning goals are achieved. Today’s workplace needs employees to continually learn for themselves and progress side-by-side with the developments in their field of work, considering the high rate of change that currently occur in any knowledge field, individual self-study is not enough for being updated, so it is also required to learn to make use of their professional networks and other social channels to reach that goal.

[3] Siadaty, M., Gašević, D., Jovanović, J., Pata, K., Milikić, N., Holocher-Ertl, T., Jeremić, Z., Ali, L., Giljanović, A., Hatala, M.: Self-regulated Workplace Learning: A Pedagogical Framework and Semantic Web-based Environment. Journal of Educational Technology & Society. 15, (2012)

3 Clarifications of relevant fundamentals

3.1 Attitude in general

The term 'attitude' can be defined for the sake of the current discussion as, "a favourable or unfavourable evaluative reaction toward something or someone, exhibited in ones beliefs, feelings, or intended behaviour"[4]. A certain attitude may have its origin in a prejudice or an experience or in upbringing. It can change if the learner has new experiences. In the EAGLE project, knowing the attitude of PA servants towards new learning concepts is important. Moreover, if the attitude is indecisive or negative, it is most important to propose ways to change this attitude in a positive sense. In order to propose strategies to influence attitudes it is important to analyse their origins and the cultural and organizational elements that could have direct or indirect impact on them. Attitude can be changed, by new information, encounter and experiences but the change does not necessarily take place without a certain resistance that must be overcome[5]

A positive attitude towards a certain aspect is crucial for the acceptance of this aspect by a person. In this section the attitudinal aspects, which are important for the EAGLE Project, are discussed. A positive attitude is a precondition for a high motivation to use new learning concept as autonomous learning; it is necessary but not sufficient to be motivated to try this way of learning.

3.1.1 Learner's Attitude

From a systemic perspective, human activities are driven by an object or motive, mediated by tools and influenced by cultural and contextual elements[6]. When observing the system in which the "learning activity" is immersed, the internal relation between the different elements of the system would influence the attitude of a learner toward performing this activity[7]. In consequence, in order to understand learner's attitude, the object of the learning activity and its relation with the other elements of the system should be analysed. Part of the elements of the activity system is the learning culture, which is directly related with the epistemology historically constructed in the society or community where the learner is learning. Autonomous learning is related with a high level of epistemic agency, which demands metacognitive processes from the learner's side. Being surrounded by a culture that doesn't support high demand of complex cognitive processes could probably lead to alienation or a lack of motivation to engage in the endeavour.

The different activities listed below reflect different understandings of 'learning at the work place' associated to learning practices known by the target users. The term 'autonomous learning' is unfamiliar for the EAGLE stakeholders, hence these activities or 'terms', and its

[4] Myers, p. 36 David G Myers (2003). Social Psychology, 7th edition. Hope College. Worth Publishers
[5] Eagly, Alice, Chaiken Shelly; The psychology of attitudes, Chapter 12, Wadsworth 1993.
[6] Engeström, Y.: Activity theory as a framework for analyzing and redesigning work. Ergonomics. 43, 960–974 (2000)
[7] Elements of the system: Subject, mediation tools, object, rules or culture, community involved in the activity and division of labor. (Engeström, Yrjö. "Learning by Expanding: An Activity-Theoretical Approach to Developmental Research," 1987. http://philpapers.org/rec/ENGLBE.

emotional meaning, are what produces attitudes while talking about autonomous learning. (The list is a short form interpretation of the findings stated in D 2.2):

- Learning in general,
- e-Learning,
- Learning “on the job”/”just in time”
- knowledge management with and without ICT support,
- knowledge sharing,
- community building and discussion
- preparing and providing learning content; i.e. there are
  - long-term planned courses and curricula,
  - mid-term planned learning activities caused by changes which become effective at a well known date at a mid or long term time scale
  - short-term *ad hoc* learning needs caused by different effects such as unusual case constellation, lack of experience of the case handler or short term amendments by superior agencies

We should note for later that performance support systems confuse and erode the need and nature of autonomous learning

As all these activities are relevant to the implementation of autonomous learning a positive attitude to all this topics would be optimal. In many constellations of RLG this does not apply to reality. So the challenge is to find a way to change the sceptic or negative attitude to the diverse objects of learning to an at least neutral attitude that does not obstruct the acceptance of autonomous learning in total.

3.1.2 Attitude of stakeholders

The term stakeholder is used in the sense of IT and organizational projects: Stakeholders are on the one hand, persons or groups, which are directly influenced by the outcome of a project or topic. On the other hand, stakeholders are persons or groups which can influence aims and outcome of a project or which are not directly affected but have a certain interest in the results of a project. Besides the stakeholders who are directly involved in the use of an EAGLE platform as learners there are others which are important for change processes and deployment of autonomous learning in the PA, especially for the target group of the project. The attitude of those stakeholders towards autonomous learning, which are not directly involved in the learning process, plays a crucial role in the change management process.

These stakeholders are denominated and their attitude is described or assessed as far as practicable. Their role for the change management process is described. Some considerations to get a positive attitude from these groups are described.

Those stakeholders are:

- municipal politicians, top-level managers of municipalities; they decide mainly about the advanced training resources (available time and budget), and about policy and priorities; they also influence the degree of “non monetary” acknowledgement of learning activities.

- top level managers of regulatory authorities and politicians commanding this level of PA; they influences curricula and rules of monetary incentives
- managers of content and (potential) platform providers (public and commercial); they influence the coverage, the quality and the price of learning offers.
- Persons responsible for infrastructure and norms of technology usage (e.g. firewalls, social media access, clouds, bring-your-own-device (BYOD))

They all influence decisions concerning the change and the motivation situation of the learners. Municipal managers may have two roles: At one hand they make decisions about learning, at the other they can be learners themselves. So experiences in one role affect the attitude in both.

From the results of the workshops and from interviews, a complete view of their attitudes cannot be deduced for this would exceed the scope of the project. Nevertheless several persons of the quoted stakeholder groups were involved in the discussion process. So in this section at least an overview of this subject area can be generated and this is helpful to develop steps in the change process in WP 3.

3.2 Some basics concerning motivation

Motivation is the dominant term with the learner whose attitude at the start of involvement in autonomous learning is considered as an important factor, which influences motivation[8]. The attitude of potential OER external contributors is to consider as well. An important topic is: how to change the attitude of sceptical potential participants, contributors and authors respectively or to reinforce an existing positive attitude.

A person who has a positive attitude towards learning nevertheless may have negative expectations concerning ICT support of the learning needs. It is not relevant if the concerns are valid; what is critical is just the opinion of the person concerned. In such a case even this person will not even use a very good learning environment. Only a change of his/her personal attitude or – to a minor extent – external "pressure" can change this situation. Especially with the attitude versus ICT supported learning anxieties may play an important role.

Following Wlodkowski[9] there is a list of a few natural human characteristics that might influence our motivation to learn in general:

- *Humans are curious and creative.*
- *Humans initiate thought and behaviour.*
- *Humans make meaning from experience.*
- *Humans have a desire to be successful.*
- *Humans are goal oriented.*
- *Humans have a need to control.*

[8] Merriam, Sharan B.; Bierema, Laura L.; Adult learning: linking theory and practice, p. 151; San Francisco, 2014, First edition

[9] http://userpages.umbc.edu/~koconne1/605TheAdultLearner/index.htm Wlodkowski R.J., Adults in modern society are on a lifelong educational journey (24.10.14) numerous references

- *Humans strive for enjoyment.*

This list of course represents generalisation; culture and socialisation might amplify, modify or attenuate the items listed.

Perhaps these characteristics constitute 'personality' or aspects of personality. They may or may not be innate but they are certainly mediated by experience and by culture, both national, regional and ethnic culture at a large scale and local, organisational, professional and domestic culture at a small scale.

Whereas these reasons for motivation are generally valid, the amount of the particular reason in detail may differ depending on the cultural background of an individual.

For the motivation of adults there are some special aspects to be observed:

> *However, since an adult's energy is finite (Galbraith, 2005), when our basic needs to survive require all of a person's energy, there is no effort remaining to be creative. A child's curiosity is "like a constant beam that highlights and invests with interest anything within range … To remain creative, even in our senior years, we need to try to be fascinated with the unknown. Because there are so many unknowns in life, doing so will allow our fascination to become endless.*[10]

The list contains some aspects, which can be influenced externally. Others are intrinsic and established in the very individual characteristics and history of a person. They can hardly be influenced externally.

For the EAGLE project a distinction between the motivation situation before learning and the motivation during the learning process can be made. The decision to participate in autonomous learning depends on intrinsic motivation – an important part of it is the attitude towards autonomous learning. The motivation to stay with autonomous learning depends strongly on the experience during learning. The role of motivation in self-regulated learning and its significance in professional development or learning at the workplace is also to consider in detail. As already described in the section 2.3, motivation plays a crucial role in the goal settings process. Goal setting triggers SRL processes, thus understanding the process of learning goals formation at work is essential for the design of autonomous learning environments (Margaryan, 2013). What motivates an employee to learn autonomously at the workplace, it is not necessarily the same that motivates them to attend to a training course that leads to a certain certification level. Self-regulated learners generate their learning needs based on the requirements of a work-related responsibilities or their perception of a professional development path (Margaryan, 2013); they may just be driven by curiosity.

In small organizations such as PA in RLG, the opportunity for professional development are scarce and the possibilities to develop a career are limited (DoW – pre-study results), obtaining certifications does not necessarily have repercussions in the work situation; moreover, the work situation has no ways of being modified from bottom-up perspective. In this case, other factors could encourage PA employees to learn autonomously, such as

[10] A.a.O. Wlodkowski R.J

improving their own working conditions by resolving specific work related problems or resolving a personal inquiry that could give them recognition in a small municipality where they belong to. Under these conditions, the recognition system plays an important role in motivation for learning. Beside of the formal organizational recognition systems exist hidden cultures, which recognise different attributes based on personal experiences exchange. In the cases of PA in RLG, this internal recognition system that operated beside of the formal organizational one, could be a very important motivational factor, in terms of receiving direct and clear rewards from close colleagues. This internal cultural elements need to be carefully analysed.

Summarizing, the relevance of the social context increases when it comes to analysing motivational factors, since it has a high impact in defining and evaluating learning goals, adapting one's strategies to social/organizational norms and receiving incentives or experiencing inhibitors from the communities the learner belongs to[11]. Furthermore, SRL is highly context dependent and the unique features of a learning environment can influence whether or not a learner enacts SRL practices (Boeckaerts & Cascallar, 2006; Whipp & Chiarelli, 2005; cited by Siadaty et al, 2012).

The effect of the inclusion of mobile learning in EAGLE may lead to a more positive or complex attitude with "digital natives[12]" or "digital residents[13]" but these are fluid and fragmented concepts not uniform, stable or monolithic ones. This will happen only if the opportunities of the medium are used in an adequate manner. For techno-sceptic PA members, perhaps the so-called "digital visitors" or "digital immigrants", on the other hand the offer of extra mobile possibilities may lead to the impression of an excess supply or confusing abundance. Of course techno-sceptic, digital immigrants and digital visitors are also fluid and fragmentary concepts and perhaps this makes the case for inclusive design - everyone is different, everyone changes.

The relationships between attitude, motivation and the desired learning success are outlined. In Figure 1

[11] Siadaty, M., Gašević, D., Jovanović, J., Pata, K., Milikić, N., Holocher-Ertl, T., Jeremić, Z., Ali, L., Giljanović, A., Hatala, M.: Self-regulated Workplace Learning: A Pedagogical Framework and Semantic Web-based Environment. Journal of Educational Technology & Society. 15, (2012)

[12] Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6.

[13] White, D. S., & Le Cornu, A. (2011). Visitors and Residents: A new typology for online engagement. First Monday, 16(9).

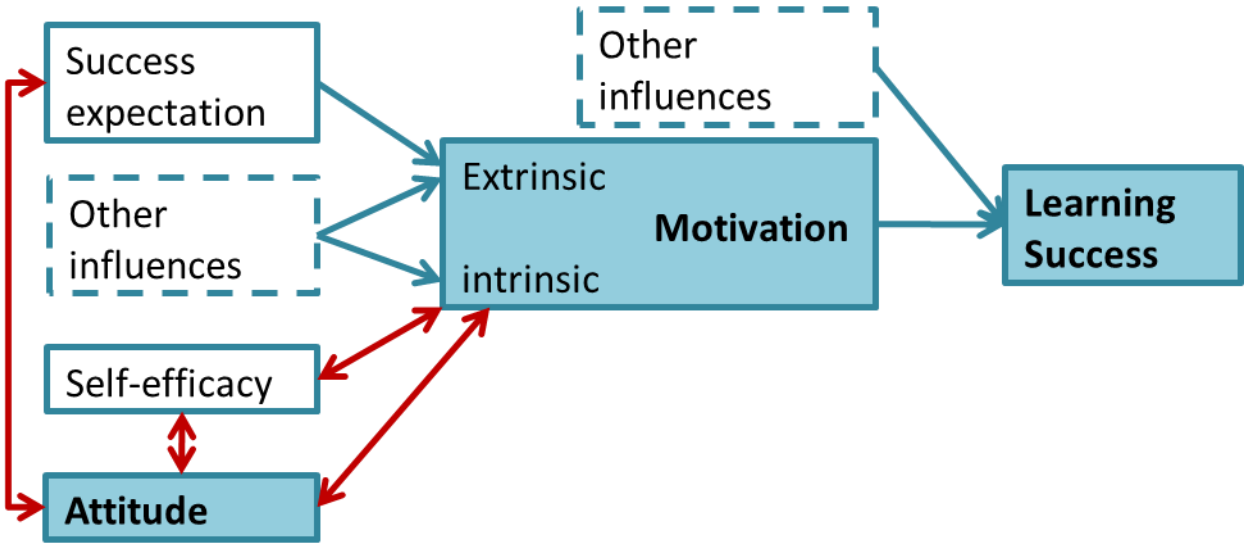

FIGURE 1 SKETCH OF RELATIONS BETWEEN ATTITUDE AND MOTIVATION

3.2.1 Intrinsic Learning Motivation

A pragmatic definition or explanation of intrinsic motivation for the EAGLE project is:

> *"Intrinsic motivation is associated with curiosity, exploration, spontaneity, and interest …" [Müller 2004]*

From this definition it is obvious that the initial intrinsic motivation of the learners can be influenced by the project only to a very small extent or not at all, except perhaps insofar as it arouses curiosity or interest. Consequently the intrinsic motivation of the individual learner primarily may be a given fact for the project. Positive attitude is an essential component of the intrinsic motivation[14]. To change attitude is consequently a single factor of intrinsic motivation that can be influenced. Self-efficacy is another component of intrinsic motivation, too[15]. As "perceived self-efficacy is defined people's judgement of their [own] capabilities to organize and execute courses of action required to attain designated types of performance"[16] it influences indirectly the attitude towards the methods of learning and vice versa. The strategy to deal with this is to accept, that not all PA employees have a high motivation to learn and to learn with ICT support particularly. The project has to deal with a very heterogeneous target group concerning intrinsic motivation. The solution could be to address only the learners with a good intrinsic motivation and to create together with them good examples with an evident practical benefit. With those examples available together with extrinsic motivational aspects discussed below another part of the target group can be induced to get an attitude positive enough to make a trial themselves. Then success feelings can result in a changed attitude with a motivation to use autonomous learning further in practice.

[14] Merriam, Sharan B.; Bierema, Laura L.; Adult learning : linking theory and practice; San Francisco, 2014, First edition
[15] Schoor, Cornelia; Die Bedeutung von Motivation für Wissenserwerbsprozesse beim computerunterstützten kooperativen Lernen Berlin 2010
[16] Banura 1986 cited after FN 15

The percentage of the target group that can be motivated has to be evaluated in the course of the project. This is however only a gross numerical metric. At the current state no experience and no intention to perform autonomous learning is available as up to now in the RLGs the project has contact.

3.2.2 Extrinsic Learning Motivation

> *"… extrinsic motivation is associated with undertaken to attain an end state that is separate from the actual behaviour…determined by some external contingency such as good marks or the avoidance of negative consequences." [Müller 2004]*
>
> *The extrinsic motive is the external motive that is beyond the relation of the learner to the subject matter; but it affects the learning motivation in a causing or amplifying manner. Learners which are extrinsically motivated are learning to receive grades, praise or prestige. In addition you can separate this type of motive in tangible/material and social motives. Tangible motives are reward and penalization. They emerge by defining aims corresponding with the abilities of the learner. Each learning success is again a tangible motivation, motivating to go on with learning. If motivation emanates from others it is called social motives e.g. competition and communal spirit/team spirit. In this case motivation can emanate by solving problems together with other learners. (author's own translation from the German original)."*[17]

Reinforcing factors within the scope of the project can be e.g. quick-easy-win examples, positive witnesses of known colleagues or reward mechanisms newly introduced in the change management process. Social technologies can provide established mechanisms to enhance social awards/recognition such as the budges systems, reviews, 'likes', etc.

3.2.3 Special Motivation Aspects concerning OER

The basic considerations outlined in sections 3.1 and 3.2.1 to 3.2.2 can be applied to the topics of OER as well.

If learners are actively involved in the content generation then this is increasing their motivation: Contribution to OER gives social acknowledgement – this enhances the extrinsic motivation as well as the learning success. The involvement in a community also gives a better attitude towards the quality and trustworthiness of OER.

Besides the positive motivation effects from embedding the learner in a community there are further aspects in respect to motivate contributions:

Another motivation to contribute for members of the municipalities is not only social acknowledgment as mentioned above – though there is also a negative version of this - but also a monetary incentive or enhancement or an easing of his/her daily work could be an option if the total savings for CPD exceed the cost for incentives of this kinds. This may demand an allocation of costs for this kind of incentives to a superior authority or to all participating

[17] [werner werner stangl]s arbeitsblätter - Lernmotive und Lernmotivation
http://arbeitsblaetter.stangl-taller.at/MOTIVATION/Lernmotivation.shtml

municipalities, as it cannot be ensured that there is an overall balance of contributions and benefits for every participating municipality.

Professional authors – external of the municipalities in question - may contribute if they can expect to generate follow-up business. They can be paid for the contribution too; from the point of view of the learner is no difference to OER if the use is free for him or her. It is also a way to link the established learning content providers to the new ways of autonomous learning. WP8 will develop business strategies in further stages of the project.

3.2.4 The Motivational Factors Associated with Mobiles

This aspect of motivation, the aspect related to how mobiles might deliver and support learning with EAGLE, embraces a very broad range of experiences, expectations and perceptions, very different from the comparatively stable and homogeneous ones associated with computers that have evolved over the last 30 years. It is evolving rapidly and empirical methods are now developing quickly. There is clearly some legacy of experiences, expectations and perceptions around mobiles that was shaped amongst some older people by their encounters with computers. Increasingly however people no longer have that legacy from computers and instead their expectations of digital technology are shaped by their experiences of mobiles. The digital native and digital residents are not actually even living in the cyberspace of computers but the phonespace[18] of mobiles.

When we look specifically at work-related learning other extra factors come into play. Some of these are obvious, for example cost and the perceptions of costs, but others are subtler. Mobiles reconfigure the borders between public space and private space, not just physical space but any other spaces people inhabit. On the one hand, mobile technology enables or coerces people into work at home or on vacation, whilst on the other hand it enables them to enjoy their own music and their own social contact whilst working. The point here is to ask where does learning fit into these spaces. Is the learning a compulsory or necessary part of the public space or does it takes place driven by curiosity in the private space? EAGLE is a space and this question is important; it is something defined by being inhabited by people and what they do there.

The mobile spaces that people inhabit through their mobiles (phonespace) do however differ from the more stable spaces that they access through computers (cyberspace) – phonespace is lightweight, braided, opportunistic, spontaneous, woven into 'real-life' rather than separate and distinct from it - and so the nature of their attitudes differs too, though neither are decoupled and independent of their time, context and cultural baggage.

[18] Townsend, A. M. (2000). Life in the real-time city: Mobile telephones and urban metabolism. Journal of urban technology, 7(2), 85-104.

4 Results of Workshops and Interviews

4.1 Scope of the considerations with workshop and interview results for D4.2

In this section the specific demand of small rural municipalities must be outlined. The situation met there is gradually different from that in larger municipalities and superior PA agencies:

- Small municipalities are often distant from the places where face-to-face (f2f) learning offers are provided.
- In these municipalities are no units specialized on a single task of a cross-sectional character. Those tasks are to handle together with other operational tasks. This low degree of specialization inhibits the development of local strategic solutions. Moreover the parallelism of the problems in many similar small rural municipalities suggests cooperation within a larger group of municipalities with a similar structure.
- Many tasks are done by a single person each; so the discussion of an arising problem cannot be discussed internally with other experienced colleagues.
- From this reason, a substitution of a person who is the only one experienced with a certain task for an absence is difficult. This is another reason that complicates the participation on f2f offers for advanced education.
- The limits of the ICT infrastructure in RLG are often narrower than in a large PA – concerning technical equipment as well as user support.

4.2 Results for all countries

The findings are based on the information provided by Deliverable No. 2.2.A. from the interviews and workshops in rural municipalities. For this deliverable these findings has been evaluated in special regard to attitude and motivation by learners and the executives responsible for human resources and continuous staff education.

The most prominent barrier identified there is the absence of experience and knowledge about Technology Enhanced Learning (TEL) in all participating countries:

> "*Another barrier of high priority across countries is the lack of awareness and low understanding of the meaning and scope of TEL [1.2.]. Having no or a particularly diverging idea of the meaning, the scope, potential benefits of the EAGLE project, or e-Learning and OER more generally, is likely to raise misunderstanding and fail to engage and motivate stakeholder to take part.*"[19]

A consequence of this absence is an uncertainty concerning the positive or negative consequences of using TEL.. The degree of scepticism or even rejection depends mainly from the individual personality characteristics. As pointed out in section 3.1 and **Fehler! Verweisquelle konnte nicht gefunden werden.** the change of an existing attitude is not easy. Consequently the improvement of the knowledge about and a build-up new experiences with TEL is a potential way to create new perceptions the relation between learning and technologies..

[19] Deliverable No. 2.2.A.; p. 19; based on the barrier analysis

A further prominent reason for scepticism is the doubt about the quality level and its transparency of the learning material. This applies especially to uses of OERs and it is related with the association of the term e-learning with formal structures of training courses or programs. .

Besides these reasons quoted above, caused by the absence of a sufficient knowledge about different TEL approaches and possibilities, a considerable part of the participating persons expressed a negative attitude to e-learning (as they understand it) due to negative previous experiences, as reported in the barrier analysis in Deliverable D2.2A[20]

It is however to remember that TEL and the responses and reactions to it are essentially conservative, based on computer-based experiences defined within a specific educational context, and may tell us little about attitudes to activities that are conceived of as 'educational' on technologies other than computers. (see below in the paragraph "Existing positive to neutral attitudes".)

Negative attitudes due to experiences and prejudices.

- Rejection of creating OERs if they are an extra burden at work
- Rejection to learn at home or in leisure time or spaces
- Fear of been drowned by mass of information
- Preference for traditional learning scenarios e.g. structured, time and space limited, limited and specific learning material given
- Fear of getting bad reputation when "learning at the workplace". (Learning is not working)
- E-learning is not perceived as substitution of training offers.
- no positive expectations to e-learning in form of courses or modules
- face-to-face learning is definitively preferred versus e-Learning because lack of personal contact and feedback with the trainer and the group attending the course together, is supposed (social dimension).
- Rejection of new technologies because perception of lack of time to learn it and get along with it. Of course perceptions may differ when considering different approach to learning with technologies as for example learning to use Facebook vs, learning to use Moodle.

Negative attitudes due to perceived organizational or cultural deficiencies:

- Associated to daily routine:
  - Demand for policy that regulates learning environment to make it compatible with daily routine
  - Low acceptance of e-learning at workplace within daily routine
  - E-learning is perceived as not compatible with daily routine
  - Using technology for learning at working hours is perceived as disrupting or interfering daily routines and vice versa
- Associated to benefits:
  - Idea of availability of educational material (isolated from a training course) is not recognized as training material
  - No examples informing about the benefits
  - No knowledge about advanced methods of autonomous learning and its benefits

[20] Deliverable No. 2.2.A.; p. 17-27; based on the Barrier Framework description p. 127 f.

- Associated to provisions
    - Believing that for the relevant topics a personal contact is indispensable [Service Provision]
    - Many learning content providers make no or inadequate offers for ICT supported learning in any form
    - Inadequate offers with conventional content offers
    - insecure content quality of OER content
- Others:
    - Own contributions to OER contents are hardly imaginable
    - Concerns that EAGLE won't be aligned with the organizational national training offer.
    - Lack of time for advanced professional education
    - It is perceived low level of organizational management in relation with training courses.
    - Budget is often small and covers only the indispensable needs

Existing positive to neutral attitudes

- Shown motivation to enhance knowledge and attend advanced professional education in general.
- The attitude versus social (closed) platforms with a limited number of (known) persons is good.
- In spite of the scepticism described above, there is a diffuse hope that the use of new methods could eliminate some weak points in the existing practice of advanced professional education

Aspects associated with (e)learning

- Learning is a time and space limited activity
- Learning needs a specific physical space to be done
- Tendency to decrease interest in continuous education and eLearning as the age increase
- E-learning is treated as it is would be a digital version of training system
- learning for problem solving face-to-face communication is perceived as a fast way to find solutions when asking to 'friends' (it is not clear if the word 'friends' was used by the participants or it was product of a second level of interpretation).
- Boundaries between learning processes and knowledge management processes are fuzzy.
- There are informal learning processes that are so tightly embedded in daily routine that they are even not apprehended as learning experiences or knowledge management process by learners and management.
    - Though these should perhaps be reconsidered in the contexts of both 'mobile learning' and 'wildfire learning' as opposed (e)learning

Aspects associated to Motivation:

- Training courses are not recognized as relevant for their professional advancement
- Some of the training courses are perceived by a fraction of the participants as with low practicality or even with low quality

- Lack of recognition and/or feedback of effort enhancing knowledge
- Lack of rewards or only minor rewards (monetary, social acknowledgment, career)
- Bad experiences within the current training system produce lack of motivation to experiment with a digital version of it.
- Lack of knowledge about TEL possibilities or options is associated to low motivation to explore digital options for learning.

The motivation to learn using institutional or personal mobile devices must be deeply explored in further stages of the project. Up to now the participants had no experience in the field of CPD using mobile learning.

Additional aspects for other stakeholders; especially decision makers
(the situation in total is similar to that one of the learners):

- Stakeholders' attitude towards e-learning is not very positive as well if they are asked for concrete fields of application in PA
- Stakeholders are sceptic in regard to a positive cost-benefit relation of TEL
- Stakeholders are not very willing to provide resources for autonomous learning.
- An advanced education strategy is missing or rudimentary in most cases. But the management mostly does not consider this as an insufficient situation.

Besides these explicit findings derived from D 2.2A there are others more implicit findings, which need to be interpreted and explained in some detail:

A certain number of staff members have an intrinsic motivation to look for new ways. Moreover a certain level of suffering often exists due to the deficits of the actual situation for CPD. So there should be a sufficient number of persons motivated and able to participate at an evaluation of content and user interface of an autonomous platform. An essential prerequisite to motivate them to participate is to overcome the widespread negative attitude towards e-learning as they understand it. A clarification of autonomous learning and its benefit as EAGLE understands it is required but not sufficient. The information must be consolidated by an example that is obviously useful for their own practice. This is necessary because the negative attitude seems to be rather firmly fixed with the staff in question. A throughout analysis of the reasons behind the current attributes and motivations will allow to set a clear picture of the current state, and design strategies to build the necessary bridges to allow the transition between the current state and the future practices (holistic solutions) proposed by EAGLE.

The inclusion of mobile solutions cannot be evaluated in detail because there are no experiences with any mobile applications in the great majority of the participating municipalities. The impact of those offers should be evaluated later in the project. (There is presumably experience of using applications and services for both the purposive and the spontaneous creating, seeking and sharing ideas, information, images and opinions using mobiles.) There is however to be expected an increasing engagement with mobile technologies by municipalities, for example performance supports amongst a dispersed workforce and improved transparency and service delivery to the community. This may be leading to a stumbling increase in awareness but driven partly by recognition by the municipalities of the

pressure to be more credible and authentic in a world increasingly changed by mobility and connection. However this expectable progression is likely to reach small municipalities last in PA. There is evidence in the UK for larger PA developing mobile apps and mobile services to increase awareness, efficiency and transparency in their work but this work is currently fragmentary and not coherent or consistent across the sector.

Another aspect is mentioned only indirectly between the lines: The sustainability of the offered platform. Even a person with a good intrinsic motivation has to invest some time to learn the handling of the platform and its affordances. If there is an obvious risk that the platform is only “a flash in the pan” a person will not make this personal investment. In the discussion of the rarely existing own e-learning experiences this “non-strategy” to make a project and to leave it alone and so drying it out when the project time is over was a clear point of critics.

Finally it is not easy to evaluate a negative attitude towards a topic that has a widespread positive connotation like e-learning. People usually don’t like to be an “odd man out”. In such a case negative attitudes are expressed only very cautiously. This had to be observed with the interpretations of any workshop and interview results.

4.3 Country-specific divergences

The differences between the countries are explained by legal and organizational reasons as well as by cultural and historical ones. Also a number of the organisations involved play different roles.

Legal and organizational reasons are responsible for a different spectrum of tasks to be performed by small rural communities. This makes an impact on the content needed, but not necessarily on the structural requirements of the platform and the attitude situation. These objectifiable differences can be represented and covered in the system.

The degree of independency from superior instances seems to be different too, including organization and budgeting of advanced education training offers. This has an impact on providing the operation and the maintenance of content and technique of the platform in the long run.

The direct influences of cultural and historical differences however are more difficult to pin down. However such cultural and historical reasons resulting in differing conditions for the recruitment of the PA staff and different levels of infrastructure are objectifiable too. The requirements concerning the degree of specialization in the vocational preparation result also in different needs for the scope, depth, presentation of content and the time scale of needs. Consequently the relevance of advanced education and its impact on the career varies also. This leads to gradual differences in the extrinsic motivation situation. This is especially related to the degree of recognition or non-recognition that is earned respective to autonomous learning of any kind in out of office hours.

Finally from historical and economic reasons the differences in the available infrastructure and the degree of ICT support may influence the actual application possibilities of some of the available contents.

All these differences may result in different content needs or in the intensity of the platform use. But none of them severely influences the general conclusions concerning attitude and motivation derived from the results discussed in section 3. It may however affect the degree of attention that is to pay for some parts of the change management strategies for the different countries.

In summary the country-specific divergences may have only minor influences on the technical platform. The kind and extend of the needed content may vary, but the platform is able to offer the total extent to cover all the different needs. However the differences are to consider for the sustainability of the platform and its content as well as for the change management strategies for the different countries.

In additional to the above considerations exist some practical differences:

In Luxembourg and Montenegro the total number of the municipalities within the target group involved is rather small. So word-of-mouth recommendations have a high coverage with a high credibility. So experiences – positives as well as negatives – of the participants of the EAGLE project may have a big impact on the overall attitude of the municipal servants. In Germany the number of municipalities is much larger. The effect of word-of-mouth recommendations is much more limited; even in a typical federal state with rural municipalities the amount is several hundred municipalities per state. From this point of view the situation in Ireland is similar to that in a federal state of Germany. Regarding only the participating municipalities, in Germany the influence of word-of-mouth should be also lowest because the participants are located in several small clusters in several federal states with large distances between the clusters.

Also in Luxembourg and Montenegro, the influence of the central government seems to be strongest. This results in a national concept for advanced professional education. In Montenegro TEL is not established. In Luxembourg are some aspects incorporated. In contrast, in Germany nor the federal government nor the federal state governments have much influence on the municipalities. This complicates common activities and their funding.

In Montenegro the expectations on IT supported methods concerning a better supply with advanced professional education are highest in spite (or because) of missing knowledge about the concept. This should be due to the very low available budget for this purpose at the moment. This should influence the attitude in a positive way, but it also comprises a high risk of disappointment if the high expectations that are not backed up by own information are not fulfilled.

4.4 Attitudinal and motivational analysis based on CHAT

As it was mentioned in the sections 3.1 and **Fehler! Verweisquelle konnte nicht gefunden werden.**, attitudes and motivations related with autonomous learning are very much influenced by the culture where the learner is immersed. Cultural-Historical Activity Theory (CHAT) describes the elements that comprise any human activity, which could be ‘learning’. In the case of EAGLE, this approach is used to explore in more depth the influences behind the users’ attitudes and motivations above described.

4.4.1 Brief introduction to CHAT

CHAT is not a predictive theory but more a descriptive framework, which builds a bridge between the individual and the social components of an activity, giving account of the complexity of real life activities. The activity system is the primary unit of analysis; it means that it is always conformed by a community of multiple perspectives, traditions and interests. Activities have always an implicit historical process of meaning making, which take shape and get transformed over periods of time. Based on CHAT, these transformations depend on internal disturbances called 'contradictions', which are the main source of change and development of the activity, since they can lead to the reconceptualization of the object and this lead to open up radically wider horizons (Nygård 2010).. In EAGLE project, the detection of internal contradictions in the learning activity system of PA in RLG could allow to support a sustainable transformation of the learning at workplace activity.

The system consist of an *individual or a group* that perform a human activity driven by an *object or motive. Mediating artefacts are used* In order to reach this object, either external (from a hammer or a computer) or internal ones (languages, concepts, ideas). The individual or group is confronted with culture and conditions conformed by *rules* that govern the *community* and the *division of labour among* the members of this community. These theory is explained by these six elements depicted by Engeström (1987):

- Subject: who perform the activity (individual, group, community, etc)
- Object/Motive: the motive that drive the activity
- Mediating artefacts: any artefact, object, concept, idea or tool that mediates the activity
- Rules: the written and non written rules that configures the culture where the activity is performed
- Community: the ones that are related with the activity
- Division of Labour: how is the division of work during the activity among the community members.

The relation between these elements Is shown in the Figure 3.

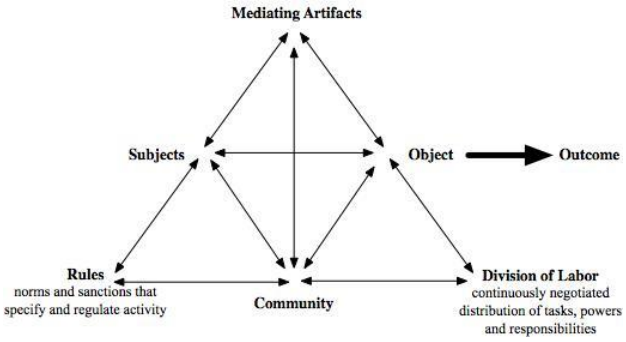

FIGURE 2 ENGESTRÖM'S CULTURAL-HISTORIC ACTIVITY THEORY (CHAT).

4.4.2 CHAT in EAGLE

In EAGLE project CHAT offers a possibility to have a better understanding of what influences the attitudes and motivations listed in the previous section. The aggregated

section of D2.2 was analysed to get a first sketch of the activity system of the participants and its internal contradictions. As a result some assumptions were arising, which will be validated in further iterations.

Because the term “autonomous learning” was not familiar to the target users and barely used, the analysis done using CHAT, was aiming to understand the “learning at the workplace activity” system.

Because the term “learning at the workplace” was also not extensively used in the information provided by D2.2. Attitudes and comment specifically associated to “learning at the workplace” where given when the term was specially addressed by the interviewers and moderators, while the rest of the time the information is addressing the term “learning” used interchangeably with “training” by the participants. This led us to the following assumption:

> Assumption 1: the term “learning at the workplace” is understood by the target users as the learning activity specifically performed at the physical work space where the participants perform the primarily work activity, where learning and training are indistinctively used.

The results of this analysis are shown in the Table 1.

TABLE 1 CHAT ANALYSIS FOR "LEARNING” ACTIVITY SYSTEM

Subject	Individual
Object	Acquire/Increase professional knowledge so that to find direct solutions for problems at work
Mediating artefacts	Face-to-face communication (language) Conventional organizational training offers Educational material provided by training providers Trustable and reliable information Preconception of “learning at the workplace” (It is not clear if the educational material was available in printed or digital versions)
Rules	It is a time and place restricted activity It is topic oriented. It is a consumption process. The learning material must be easy and fast to be consumed. Face-to-face communication is trustable (digital communication is not trusted) Individual process When learning at work place is taken It is not well valued Is a guided and structured process
Community	Trustable people Topic experts recognized within the organization Ministries/managers

	Training providers
Division of labour	Central ministries provide options when demand reaches critical mass. There is a clear distinction between training providers and learners. Trainers posses the knowledge, learners receive it. Someone different than the individual decide the training to be attended. (It seems the way how training courses are arriving to the PA in rural areas depends on each country and even on each municipality, but it seems also clear that it is not a decision made by the learner)

From the content of the previous table, in the Figure 3 is depicted a first sketch of the current activity system of EAGLE users, based on the aggregated information provided by D2.2, including its internal contradictions: (a), (b) and (c).

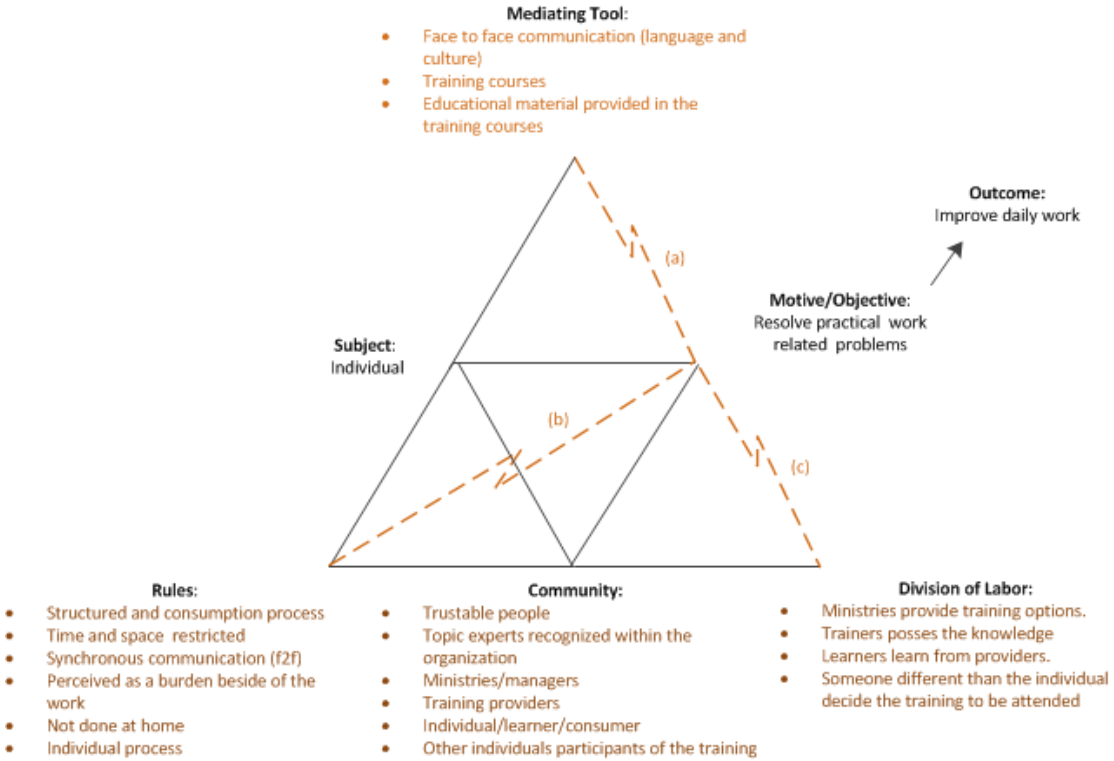

FIGURE 3 LEARNING ACTIVITY SYSTEM OF EAGLE TARGET AND ITS INTERNAL CONTRADICTION

This initial sketch of the learning activity system brings some potential explanations for some attitudes and motivations previously listed presented. One of the more evident results is that learning is described as an individualistic activity, ideas about social learning or community of practices where missing in the information processed. It is highly recommendable to include them in further interactions with the EAGLE users.

In relation to the community that participates in the activity it was observed that the only learner present in the community described is the one who perform the learning activity,

there are no other learners participating. This is consistent with the individualistic description of learning as activity. In combination with the rules and the division of labour described in the system, it arises another assumption:

> Assumption 2: learning is conceived from a knowledge-consumption perspective, where the learner is not responsible of setting goals, creating knowledge or discussing learning, but of receiving it in an structured course like format

From this assumption many attitudes and motivations are explained, the epistemology of knowledge consumption demands the presence of experts who are responsible for the quality of the instruction and learning material, hereby the concerns about quality of OERs and the demand of having mechanisms that ensures their quality, referring to external 'experts' matters. Learning is instruction based and there is a superior entity that defines professional development options and opportunities.

Looking at cultural aspects as "time and space restricted" and "structured and consumption process", together with the mediating artefacts described by the participants and the interchangeably use of the terms 'training' and 'learning', it is possible to arrive to the third assumption:

> Assumption 3: As the learning at the workplace process is associated to 'instruction', designed and delivered by experts, in formal face-to-face settings,the success of the learning process is responsibility of the one who delivers the instruction.

From the assumption 3 can be explained, the demand for providing a space for learning, located at the work place; as well as the negative attitude in front of the idea of 'learning at home'. It should be introduced alternative conceptions of learning such as mobile and social learning, to explore their attitudes. The assumption 3 also could explain why the learning at the workspace activity is perceived as an extra work burden. It creates the contradiction (a) between the object of resolving work related problems and the need of devoting time to an individualistic instruction, generally not directly related with the addressed problem.

The system shows three interrelated contradictions in the system: (a) between the object and the mediating atrifacts, (b) between the object and the rules of the community where the users are immerse and (c) between the object and the division of labor within the community during the activity. All the contradictions are related to the object of the system, because this object is the one provided by the individual who perform the activity, while the other three elements are part of an organizational culture that dismisses the individual object in the way the learning is conceived (culture), the tools used to mediate it and how is decided who learn what and when (division of labour). This contradiction could explain why, even when the conception of learning concord with the organizational structure for learning, there is a negative attitude in front of how effective is considered the organizational learning offers. It would explain that regardless the learning offer, the motives for learning generated by the individual, associated to resolving daily work problems in an immediate way, are not covered by the current activity system. These contradictions present a great opportunity for change and development. Having impact in the community and division of labour so that the contradictions with the object can be resolved and could generate transformations in the learning at the work place culture (rules).

Any scepticism in regard to try new technologies for learning could be also explained by these contradictions, since in the information analysed was clearly stated that using technology for learning is clearly seen as technology supporting current learning practices - training. In the document D2.2, it is evidenced that other uses of technology, as the use of social media systems or tools, was not considered part of learning at the workplace practices. For example, in the case of Ireland, where the offer of social media tools is higher than in other participant countries, it was anyway expressed the need for having someone who maintain the information updated in forums and wikis (It also can be explained by the assumptions 2 and 3). Consequently, the translation of the current training system into an 'e-learning format' does not change the rather negative perception of the current training system benefits.

> Assumption 4: CHAT has been widely used in e-learning research and especially in the mobile learning research that grew out of the expectations, aspirations and frustrations within the e-learning research community. It addresses learning as understood and defined within that community and that paradigm. A rather different theoretical perspective would come from research into the universal, social and personal use of mobile devices, and the ways in which they redefine the epistemological bases of learning.

It is important to remark the limitations of the D2.2 information. The original information was collected and processed in the original language of each country (German, Montenegrin, French, Irish and English), and then translated to English to facilitate the elaboration of the D2.2 by a small group of people. Dealing with translated data analysis bring the limitation that it is extremely difficult to evaluate the specific use of some terms, because of their cultural associated meaning. However, all the assumptions would have the opportunity to be validated in further interactions with the EAGLE target users. Furthermore sampling and analysis must inevitably have limitations especially when exploring transformative concepts rather that established concepts.

4.5 General Conclusions

. The points concerning attitude quoted in sections 4.2 and 4.3 influence the intrinsic motivation indirectly via the sceptic attitude as outlined in section **Fehler! Verweisquelle konnte nicht gefunden werden.**. The barriers concerning a lack of reward or acknowledgement and doubts about the learning success influence motivation directly. At the start of the process to establish autonomous learning as a widespread opportunity for Professional Continuing Education (PCE) one can only rely on a limited number of persons with an intrinsic sufficient motivation to try new ways of learning. There is a resonance here with the Diffusion of Innovations[21] and with the Concerns Based Adoption Model[22].

[21] Rogers, E. M., & Shoemaker, F. F. (1971). Communication of Innovations; A Cross-Cultural Approach.
[22] Hall, G. E. (1974). The Concerns-Based Adoption Model: A Developmental Conceptualization of the Adoption Process Within Educational Institutions.

The very first step in this process is changing the attitude of these persons and a number of managers towards autonomous learning. As depicted in Figure 1, Section **Fehler! Verweisquelle konnte nicht gefunden werden.** there are three effects which are relevant as well for the decision to undertake autonomous learning as well as maintaining motivation during learning i.e. for a good learning success:

1. Positive attitude as an essential expression of the intrinsic motivation
2. Self-efficacy as a reflect of intrinsic motivation
3. (Extrinsic) Motivation by outcome expectations

At the moment the attitude within the PA towards this topic is negative as outlined in section 4.2. To recruit a limited number of persons with a sufficient intrinsic motivation you have to overcome the existing negative attitude by information in a kind of public relation or promotion which shows the potential of autonomous learning and the difference to the e-learning examples with negative impressions they may have experienced or have heard about in the past.

A kind of critical mass of preconditions is needed to create a positive attitude of persons with a basically intrinsic motivation to try new ways as outlined in chapter 3. Derived from the results of section 4.2 these basic preconditions are as follows:

- Information about the methods and benefits of autonomous learning for users (learners and contributors) and managers (and other stakeholders)
    - autonomous learning using EAGLE in a nutshell
    - detailed information for first steps to use or to promote it respectively
    - Business models for platform and content providers integrating their existing offers in the platform
- Easy access and good usability for users
- Quick success in a current need
- Knowledge about a sustainability strategy for future use.

With these preconditions the project can motivate a certain number of PA members to participate at the platform tests. If the test impressions are positive their experience enhances the attitude of managers and other stakeholders and colleagues. This is necessary for the following change management activities

These persons are a “critical mass” which can be used to witness the benefits of autonomous learning in general and the platform use in particular. But the number of these persons as users and management is very likely not yet sufficient to achieve a “Stimulation of the take-up of learning technologies in local government” which is referenced as a project goal in section 2.2.

But with their help the trial of a self-amplifying process could be started. With broadly conceived campaign among rural municipalities via their umbrella associations and the reliable witnesses being “from the same stable”, it should be possible to involve further people in the use of the platform. It is certain that strong trustworthiness generated by own colleagues can overcome the resistance against changing any fixed attitude which is mentioned in section 3.1. Every increase in the number of persons gaining a benefit from autonomous learning will impress their respective managers and influence the attitude of

them, even if they are not involved personally as learners. If their feel that the use of autonomous learning provides a benefit not only for the learners but also for their organization a whole this should result in the willingness to assign resources to autonomous learning. This should give an extrinsic motivation to others whose attitude and intrinsic motivation was not sufficient before. Their positive experiences should influence the attitude of other colleagues and managers as well. The responsibility of the project is to evaluate the effect of this trial during the project. If the expected impact occurs an accompanying strategy is to develop which communicates the positive experiences for a longer time period until a widespread use of autonomous learning is achieved.

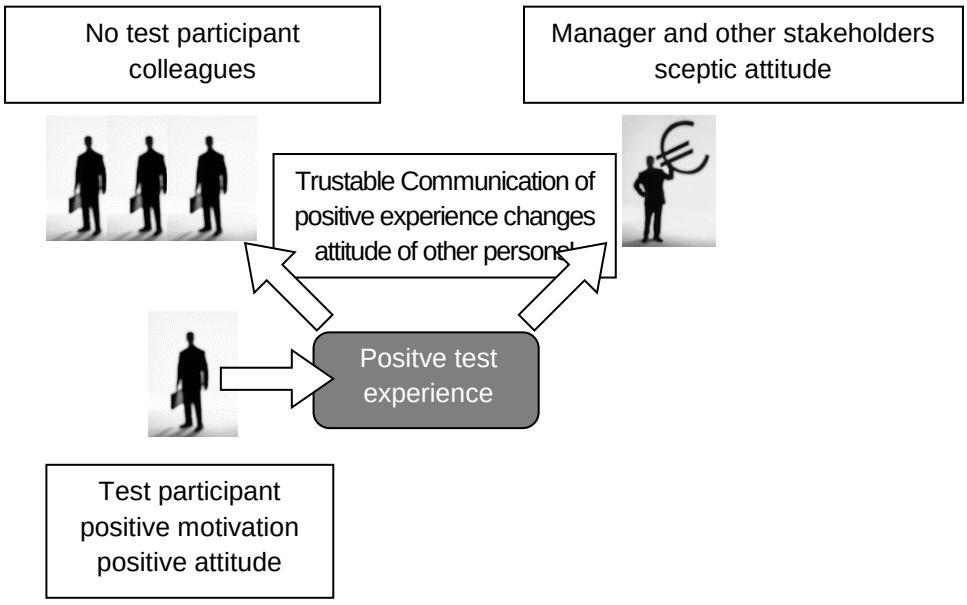

FIGURE 4 MICRO VIEW OF THE PROCESS OF ATTITUDE CHANGING

5 Recommendations.

5.1 Dependencies and recommendations to other WPs of the project

There are dependencies to all other Work Packages. On one hand D4.2 results depends on the results of other WPs; at the actual state especially from the outcomes of the interview and workshop results of WP2. For the next step mainly the evaluation results has to be observed. On the other hand, there are also relationships from the D4.2 results with the considerations of the other WPs:

As a widespread use of autonomous learning is an aim of the project, motivation enhancing or at least keeping motivation on an existing high level is a crucial topic of the EAGLE project. So it is clear that questions of motivation touch all topics of user-friendliness and change processes. As is outlined in the previous section 4.5 to create a positive attitude versus autonomous learning with all stakeholders is also an important issue. So in all WPs there are aspects of keeping, creating and enhancing positive attitude and motivation. The proposed measures are outlined in relation to the results of the interviews and workshops in short in the list below lead to the recommendations given in the following text:

Dependencies to other WPs

WP 2: Attention to the finding create the use cases and roles for motivating examples

WP 3: induce changes to more motivational environment providing information to change attitude and to increase acceptance/motivation

WP 4: (other tasks): providing motivating concepts and practical examples that are able to change attitudes

WP 5: providing an intuitive, easy-to-use suitable technical environment for trials to avoid frustration by bad success.

WP 6: providing an intuitive, easy-to-use suitable tool environment for trials to avoid frustration by bad success. Providing technical support for community building.

WP 7: Contextualization for good exploitation considering local culture, both organisation and regional, as well as legal and organizational context

WP 8: evaluation of attitude and the potential to change attitude or motivation by positive examples

WP 9: Publications and other information to reinforce or create a positive attitude and motivation by the management, learners and learning content contributors

Recommendations to the other WPs

1. WP 2
   Reaction towards the adjustment of requirements, roles and use cases following the results with the evaluation of attitude and motivation and their change during the EAGLE project.
   …
2. WP 3
   The creation of a positive attitude in the change management process;
   proposals for framework and sustainability to the political level;
   making a relation of learning activities to career chances
   …
3. WP4
   A clear description of the benefits which are related to the proposed methods, systems and strategies for the RLGs

4. WP 5
   high user friendliness in general;
   Creating “quick win” examples;
   navigation and terminology
   …
5. WP 6
   “Quick Win” Examples with an obvious advantage versus conventional solutions
   …
6. WP 7
   checking if quick win examples are appropriate to the local context
   …
7. WP 8
   investigate attitude and degree of motivation at the start and the end of evaluation
   how to enhance a positive attitude
   collect positive experience (witnesses) for using it in WP 9
   …
8. WP 9
   There is an urgent need to change the widely negative attitude versus autonomous learning as outlined in the result analysis in section 4.5 to acquire participants for the test phase and for a widely spread deployment in a later step. It is a task of WP 9 to provide and spread the adequate information for this phase
   ...

6 Literature

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