

# MANAGING INTERACTION RELATED RISKS ON THE DEVELOPMENT OF E-LEARNING IT PROJECTS: A CASE STUDY OF A LANGUAGE INSTITUTE E-LEARNING PLATFORM DESIGN IN IRAN

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## ABSTRACT

The aim of this research is to present the possible problems and complications in designing and developing E-learning IT projects. The study is focused on how e-content design and delivery risks can be prevented by a more practical and beneficial communication between the target group and the design team and with the help of providing some basic knowledge of pedagogical terms and means that provide the IT project team with a better understanding of learning. Hence, this study includes the problems involved in the steps of defining strategies, objectives, planning and project management. This research designed as a qualitative study, total 12 interviewees participated in this research. The data were collected by open-ended questions and interviews. The accumulated data were assessed by the descriptive analysis method. The participants' overall attitude towards the proposed methods was generally positive.

**Keywords:** e-Learning content management, IT project management, Risk management, Communications management

## INTRODUCTION

Impact of technology on learning is an undeniable fact of today's world. That is for sure the reason why almost every learning institution, from local schools to world-class universities, are investing huge amounts of money every year to build up stronger and more developed learning environments with the use of technology, especially e-learning environments. However, one of the important issues which is involved in this field is whether the tools and the contents delivered in these environments can be considerate enough of learners' needs, preferences and also aligned with their perspectives and expectations of e-learning. As it is stated by Vygotsky, 1978: language and communication are the two aspects which constitute the essence of a culture. Therefore, not enough theory of online learning and not adequate e-learning model can end up bringing lack of interest and involvement of learners in e-learning environments. In other words, if these contents are not based on pedagogical principles and reliable approaches to systematic instructional design, there is a tendency that the whole philosophy of learning might fail. The reason is without interactive contexts, it will be out of reach to manage interactions. It happens because usually we consider technology first while planning educational environments and then we move on to how this piece of technology or environment can be applied to educational uses, and as it is said (InfoDev,2005) there is a lack of contribution to the existing cleavage between technology and pedagogical innovations in learning. To cover this existing issue, it is of high importance for IT project team members and managers to gain basic and necessary understanding of what context and interaction mean as pedagogical terms. It will provide them with an insight of the vitality of communication between the learners both that the level of using the technology and also on the level of designing the environments in the first place. This will hopefully lead to lower risks of delivering e-contents which might lack adequate features a needed abilities to virtualize real interactions among learners and teachers in the classroom. The main addressed issues in this field have usually been about the constraints and the technological risks of delivering e-learning projects and how to prevent risks in terms of designing and deploying in the environment. This study, however, focuses mainly on the design of e-content with regards to educational and interactive issues and how the attention of design should be brought to real learning goals and outcomes.

## LITERATURE REVIEW

(O.Giardina et al, 2007) presents a study on how to manage technological constraints and educational aspiration in a multi-cultural e-learning environment design, focusing on the fact that e-learning depends on the involvement consideration and constraints imposed from the economic and labor markets and the world of human sciences. It is also mentioned in the paper that the learning environment design based on the finding of future research could probably provide directions to make online interactions and communications more successful in developing learning critical thinking and epistemological skills.

(M.Martins et al, 2014) produced a work on constraints and requirements in designing and e-learning environment by actually designing a real virtual lab (The VEMA) with the objective of perusing five

characteristics of an effective system, one of which referred to as consistent with the need of the learners and the employers. It is mentioned in the paper that if the students is not motivated the role of e-learning with its unsupervised teaching will not be effective. According to this paper, quality e-learning courseware requires several aspects to be covered in order to achieve its purpose. One of the aspects is referred to as thorough knowledge of the content as well as methods of delivery and learning theory. Therefore, it cannot be limited to put content online and assign chores to be completed by the learners, but also learning goals and outcomes must be included.

(B & M.Fetaji, 2007) referred to successful learning as e-learning concepts and factors that substantially influence learning. They based their analysis on 17 e-learning indicators. Among the mentioned indicators are a) type of learners, b) learning style and intelligence of learners, c) content, d) preferences of e-learning design, e) motivation and performance-self-efficacy (the learner's senses their effectiveness in e-learning environment). The findings show that these indicators can play an important role in delivering e-learning contents and that this can be applied to e-learning projects. Thus, individual learning services are needed to support learners according to their subjective preference profile.

(J.Bartz, 2010) believes that the learner is part every stage in the e-learning project development and she discusses the point that how well the learner engages with and achieves the objectives of the project, introducing the learner as the fourth constraint along with time, cost and scope. She also refers to the fact that the concept of the learner engagement as the measure of quality should be considered by project managers as learner's involvement in each stage of project management process. However, the only involvement of the learner in the process is within the phase of initiation where learners are identified and planning phase where the team is persuaded to think like a learner.

(T.Surcel et al, 2009) looks at risk management on developing e-learning strategy from the point of vulnerability in e-learning. One of the vulnerability risk the paper refers to is the student associated risk which is explained as participation risk directly linked with the student and their expectations. It also states that the student's perception about this innovative style of teaching and learning might get worse if the course is so rigid. To manage this risk, it is suggested that the professor correlates his course much more explicitly in order to help students in the way that they can understand the course goals easily. Also, there is a reference to communication risk which is not solely related to e-learning systems, but generally to any IT system as learners communicate with a monitor, so it will be difficult to activate a good communication between students and to inspire them with the feeling of being a member of a bigger team that can contribute a lot to the performance of students.

(D.Axia and D.Wang, 2011) proposed and presented an integrated e-learning platform where students can share and operate these resources at any time their core management platform is filled with any applications and tools related to e-learning and supports the creation of a self-learning and innovative learning environment with the aim of providing new ways of user interaction and data representation in a knowledge based environment in which teachers and students cooperate to share knowledge. This was the result of the effort to make a step towards a more effective e-learning experience.

(B. Baruque et al, 2014) refers to other relevant issue that concerns the impact of content instructional materials on the learner's motivation to complete the course.

(MC Kenny et al, 2015) refer to teachers as designers for classroom activity and instructional resources who are also capable of creating their own technology-enhanced learning material. They attest to the critical importance of teachers as designers and elaborate on how to bring together design a cross disciplines with the literature on teachers as designers. In addition, a number of other studies have looked as teacher design capacity in natural settings from a technological, pedagogical, and content knowledge and perspective. Hence, teacher's capacity with technology includes the ability to blend together knowledge that emerges from the intersections of content, pedagogical and technological knowledge and their interdependency with experiences and contexts (DiSessa 1988; Kali, Goodyear et al. 2011; Mark-Auskait & Goodyear 2014).

(H. Al-Samarraie et al, 2003) discuss that the current integration of instructional design theories into e-learning has mainly led to platforms that are based on how learners interact with the representation of content during a particular task and how the representation fits into their learning process. They also address the possibility of learners losing attention and focus on learning through e-learning. One of the 3 major components, they base their research on is the external variables, which include motivation and interaction as well as attention.

(Lehtinen, 2003; McCombs & Vakili, 2005) believe that the negative impact on students engaging with e-learning environments and platforms are likely the results of students' needs for multiple forms of support which are probably not provided.

(Botturi, Cantoni, Lepori & Tardini, 2006; Hwang, Tsai & Yang, 2008; Martinez, 2003) state that the adverse effect may also rise from a failure to use appropriate design strategies hired for representing learning content.

(Dutton, Dutton & Perry, 2002) did some directed research to determine the role of students in online classes and how different it could be from their role in traditional lecture classes. They found that a high percentage of students who begin e-learning courses do not complete them.

Giannoukos et al (2008) mentioned the fact that current e-learning tools lack adequate learner interaction, leading to students getting motivated enough and bringing the result of their shifting away from e-learning. Hardt (2009) insists that we lack a solid understanding of how certain forms of learning might help students understand content in e-learning.

According to Moore (2002), cyclic relations involving interactions between learners and e-learning content usually promote the development of the necessary metacognition for understanding content and thus learning in the e-learning environment.

Sweller (P. 124): "The more elements that interact, the heavier the working memory load."

(B.G. Wilson, 2004) recommends that e-learning environment designers carefully consider all aspects of the learning experience, because learners often encounter the stimulus materials when they are sitting alone at a computer, away from easy coaching or support from an instructor. He suggests that e-learning environments provides collaborative workspaces that include information resources and tools to do the work alone and with others and diagnose learners' needs and that learning outcomes are codetermined by designers and participants. He believes that there's a lot to contribute to the process of envisioning how online environments can foster learning and interactive environments that will be developed in ways that have significant learning potential.

#### AIMS AND OBJECTIVES

The main aim of this study is how e-content design and delivery risks can be prevented by a more practical and beneficial communication between the target group and the design team and with the help of providing some basic knowledge of pedagogical terms and means that provide the IT project team with a better understanding of learning. In order to reach the goals above, this paper seeks to answer the following questions listed here:

- I. How a better and more in-depth communication with teachers and/or learners in order to discuss teaching and learning issues would contribute to design team's better understanding of the content and designing it?
- II. How an input session of basic teaching pedagogical approaches could help e-content design team members to come up with more convenient design ideas for delivering practical interactive contents?
- III. How observing actual classroom sessions would provide the e-content design team with a clearer insight on the real meaning of interaction in learning?
- IV. How getting involved in a real-life language learning experience can have effects on the design of more useful and beneficial e-learning content?

#### METHODOLOGY

Through all different research fields, there has always been the emphasis on thorough knowledge of the content and proper methods of designing and delivering the content on an e-learning platform is crucial to the success of the project and achievement of goals.

With the huge wave of technological advances and the fast-growing tendency of interest among the knowledge seekers, there is a competition for more innovative and modern ways of learning and accessing information and knowledge. Therefore, it is of utmost necessity to have full focus of what keeps the learners interested and motivated to continue once they have stepped into an e-learning environment. A J. Bartz mentions in her paper(2010):" *The learner is the most important consideration in any e-learning project. The same holds true for project management of an e-learning project. Models of project management can be adapted to reflect the importance of the learner; both as a measure of project requirements and quality, and as a key factor in each stage of project management.*"

Yet, not much is done on how much the end-users are involved through the process of designing and how much of risk management in content delivery is involved (L.B. Baruque, 2014). She believes that the quality in the production of content materials is one of the most critical success factors in e-learning products and that the learning component is that which differentiates the e-learning projects from other types of projects. Thus, What matters most is the prevention of boring repetitive activities and chores on e-learning platform as it can be one of the most dominant reasons why learners might lose interest in it all after a while. Therefore, the IT e-project team needs to be provided with a more in-depth understanding of what goes on in a face-to-face classroom and how the most intriguing and exciting learning experiences in the classrooms can be put into design of e-learning environments and platforms.

Based on experience and research, there are several most referred-to reasons why learners enjoy face-to-face learning environments. One is the interaction they have with peers and the teacher. Humans are known to be sociable creatures and enjoy talking to each other, sharing ideas and personalizing different topics or issues, hearing from others and reflect on the topics and points of discussion while showing their feelings and expressing their attitudes. That is how they learn and develop. Learners are no exception.

As a matter of fact, interaction is the main key to learning better and understanding better. Types of interactions vary depending on the activities and tasks that the teacher designs according to the goals and objectives of the lesson. Teachers play a very important role in designing the lessons and sessions to be either more teacher-centered or learner-centered. Thus, it is assumed that the understanding of the importance of interaction and task design can contribute a lot to a more effective e-learning environment design.

In addition, what a learner desires and expects from an e-learning course can be more demanding and challenging on the level of design. Learners come in different learning styles, making them love and enjoy doing various activities. Learning styles are one of the most important pedagogical terms every teacher gets involved in and good and resourceful teachers spend hours preparing lessons which can suit and address a wider range of learning styles so that every individual learner enjoys the level to some good acceptable extent. Therefore, the expectations of learners raise the bar on the e-learning environments and the design of e-learning contents. It is because they assume that technology is a powerful means that can bring the impossible to possible.

With enough attention and consideration to the main teaching methodologies that have approved to be successful and yielding, there is a better chance of avoiding the risk of designing and delivering e-learning contents and platforms which might doom to fail if they are not as interesting and involving as a real classroom session. This can be covered if there is a mutual and more friendly communication between the end-users, i.e. learners and teachers and the project team. A better understanding of who the learners are, what their needs are, what they enjoy doing and how they enjoy learning can be a real asset in designing an environment which gets as close to a real classroom as possible.

To reduce the risk of failure in designing and delivering e-content which does not suit the learners' needs and interests, two solutions are introduced in this paper which can be tested either separately or combined:

#### **Solution one**

Nothing beats experience. A good and also fun way to make this link between the project design team and the learners and teachers is to actually involve them in a real classroom and make them be learners to feel and understand the learners. Providing a real classroom sessions for those who might merely remember how they learned and what processes they went through but now are defining those processes in a virtual world, will be a good practice.

On the one hand, it gives a wake-up call to the nostalgia of being a learner as they were in the old times and the experience can be quite refreshing and interesting. On the other hand, it makes the whole abstract idea of learning more authentic by putting them in a real-life situation that helps them understand how every piece of activity, task and interaction among learners can influence their learning and how the outcomes are to be evaluated. Taking part in actual classes with the goal of obtaining a better understanding of how learning happens and what approaches, means and methods a teacher utilizes to foster and facilitate learning can be effective.

Also, it helps the design team to come up with more innovative ideas how to design and implement interactive tasks to bring them closer to real interactive activities in a real classroom. Monitoring a classroom can be a very handy way to make every ambiguity to become clear for the design team.

### Solution two

This solution will work best if it is followed by the first one. In case of the impossibility of monitoring real learning environments, providing one or a few inset sessions for the project team in which some general and useful basic knowledge of teaching and learning is introduced can be useful in developing better platforms. This can include presentations which provide an explanation of some terminologies related to teaching and learning approaches supported by a limited yet enough video clips to make it more tangible. Bringing teachers in, communicating with them through the phases of the design and hearing from their invaluable experiences of how designing activities can promote learning and whether the designed activities on the platform can help better understanding of topics is also a means to consider.

### Putting the Solutions on Debate

The Basis:

This study was performed on a design team of 12 IT professionals who were working on the design and implementation of an e-learning platform. The platform was supposed to be used as an aiding tool for the learners in English language to have more practice and further engagement with the language outside the classroom. The project was funded by a language school whose main courses were English language, IELTS and TOEFL preparation and ESP courses. A privilege this project team had been one of the members who had professional experience of teaching along with her IT skills. The idea of such study bloomed from the different points of view she had towards different activities which were being designed on the platform and the contents which were being handled.

**Table 1. Interviewees information list**

Gender	Female	3
	Male	9
Age	23-25	4
	26-28	2
	Above 28	6
Software Development Experience (years)	1-2	3
	3-4	6
	5-7	3

The platform consisted of three main sections:

1. A section for further practice on different skills that learners learned and were involved with in their class sessions.
2. A section for an exam review and practice where learners could have access to previous exam papers and materials for self-study practice.
3. A section for interactive and multimedia exercises where learners could practice speaking.

As it came out from the interview, there were certain times when this specific member pointed out details that had not been foreseen by other members of the design team. There were also several constructive discussions in which the whole approach towards the design of a specific piece was turned around due to a different perspective shared by the once-a-teacher design team member.

The most considerable issue was the how-to of the design of interactive section. This was the part which caused the biggest controversies among the team members as the once-a-teacher member was mainly opposed to the traditional and repetitive styles of the interactive exercises, complaining that they were rather boring and not really communicative and interactive enough for learners and that the reason why many learners gave up on e-learning environments over a short period of time was that they did not see a point in doing a bunch of activities they could do in practice books as well. This can be one of the most important risks which must be prevented whereas usually it is ignored because risk management of projects mainly deals with financial issues rather than how the project will actually fall in place after it is enclosed and delivered.

### The Gap:

During the phase of design, there were long discussions on how making the content more meaningful, objective-oriented and interactive on the e-learning environment. Clearly, there were quite diverse approaches had ideas from all the members. However, the once-a-teacher team member looked at it all from a whole different angle. The huge difference between the this specific member and the rest of the team was the in-depth knowledge and

experience in teaching and involving with learners in an authentic classroom environment. Thus, how she interpreted the words “communicative” and “interactive” was totally different and also she approached every activity within the content from a teacher’s side rather than an IT design team member’s side.

Therefore, the idea of bringing integrity among the members of the team in terms of ideas and approaches arouse. For this reason, the questions were designed around the two solutions which were previously stated. By using 4 questions, this study focused on whether it would be possible to either close this gap or making the opinions more integrated and the team’s understanding of teaching and learning more solid.

As the questions were not borrowed from other previous surveys and questionnaires, it is important to mention that they were generated originally based on the following references:

*Question 1* is based on the opinion of B. Feteji and M. Feteji(2007) who stated in their paper that type of learners is one of the indicators contributing to successful e-learning design because it reflects the preferences of learning styles in teaching as well as delivery style to students. They concluded that e-content not suited to learners’ learning styles is rated as the biggest obstacle and barrier to enhanced learning via e-learning environments.

*Question 2* is based on the idea of S. McKenny et al(2015)’s discussion on how to develop conceptual infrastructure that could help frame and discuss teacher design work as compared with the expert design work. In their paper they insist that conceptual infrastructure is necessary to understand how teachers think(Horn 2010) and how designers reason(Nelson & Stolterman 2012). Also, there is a reference to (Boschman et al. 2014) stating that teachers intuitively address classroom practical concerns while designing technology-rich learning activities and materials, but are also influenced by their own existing knowledge and beliefs. In addition, L. Oubenaissa(2007) refers to the fact that a profound understanding of the interface should generate pedagogical and educational designing principles rather than only physical management of the learning environment.

*Question 3* is based on a claim from Anderson(2005) that there lacks a theory of online learning and a valid e-learning model which take into account the aspects of the language and ways of communicating. Furthermore, a reference can be made in a report by Giannoukos et al.(2008) that current e-learning tools do not adequately support student interaction, which leads to students being insufficiently motivated and shifting away from e-learning.

*Question 4* is derived from the proposal of J. Bertz(2010). While she suggests that within the planning phase of project management of an e-learning project, the team needs to think like a learner as she holds the importance of the concept of learner engagement and involvement in each stage of the project. Through the project they developed, they applied the strategy of thinking like a learner, therefore this was extended to the idea of letting the content design team experience being a learner and thus the question was based upon it.

## RESULTS AND DISCUSSION:

The above case became the fundamental of this study in order to find out how communication between the design team of the project with teachers and learners can affect the design and delivery of the content they are working with. Therefore, a survey was designed based on several questions regarding the approaches which were previously presented in the methodology of this paper.

The survey consisted of 4 questions with reference to the experience of the design team members in working with a teammate who had been a teacher and possessed solid knowledge and experience in this field and the discussions which arouse among the team while working on the design and delivery of the content. Some of the answers are not brought up here due to being quite short or very similar to the ones shared in the paper:

1. *Based on your experience, how do you think a better and more thorough communication with teachers and/or learners in order to discuss teaching and learning styles would contribute to a better understanding of the content and designing it?*

The aim of this question was to raise awareness among the design team on the fact that a closer relationship between the project design team and the target people could be a way to get a better view of what they are designing and delivering. Here are some of the answers:

*"I think teachers and learners' ideas on what they expect from the platform can change our perspective about the contents we work to deliver on e-learning scale."*

*"It is important to talk to learners specially to realize what makes them want to continue working with the e-learning platform can give us signals on how to design and implement content."*

*"It shouldn't be a big deal really. We as content designers are mainly told about what we are designing and the frameworks are usually present. I don't think there could be much change applied to it whatsoever."*

*"As a designer of e-learning content, and to be honest, this is my first experience, I think talking with teachers and learners and asking them what they really want could give me more confidence on the job I'm doing."*

*"To me, it's fun to meet them and ask them what they really expect to see and experience one the project has been delivered. I think their ideas could be pretty helpful."*

As it is evident from the answers, the content design team believed that a more authentic communication between them and the target group could contribute to their better understanding of what they have in hand and how they need to turn the content around so to keep it as useful and practical as they are dealt in the class and yet transforming them into pieces for an e-learning platform. However, two members of the team had almost same ideas, believing that what they do is based on what they are told to do and so it might not have a considerable impact.

2. *Based on your experience, how do you think an input session of basic teaching pedagogical approaches could help you come up with more convenient design ideas for delivering practical interactive contents?*

The objective of this question was to trigger the point that whether a little amount of teaching/learning methodologies could broaden the design team's sight on how to design content which can pursue the teaching/learning aims to the fullest. Here are some of the answers:

*"I don't think we really need to know basics of teaching approaches and ways and methods that teachers hire to teach stuff. But I believe it would be good if we got to know what the aim of different activities are on the whole so to help us implement better ideas while designing them for e-learning."*

*"It's fun to learn what goes on in a teacher's mind when she is teaching something through and activity. But I am not sure if implementing all of them in e-learning would be possible for the time being... or if it is, it should be a really sophisticated job. After all, teachers are human, e-learning environment isn't!"*

*"I guess it is always a good help. I mean... why not? If a teacher tells me how she teaches a piece, I might be able to challenge it and try to design in a way that gets as close to the teacher's way as possible."*

*"She, the once-a-teacher team member, used to tell us how a certain activity in the content could go through lots of ups and downs in a real classroom to take learners from point A to point B and how probable it could be that the activity succeeds or fails in teaching a certain point. We don't know this stuff. It's quite complicated. I guess when it comes to e-learning, things become a bit frightening if every single activity can get that deep. I would say YES to teaching knowledge. "*

Clearly, people were mainly in favor of getting some fundamental knowledge of teaching and they were astounded by the fact that there could be so many complicated details in language teaching and learning that are usually ignored while delivering e-content.

3. *Based on your experience, do you think observing actual classroom sessions would provide you with a clearer insight on the real meaning of interaction in learning?*

*"I actually participated in a classroom with our teacher teammate. It was fun. While she was teaching, she would come to me and tell me how one single activity could be played around in several ways to bring up different interactive situations in order to get the learners to talk and use the language. It did in fact clear a lot of vague points in my mind."*

*However, I find it quite difficult to deliver such interactive content. Still, a classroom is a classroom. It's a whole different definition."*

*"I would like to go and see a classroom if I am dealing with content like that. If that's a practical idea, why not? When you see things in practice, it will give you a better understanding. Plus, what we as software developers perceive as INTERACTION is way different than what real life interaction means."*

*"Yes, we could get to see how learning through interaction happens really. As far as I remember, the biggest argument we were having while designing the content was that our teacher teammate kept whining that the activities we were designing were not interactive enough. We couldn't really get the point! I wish she could give us a practical example of classroom interaction. Then we would probably be able to put it in design."*

*"I wouldn't mind going and seeing a real interactive class session... if it is really interactive, I mean. I remember my own learning experience. It wasn't really interactive. I mean... what we had in the books we can put it in the e-learning content if it is all about how I studied. However, if there's something new and if styles have changed, I would fancy seeing it in real."*

Based on the answers, there is a point which is being indirectly conveyed, and that is the fact that "interaction" and "interactive" need to be redefined for design team members. This could be better made clear if they observe how exercises or contents can be designed by teachers to be more learner-centered and involve learners as much as possible. This could be a great help to e-content design team, reducing the risk of delivering content which, is just in the form of electronic books, thus ending in the risk of learners losing interest in involving.

4. *Based on your experience, how do you perceive the effects of getting involved in a real-life language learning experience on the design of more useful and beneficial e-learning content?*

The objective of this question was to activate the possible learning experience the design team members had before and try to figure out whether recalling those details could in any way better the approaches of the e-content design they were applied, and that if they found the experience useful in terms of getting a better view on the job they were doing.

*"I think there'll be good effects. If I experience being a learner, I will definitely develop better understanding of the learners' needs which could be beneficial to my work experience as I get to realize what ideas need to put into implementation in order to make the e-learning content and environment more useful."*

*"Real-life language learning experience is something I have had before. I don't remember much of what happened in the class. Plus, at that time I didn't know anything about computers... let alone being an e-content design team member. I guess it would be useful if I got involved in it again."*

*"I'm not sure. I don't know how the two could cooperate. I already know what I'm doing. I don't know how it might affect the job I'm already doing. I can't comment before experiencing it."*

*"Practice makes perfect. That's what teachers say. Maybe if we practice being learners, we will be better designers for e-content as well because we will get to understand their styles and tastes. For sure, there will be some positive effects. I might not be able to give clear ideas now, but sure there will be some."*

The main point in answers is that there will definitely be effects. They were not quite sure what kind of effect they might receive, but there is a positive attitude towards experiencing it.

## CONCLUSION

According to the literature review, there is not too much work on IT e-learning risk management in content development area. The literature addressed the current issues and risks in IT e-learning management mainly covering the financial aspects, so this study provides some novel approaches in order to fill out the gap. A qualitative approach was applied to an e-content design team of 12 to find out about their perceptions of teaching and learning and how a background or experience of teaching or learning can affect their design and delivery of the content on an e-learning platform. The two proposed methods, based on which the interview



questions were formed, comprise enhancement of both learning styles and teaching methodologies within e-learning. Learning styles are one of the most important pedagogical terms every teacher gets involved in and good and resourceful teachers spend hours preparing lessons which can suit and address a wider range of learning. Hence, the approach of this paper is to assess the fact that how making a connection between the project design team and the learners and teachers via involving them in a real classroom and making them be learners helps them better understand the learners, their styles and needs. Providing real classroom sessions for those project team members who might merely remember how they learned and what processes they went through but now are defining those processes in a virtual world, will be a good practice. Furthermore, the findings agree that some basic knowledge of the main teaching methodologies that have approved to be successful and yielding will give the project team a better chance to avoid the risk of designing and delivering e-learning contents and platforms which might doom to fail if they are not as interesting and involving as a real classroom session. This can be done by establishing a mutual communication between the end-users, i.e. learners and teachers and the project team. Further quantitative and qualitative work and study can be done to put to test the basic results which were delivered in this paper.

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