The theme of my presentation is studying the possible roles and communicational possibilities, as well as habits of educators within the framework of e-education, principally in higher education. In higher education we think students are able to study independently and they are motivated to learn on their own. So we pay not much attention to help them study, not even if we talk about e-learning. But we have to see that even appropriate ICT-skills are not sufficient for learning on-line: students need appropriate learning competences and motivation for efficiency in e-learning. Both requires the teacher’s customized support – and on this way we get to the very important role and tasks of e-educator alias e-tutor.

Keywords: ICT, e-learning, distance learning, teacher’s role, methods

The starting point of this analysis is, on the one hand, the practice and the theoretical possibilities of typical, traditional “face to face” education, and, on the other hand, the educational and pedagogical support tasks in the pedagogy of open and distance education. The e-learning, due to the fact of being technologically indirect and inevitably asynchronous, is similar to distance learning, and not only in respect of preparing the curriculum and planning the process of learning, but in respect of support and communication. However, in Hungary during the everyday practice the application of e-technologies is just rarely accompanied by the revision of the learning management strategies. Accordingly, the characteristics of educational roles and communicational habits in e-education are somewhere halfway between those featuring traditional and distance education.

During the development of an electronic curriculum it is crucial to keep an eye on both the optimum conditions and the current practice that the new curriculum has to fit into. This current practice is, naturally, including the educational process’s target group, objectives and requirements, as well as every other aspects of organizing learning: curriculum, work schedule, administration, the given (or missing) technological and competence conditions, the learning support system adjusted (or not) to these conditions, and all the communications that take place during these adjustments. Last but not least a key element of this process is the situational role that the educator is assigned or intended to fulfill in e-learning.

In the recent past the Regional Distance Education Centre of the University of Pécs has developed its electronic assistance material on learning development called Learning – effectively, sensibly and with lasting results. The results of the development process and mainly the testing of the
afore-mentioned material are suitable for drawing morals and conclusions in respect of the development of training materials for higher education and the possible roles of e-educators that is in close connection with the former one.

E-learning, distance learning, traditional education – clarification of the definitions

Nowadays, e-learning, blended learning and learning supported by electronic devices seem to push into the background the system of distance education, at least in Hungary, during every day practice. Often these above mentioned concepts replace the all the phenomenon relating to distance education. However, we should understand that these are not the same, even not the same types: while e-learning (put it very simply) primarily is a technology and an educating-learning method relating to it, distance education and blended learning are first of all methods for creating and supporting the learning process, their form is in contrast with the so-called face-to-face, attendance based education, and the tools of e-learning can be integrated into them. But the tools of e-learning also can be integrated into the conventional, face-to-face educational system. Typical examples: using a digital or interactive blackboard during a traditional school lesson, or, in a broader context, even simply projecting a presentation can be considered as electronically supported learning.

In case of e-learning the starting point is the available and exploitable technology, and it is the curriculum and the methods of organization of learning that should be adjusted to the capabilities provided by this technology. On the contrary, in case of distance education the starting points are the target group and the result of the training. Ideally the curriculum, the support system, and the technology that is the base of the two previous one are all the outcomes of those starting points. (In literature on distance education we find that the objectives and requirements, as well as understanding the target group have the highest priority; and we get the curriculum and the support system as a result of harmonizing them.) So, not every e-learning is distance education, and not every distance education is e-learning (although it is obvious that tendencies are moving this way).

At the same time we cannot deny that there is something common in e-learning and distance learning (Kovacs 2007). For example, the synchronic and/or asynchronic distance that is, on the one hand, a core characteristic of distance education, and, on the other hand, natural field of e-learning. In both cases – theoretically and ideally – the centre of the learning process is the student, and an elaborated, easy-to-understand and easy-to-use curriculum plays an important role. Those so-called e-curriculums or distance curriculums that are available nowadays are more or less programmed, since they take into consideration the most typical situation occurring in the framework of e-learning and distance learning, which is sole learning at home. In both cases it is important to build motivation into the curriculum in order to make sure that we can keep those “self-abandoned” students within the learning process, who are, at least partly, deprived of the traditional interpersonal education. The ultimate objective – that is yet not widely pursued, but that should be reached – is to create curriculums that are optimized for the different learning habits and cognitive styles, and can be “custom-made” (Kulcsar). And with this we have arrived to a feature that cannot be missing from curriculums developed for web 2.0 generation, since without it the whole process of e-learning or distance learning virtually becomes unable to operate. And this feature is interactivity. This equally can refer to an imitated interactivity coded in the
curriculum (e.g. in case of tests), or to a real, technical interactivity, or to a live, real-time connection between the participants of the learning process.

Student, educator and the World Wide Web

Thinking over the significance of interactivity can lead us to two other important elements of learning process development, which are: the personal relationship between the participants that is basically much less formal than within the “face-to-face” education; and consideration the effects of cultural/sub-cultural standards of the Internet. (And these effects are highly correlated with the nature of those personal relationships.) A more personal tone between educator/supporter and students can be an effective tool of motivation, but applying this tool requires not only a curriculum, but also developing a system of organization of learning.

Cultural standards and rules of the World Wide Web (Brown 2002) confirm the importance of having a personal tone, since the Internet – from the start of its “civil” use – has always been and will always be a place, where there is no hierarchy, and the communication and content sharing is informal (Wallace 2004). Consequently, if we would like to, it would be really difficult (and probably ineffective) to transplant – without any alteration – the rules of the hierarchal, formal, face-to-face education into the society of the Internet that is totally out of accordance with them.

Though the traditional educator-student relationship might be fitted into the communicational situations, codes and roles of the World Wide Web, it would not happen without having any problems. Differences between the positions of the participants can be expressed through the rights given to them or through the division of process control, but it does not prove to be a successful strategy to keep distance between the positions during everyday online communication, or to protect the myth of the educator as primary source of knowledge. After all, students, at least in a technological and social sense, play “at home”: in the net society they are not less confident (on the contrary, often more confident) than the educator (Brown, 2002). Consequently, they obviously have access to alternative information – virtually form infinite number of sources – that inevitably redefine the status of educator as knowledge provider. Depending on the educators’ attitude, there are two options for them: they can remain – from the students’ point of view – authoritative participants of the learning process, or there is the possibility that they will be more or less excluded from the circle of those from who the students gain knowledge. If an educator is not able to accept an unorthodox role, the chance of getting far from the current learning process will be much higher.

 Educators must acknowledge that they will play a different role among students studying with the help of electronic devices (or even online students) than in the class-room. Just like within the framework of traditional distance education, educators lose their central, information provider function, or rather this function turns into a not less honorable status: the educator becomes a leader, a guide or a mentor. It is due to the fact that, though most educators still have not get used to online communication, by means of their professional knowledge and experience they can help students to find and process specific professional information available on the Internet, as well as help them selecting all the information they found by themselves. The educator, who is expert in source criticism of professional documents, has nothing else to do just to show the same critical attitude towards online sources, and introduce the students surfing the web into this process. And this would be useful not only for the educator, but also for the students, who are able to find anything
on the Internet, but are not necessarily able (even, at first surely unable) to determine the exact position of the given text within or without a profession or science. Therefore it might happen that the students attain their knowledge from unreliable sources that will have negative affects on their competence (Bai 2002).

So being a source critic is a dominant part of being an educator as a professional leader. Besides, of course, the educator also does some sort of orientation that is quite similar to the personal consultational process supporting the writing of the thesis in the traditional higher education, with the difference that this orientation sees the studies of the students through (and it is also part of the distance educator’s role). But neither the general attitude of educators working in the “mass education”, nor maintaining the hierarchical positions is compatible with this new role. In this situation the educator, in the first place, should be a partner, and, in the second place, should be a mentor (or tutor), which means the educator should be a person who concerns with the students one by one, help solving their unique problems, guides them on their own professional progress, and, at the same time is not ashamed of learning from the students on those field that the students are more familiar with. Web services and other IT services provide a good basis, but do not and cannot replace the continuous work of an educator. For example, it is not enough to have access to forums, chat, frame system, blogs and e-portfolio, if the participants of the learning process do not use and take advantage of these tools: if the system only contains e-books, presentations, tests, exam papers and maybe essays, then it is quite far from creating the above-mentioned partnership (see also Conolle 2008). Naturally, due to the structure of education, the educator is in position of power, but what really matters is whether this position is constantly put forward or only jumps out of the background when it is time to evaluate the students’ performance. In the previous case the activity and the motivation of the student is not the same as in the latter one. And this only depends on the educator’s attitude and behaviour (activity, style).

It is the partnership that allows the educator to become and remain a personal professional leader and that the educator, who is the direct controller of the learning process can turn into the engine of it. One of the most difficult challenges in the hierarchical-formal education system is to attain this “engine” role and keep it permanently, whereas it would be really desirable in higher education, where students are independent adults. If students are able to learn, to research and to conduct projects on their own, then they will not or, at best, will only seemingly accept the full control of the educator. But if students are not able to work on their own, then it would be advisable to set it as aim for them, since independent research is a declared requirement that they have to comply with at the latest when they write their thesis. And the best way to attain this skill is to have many opportunities for independent, self-organized orientation and knowledge gaining, and even to face with a constant demand for doing it. But regardless of doing it alone or in a team, a strictly controlling educator is less able to motivate the students to become independent, than an educator who is their partner, and comes to the fore only when his/her help is needed, but this help does not mean that the educator gives them every piece of information automatically. Therefore the educator withdraws into the background for most of the time: this does not mean that the educator is pushed into the background, but that he/she decides to leave space for the students’ development. Acting like a good trainer or coach, the educator helps to set off the process, and then keeps an eye on each student, constantly stands by them, but does not interfere with the course of events, and does not take the initiative. At the same time, the educator clearly understands when and why
the process comes to a halt or, perhaps, turns into another direction and helps the student or the team to get over the obstacle.

Connectivist pedagogy (Siemens 2004) even goes further: it says that in extreme cases, in creative, separate communities the boundary-line between educator and students simply vanishes. But this is not necessary, and not necessarily a problem. In case of less formal educations, and especially in case of highly educated, mature students, the vanishing of the boundary-line can add value to the process: a full, pithy partnership can come true that is free form the disturbing formal relations. Besides, as a result of group dynamics, most teams need a leader, and this features the permanent online groups as well. If the student group is made up of less mature students – both in a professional and personal sense – probably the more experienced educator will enact this role, even so if the distribution of roles hasn’t got a strong, formal base. The more mature and independent the students are and the wider their knowledge is, the more likely it is that the traditional educator-student relationship gradually turns into a fruitful professional partnership. This can also happen within the framework of face-to-face education; e-learning only modifies the framework of the process.

The educator as motivator: “survivor” tool-kit for electronic learning development in practice

During the development of curriculum for distance education and development of electronic curriculum, the editor (tutor, mentor, educator) usually assumes that it is quite enough to provide students with cognitive knowledge (content of the curriculum) required for attaining the curriculum, and there is no need for anything else, since the students already have the ability to learn self-directedly. So the educator treats the students like people who are able and willing to learn by themselves and to make their own time-table, and who know and proficiently use all the learning support methods. This implicates the next assumption: that adult students, based on their previous learning experience, are naturally able – without making major changes in their learning habits – to comply with the requirements, to memorize the curriculum in the long run, to understand the interrelations, and later on, to utilize the attained knowledge in practice. Of course, I would not say that each and every educator shares this assumption, but probably this is more of a general attitude than just a negligible point of view on the part of educators, and in the Hungarian higher education this is an absolutely typical phenomenon.

On the contrary, practical experience shows that students during their previous studies do not or rarely developed skills useful for attaining the curriculum; their learning abilities are deficient, not properly developed. Although, in theory, learning methodology is one of those fields that can be evolved in elementary and secondary education, the fact is that it is pushed into the background along with several other educational efforts aiming to develop student competence. In many cases the higher education tries to fill this gap in the first stage of the training by either formal (learning methodology course) or informal (integrating learning methodology into other courses) way. There are, among many other solutions, for example, learning methodology modules to be attained during the training, or learning methodology training within the framework of a professional pro-seminar. A typical, informal, non-declared method is when educators try to provide first year students an “emergency” training on learning development within the framework of any kind of practical course, without making it a part of the
themes or the curriculum, simply giving them opportunities to practice making a presentation or preparing a seminar essay. Fortunately, nowadays it is more common that higher education undertakes competence development / improvement, so more efficient and more traceable methods can be implemented (Bodnar 2007, Bessenyei 2007). At the same time, it is not obvious for everyone and everywhere that students are not necessarily ready for processing a huge amount of curriculum and doing research on their own, and for making schedule for the periods of term-time and examination season, which is different from what they get used to in the system of public education. Observing these deficiencies, the Regional Distance Education Centre of the University of Pécs have developed the first electronic assistance material on learning development (Learning – effectively, sensibly and with lasting results) for regular and correspondence students. Our main objective is to give a possibility – first of all – to our BA students to complement their basic learning methodology studies via e-learning, of course, within the framework determined by and with the help of the current educator.

Creating the curriculum we did not wanted to work out a complete learning support programme or website (like Eszterházy Károly College of Eger did: http://www.ektf.hu/tanulasfejlesztes3/), we just wanted to draw the students’ attention to this topic, and make them aware of the status of their learning abilities, motivate them for self-improvement and offer them a “survivor” tool-kit to start with. Learning – effectively, sensibly and with lasting results is only an introduction, being the first part of forthcoming series of materials each of them focusing on a specific field of learning methodology. As a result of our work we are going to have such an assistance material on learning development that will provide opportunity for individual development beyond learning methodology classes – in a very practical way.

That is the reason why we wanted our material to be impressive, attractive and, last but not least, easy-to-use, even for those whose digital literacy is less developed. According to its content, we thought that it would be useful to start with the examination of concentration ability. Though – considering its structure – this is an e-curriculum and not one made for distance education, both the style of the text and the interactive parts are designed to comply with distance education (fitted into an appropriate system of learning support and learning management). And this has two major advantages: on the one hand, this curriculum can be applied in several types of education, and, on the other hand, it has several great characteristics due to the fact that it was written like distance education curriculums. The style of distance education curriculum (the descriptive parts, the problems, the questions and, first of all, the guides) is necessarily concise, clear, precise, its language is simple, its tone is friendly and encouraging; its objectives are to replace the missing educator, to help interpreting the information, and to motivate and support the student (Dillon 2004; Nielsen-Morkes 1997). In connection with learning methodology the key is arousing and maintaining students’ motivation, because, on the one hand, it is embarrassing for students starting their studies in higher education to admit that they have deficiencies on this field, and, on the other hand, developing learning abilities is essential, but not popular, since usually it is not systematically supported by higher education institutions, so it requires extra efforts and independent orientation. So this motivation is supported by both the wording and the structure (classic distance education style: there are no theoretical parts) and the well-developed technology and display that can be applied in several platforms, and, last but not least, the interactive, multimedia form. We considered that these latter characteristics can be ensured by a freeware called EXE (1.4.0) that is a curriculum editor programme with display templates, which can be integrated into both Moodle and CooSpace.
LMS, without any problem. The complete material along with video and audio inserts and interactive self tests (many of them was created by the test editor module of EXE, and the rest were inserted into the curriculum), have been put together in this programme, and then it was imported as one pack into the Moodle and CooSpace systems that we use for electronic support of our training.

We must mention that we had a third aspect during the development: the limited amount of time and energy in case of e-learning (Gerő 2008). These limitations can be motivation decreasing factors if the curriculum is difficult-to-use and its appearance is not impressive. That is the reason why we did not want to create a “motivation decreasing” voluminous material: the “course” contains only 2 major modules that is made up of 4 / 5 smaller modules respectively, so – depending on the student’s individual pace – it can be completed in 3-4 hours. This, of course, is just the start of the learning development process.

The first major module contains only tests and feedbacks, for example: Stroop test (change-over test), essence seeing and detail recalling test based on video inserts, text interpreting and simple measurement of ability to concentrate on monotonous information. At the end of the tests the students get feedback that helps them to determine the fields of their learning abilities to be developed. In the second module students are offered exercises that are suitable for developing the previously chosen fields, divided into the subfields of concentration ability. When choosing and displaying these exercises, we put a great emphasis on their “mobility”: we wanted to make sure that students won’t be “locked” to the computer, so these exercises also can be completed and practised without technical support, with simple tools, or even without any tool, during everyday activities (travelling, waiting, administrating, relaxing or in a period of time dedicated to this “course”). Consequently these exercises are less “multimedia type”, than the tests in the first module. They are rather focusing on arousing and maintaining inner motivation.

Since curriculum is designed for variable purposes and target groups – though the main target group is regular, first year BA students – the role of the educator cannot be elaborated. Normally, the compact curriculum serves as an electronic assistance material, a collection of exercises. Ideally, it is used for one term, within the framework of a learning methodology course complemented with discussing the test results and other measurements; thinking further, varying and supplementing the exercises, and building the whole course onto processing a certain professional material that is closely connected to the studies of the students. In this system the educator acts as the controller and guide of the learning process, on the one hand, and, on the other hand the educator is the personal developer and learning partner. Within the framework of the system it might happen that students look for or prepare their own exercises connecting to certain thematic units, and make their peers – and ideally the educator as well – to complete those exercises, then they evaluate their work and draw the adequate conclusions. If we built these contributions by the students into the curriculum that, on the one hand, can provide further motivation to the learning development, and, on the other hand it enrich the material, makes it more pragmatical and facilitates customizing it. So the assistance material itself serves only as a starting point and guide to the real learning development.

By this time the electronic curriculum has been tested and evaluated by nearly 80 students. Testing and evaluation took place within an electronic frame system in each and every case, and most of the students have done it alone at home as a distance learner, rest of them has done it during a class in
an IT lab. All of them were BA students, but only 50 of them were regular students, 20 of them were distance learners.

The results are promising both in terms of the usability of the curriculum and the hypothetical role of the educator during the process of e-learning (see statements in accordance with the latter one in italics).

None of the testing students had technical or interpretational problems neither with the test itself nor with the exercises offered, and all of them found the material “useful” and/or “interesting” (87% of written feedbacks contained the words “interesting” or “exciting”, and 83% of them contained “useful”). Some students reported that their motivation for learning had increased, and many of them asked for continuation, in order to develop other areas as well, e.g.: memory, dynamic reading, and essence seeing and even logical skills. 6 students reported that they had checked up on certain type of exercises on their own, but the rest of them wanted the educator to expand the scope of the exercises and tests.

There were some students who mentioned particular parts that they had most enjoyed. Not surprisingly, in most cases, these were the tests based on multimedia inserts, but there were some students who also liked the text interpreting exercise and the training-like “getting in tune” for learning. The majority of the students (56 persons) reported their test result even without asking, and some of them even asked question about the customizability of exercises. So we can claim it to be clean-cut that students are relatively easy to motivate for developing their learning abilities, if we offer them attractive, easy-to-use tools.

Difficulties with the curriculum were totally different from what we expected: most students complained that it is too long for completing it with unwearying attention, though there was no such requirement that they have to accomplish the whole test at one go, and there weren’t any technical solution that would have prevented them from doing it on divers occasions. This complaint has revealed that – as generally we cannot expect the students to dispose their “learning-time” well completely on their own, without any experience – we have to make clear the schedule of the time devoted to attaining this curriculum, providing at least a benchmark either in the text itself, or in a complementary guide. Therefore it is practical to divide even the testing phase, but particularly the big module of learning development exercises into several occasion conducted in different times. And it also would be useful to suggest certain length of time for testing and practicing. These suggested periods should not be longer than 10-15 minutes (in case of testing) and 30 minutes (in case of practising). (Students, of course, are allowed to deviate from the proposed time frame to a certain extent, if they think that they have practiced enough.) In the later version of the curriculum we have made these changes, and then the students did not have questions relating to this topic. However there were 12 students who initially reported a reverse experience. They completed the tests for at once, and finishing it they asked for further sources of tests. These 12 students handled the exercises as parts of a collection of exercises: they primarily tried out those that proved to be useful for them based on their test results, and they just took a quick look on the rest, or recommended them to others. The questions of these 12 students focused on whether where they can find further materials for developing one or two of their learning sub-abilities. This group – with one exception – was made up of correspondence students. They neither knew how to look up complementary materials on their own.

From all the above information we can outline the expected tasks, duties and the basic status of an educator from the students’ standpoint. The educator is primarily a person, who orientate – but both in scheduling the exercises, and
providing and selecting contents, is a person who actively, but slightly control. Secondly, the educator \textit{supports and motivates}, and the students obviously \textit{expect feedbacks from him/her on their performance}. In this situation – emphasizing that this curriculum has been completed by regular and correspondence students studying within the framework of traditional, face-to-face education and distance learning, respectively – the educator has the traditional role of the controller, which probably would be different within a supporting and training organization structure that is specially created for regular use of electronic curriculums. So the students’ attitude toward the educator – whether they reckon the educator as a partner or a controller – is determined by the behaviour of the educator (which in the testing phase was particularly more of a partnership), and also hugely determined by the structure and role culture of the training itself.

The learning supporter, electronic, “programmed course” proved to be useful in practice. First of all, it proved true that an attractive, impressive electronic assistance material is an effective tool for arousing and maintaining motivation, even in the field of learning development that is a less beloved field of education. Besides, it has become clear that in case of assistance material customized for students the attractive form and displaying interactive interfaces is just one thing. Easy manageability, transparent structure and, last but not least, easy-to-understand wording with proper style and tone are also very important. When it comes to the content of the material, so far experience shows that the assistance material’s benefit lies in the fact that students, firstly, get to know certain parts of learning methodology, and, secondly, they can study them in practice; and finally, they get feedback on where they are on this way, and in which direction they should go on.

**Thought experiment: possible roles of an educator in the system of e-learning**

Within the framework of e-learning the roles of the educator are obviously go through a modification, but only if the educator is open to take advantage of the possibilities, and the structure of the education enables it (Davidson-Shivers 2009). This modification has two directions: on the one hand the roles of the educator become similar to the roles of a distance educator, and on the other hand, the working methods of the educator become similar to the methods of a consultant or a talent manager. Accordingly, an “e-educator” is more of a supporter, guiding the students on their way from the background, than a classic “teacher”. So an “e-educator” enacts the roles known from the system of distance education, being a tutor, a mentor, a consultant, and besides there are several other roles to play (these partly overlap the previous ones), that cannot be easily described with concepts used in the traditional education system:

- relationship builder – get the relevant teams together (consultant?)
- starter of the process, motivator (trainer?)
- a person who is mapping out a route (individual curriculum developer?)
- source critic (expert on information?)
- knowledge provider and examiner (editor?)
- responsible person for enforcing the rules of the learning process (moderator?)
- personal supporter (mentor? tutor? coach?)
If the educator is able to enact these roles with credibility, then here is a chance for him/her to remain the source of knowledge in the students’ sight – in case he/she acknowledges that he/she is far from being the only source.

References


E-Learning is the next big thing to revolutionize education, K-12 and beyond. The statistics are amazing as an Edutopia article, Highschool.com, just reported. The Florida Virtual School is a great example of distance education making a difference for many individuals. Students no longer need to attend a brick and mortar environment for a quality education. In fact, students learning via distance are learning as much as those in a face-to-face environment.