A STORYTELLING LEARNING MODEL FOR LEGAL EDUCATION

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ABSTRACT

The purpose of this paper is to describe a learning model based on *Storytelling* and its application in the context of legal education helping build challenging training resources that explain, to common citizens with little or no background about legal topics, concepts related to *Legal Mediation* in general and in specific areas like e-commerce and civil liability. The defined model has been contextualized with respect to relevant literature and implemented through the development of two software components that have been integrated in an existing e-learning environment. Such an e-learning environment is itself a module of a greater experimental system for *on-Line Legal Mediation* named eJRM.

KEYWORDS

Storytelling, Narrative Based Learning, Adaptive Learning, Legal Education, Legal Mediation.

1. INTRODUCTION

In March 2011 the Italian Government introduced mandatory pre-trial mediation of civil and commercial cases. After a ten-month stop due to a provision by the Italian Constitutional Court, the mandatory mediation came in force again in September 2013 with a new regulation. The Italian mediation model is capable of sensibly speed-up the settlement of disputes but, on the other end, it needs efficient and effective tools to support the explosion of mediations. Citizens also need to be sensitized to the benefits of mediation and must be trained on how mediation works and how to access it.

The project eJRM "*electronic Justice Relationship Management*", supported by the Italian Ministry of University and Research, brings together researchers and practitioners in the fields of law and computer science with the aim of defining, implementing and experimenting innovative methods for managing on-line mediations. The project foresees the development of a complete environment for on-line mediation with innovative features like the possibility, for a citizen, to formalize a case in natural language and let the system provide relevant information for autonomous case resolution such as connected laws, relevant jurisprudence, training modules, links to lawyers with useful competencies, etc. (Arosio et al., 2013).

eJRM also covers the definition and development of engaging training modules, targeted to citizen with little or no background on legal topics, aimed at explaining concepts related to legal mediation in general and in specific areas like e-commerce and civil liability. In line with a tradition of *Narrative Pedagogy* applied to legal education, we decided to adopt, in this case, a *Storytelling* paradigm. The purpose of this paper is to describe the developed model and the first results obtained in its implementation.

Starting from the well-known *Visual Story Portrait* (Stanley and Dillingham, 2009), we defined a story model composed of several situations where each one is made of subsequent events aiming respectively at interesting the learner, providing the required information, supporting reflection and assessing the acquired knowledge. We also integrated a *dynamic branching* mechanism that allows the re-articulation of the story on the basis of assessed training results to support the recovery of found knowledge gaps. The model has been implemented and integrated within an existing training environment. A sample story about mediation in the e-commerce field has been also defined for a first validation of the system and of the underlying model.

The paper is organized as follows: section 2 contextualizes the research described in this paper in the framework of research on narrative pedagogy and storytelling applied to legal matter; section 3 describes the defined model; section 4 presents the developed prototype; section 5 describes the experimental story defined for system validation.

2. RELATED WORK

The goal of legal education is the teaching and learning of legal and case law doctrine. In teaching practices documented in literature a clear dichotomy emerges between a more theoretical approach to knowledge transfer and a more practical approach aimed at developing skills and knowledge in action. The first, more common in Europe (where law schools are based on traditional methods which make use of resources such as lectures, essays and manuals), focuses on the discussion of abstract concepts and on the explanation of rules often far from concrete experience.

Quite different instead is the approach adopted by Anglo-American countries, where the teaching approach applied is based on practice, and on assignment of specific tasks to groups of students, pointing out resources analysis, and resolution of cases. Most of such schools resort to specific teaching methods like *Casebooks* based on true or fictional stories; *Legal Clinics* i.e. real *hands-on legal experiences* where students are called to offer pro bono legal services to real clients under the guidance of experienced teachers; *Moot Courts* i.e. simulation of a real appeal and competition with others, whose value is amplified by the use of information and communication technologies (Lettieri et al., 2011).

Narrative Pedagogy has an increasing importance in this context. Effectively utilized in several disciplinary contexts and domains, it guarantees, even within the legal framework, a high degree of learner's involvement and of skills development (Blissenden, 2007). Jurists of Anglo-American countries were the first to emphasize the importance of narrative pedagogy and the interrelationship between law and literature. Cardozo in deed published the essay "*Law and Literature*" already in 1925, introducing the possibility that narrative offers to accept, through the literary representation, the context within which legal experience takes place: *law in action* as opposed to *law in books*.

However, it is from the 1970s that the researchers began to focus not more on literary texts analysis, but on the training and education potential that the use of narration can have in the legal field. Between the 1980s and 1990s, several professors from important law schools and also legal scholars, tried to emphasize and promote the introduction of *Storytelling* as an alternative teaching method or as an addition to traditional techniques used to teach legal topics. This second phase was launched by studies like "*The Legal Imagination: Studies in the nature of the Legal Thought and Expression*" (White, 1985).

It is precisely in the 1980s and 1990s that the academic world reassessed the use of narrative in teaching (Bruner, 1984) and law schools introduced storytelling in their classrooms. In this way, the understanding of concepts that are often too abstract was facilitated through realistic o real stories. Furthermore, students were involved in role-playing games that, through different views, allowed them to empathize with the characters in the story, creating emotional and empathetic immersion.

In the period 2007-2009, the literature presented a view of the applied strategy of storytelling in the legal environment and "*to weave the law in the stories*" seemed to become the best way to preserve concepts and think about possible applications (Steslow and Gardner, 2011). Five techniques to integrate storytelling with traditional legal education were defined: *Metaphorical Stories* (i.e. stories told to explain complex concepts), *War Stories* (i.e. stories told to explain a legal rule or doctrine after the students labour through analysis of rule and its application), *Case Stories* (i.e. stories describing legal cases), *Storytelling through literature* (i.e. lifelike characters and stories from literature taken as a model), *Sharing stories* (i.e. individuals that integrate and build together their own stories expanding them routes and viewpoint).

In recent years, thanks to digital technologies, the *Digital Storytelling* captured the attention of experts and researchers and leaded to evaluating the potentiality related to its adoption. For example, *CivilObiezion!* (Steslow and Gardner, 2011) is a series of computer gaming trial simulations in which students play the role of lawyers. The players are invited to evaluate questions posed to a witness in the course of a hearing and to decide whether it is possible to oppose according to the Federal Rules of Evidence. The student must choose when to oppose and select an explanation for the objection made. Acceptance or rejection of the objection are decided by computer that plays the role of judge.

TLE (Transactional Learning Environment), developed in 2000 by Glasgow Graduate School of Law (GGSL) and UK Centre for Legal Education (Maharg, 2007), is a virtual simulation environment used in a professional legal practice training course. TLE is built around an on-line virtual town containing utilities, businesses, agencies, government organizations etc. which provide the backdrop for students to progress simulated legal transactions.

Fishbowl Online Role-Play (Douglas and Johnson, 2010) is an educational game based on problem solving for the development of legal skills. The game provides students with opportunities to practice legal skills by taking different roles that allow them to practice interviews to witnesses, legal advice and moments of judicial negotiation and enjoy instructional scaffolding moments that promote the construction of knowledge in action. The narrative game allows the development of specific skills in the negotiation and mediation field as well as those required to conduct an interrogation.

3. THE LEARNING MODEL

This section describes the *Storytelling model* we have defined in the context of the eJRM project. The model was purposed to build challenging training resources to explain, to common citizens with little or no background about legal matter, concepts related to *Legal Mediation* in general and in specific areas like e-commerce and civil liability. The training resource had to transfer notions about procedures to follow, actors involved, normative references about mediation and advantages of such a method of disputes resolution with respect to a legal trial.

To develop our model, the *Visual Story Portrait* (VSP) was investigated. It is a very much in use story map characterized by some essential elements as shown in figure 1: *Problem*, *transformations* of main character (whom the student is normally identified with) and *story closure*. To assess the power (the *storyability*) of situations, the story is conceptualized in terms of *transformations formations*, transformation layers of several types: physical/kinesthetic, inner strength, emotional, moral, intellectual, psychological, social and spiritual (Ohler, 2006).

The proposed model considers the *intellectual transformation* of VSP as changes in terms of *learning objectives* extracted from Bloom's taxonomy (Bloom et al., 1956). The learners are encouraged to use the knowledge and cognitive skills to go through different teaching situations associated with various phases of a classical VSP (Mangione et al., 2013). The correspondence between situations of VSP and learning objectives of Bloom (Krathwohl, 2002) guides the transformation of the *character* and the structure of situations.

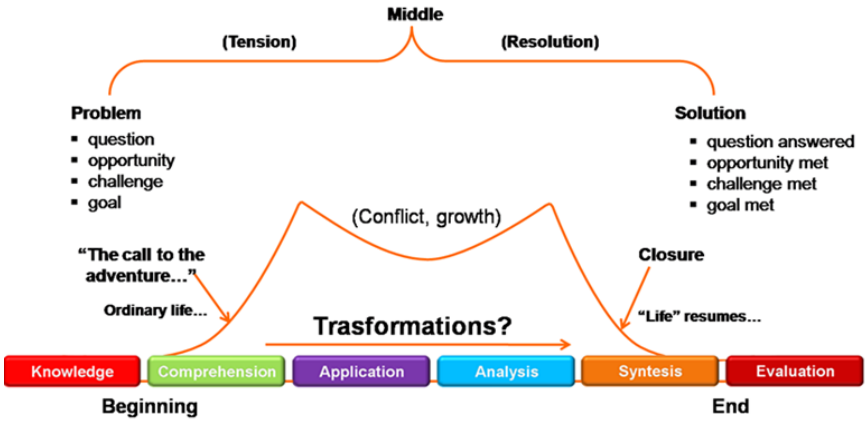

Figure 1. Mapping between VSP and learning objectives.

To ensure the achievement of assigned learning objectives, each situation presents itself as the composition of educational events whose structure facilitates organization, selection and integration of information (Gaeta et al., 2014): the *Advancer Event* designed to activate student's prior knowledge and to ensure his involvement in the initial situation; the *Learning Event* that supports the objective to maximize student's topic understanding and is based on a heavily driven approach; the *Reflective Event* designed to support the learner in the reflection process on concepts learned and helping he consolidate the knowledge acquired; the *Assessment Event* able to assess whether the type of cognitive transformation hoped for him has occurred.

By recognizing the knowledge gained by the user in different teaching situations, it is possible to define a series of treatments able to support the student in overcoming the presented shortcomings. *Assessment Events* are in fact the driver of a *dynamic branching* mechanism that allows a re-articulation of the story to recovery found knowledge gaps.

Actually, the defined model supports different "*corrective*" paths that meet specific educational approaches or principles. The alternative routes call the student to take up a new perspective in the story. Coherently with an *interactionist perspective* one accepts the idea of how individuals are able to take certain "views" (e.g., Helper, Hero, Victim, Antagonist, Essay, etc.) during the interaction with the learning resource which, selected randomly, allows learners to experience situations and events with greater responsibility and empathy (Porteous et al., 2010).

Figure 2 shows the flow of events within a modelled situation, based on two teaching iterations. The assessment event that occurs at the end of a situation, allows to obtain a measure of understanding of key concepts through a formative evaluation able to represent a specific goal of knowledge (first iteration). Once you have a score (second iteration) the narrative branches out and suggests to the student different alignment and recovery paths, basing on specific rules defined by the teacher and related to knowledge levels detected by formative tests (Mangione et al., 2011).

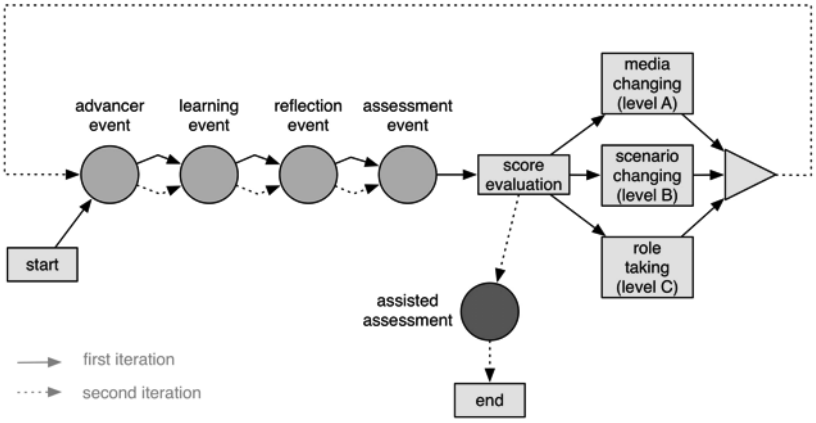

Figure 2. The defined Storytelling teaching flow.

4. THE DEVELOPED PROTOTYPE

In order to build and experiment a *Storytelling Learning Resource* based on the defined model, two software components have been defined and integrated within an existing e-learning environment. Such a learning environment, named *IWT* (*Intelligent Web Teacher*), allows the definition and execution of personalized e-learning experiences tailored to learners' cognitive state and learning preferences (Capuano et al., 2008; Capuano et al., 2011). In particular, defined software components have been obtained as a customization, in the legal domain, of results coming from a previous research initiative oriented to *risk management* (Capuano et al., 2013).

The first component developed is the *Storytelling Editor*. It allows the creation of multimedia resources, the design of story elements, the creation of testing activities and the management of different flows inside the story. It is conceived as a desktop application allowing to select several editing layouts and to support content

editing functions. It enables the authors to make creative contents by integrating multimedia objects such as textbox, images, video and audio as well as to associate interactive behaviours to each object. A table of rules allows to check scores obtained by the learner within each *Assessment Event* and, if the score reach a given threshold, the story flow proceeds to the next situation; otherwise the situation is restarted with different parameters (change of media, change of scenario, change of role) according to the process shown in figure 2.

Figure 3 shows the main interface of the editor. The left pane lists the sequence of situation events while the selected event is displayed in the content pane on the right for editing. The toolbar on top of the window includes editing functions and allows to insert, in the current event, several kinds of multimedia objects. A recording toolbar is also provided on the right to capture live audio and video.

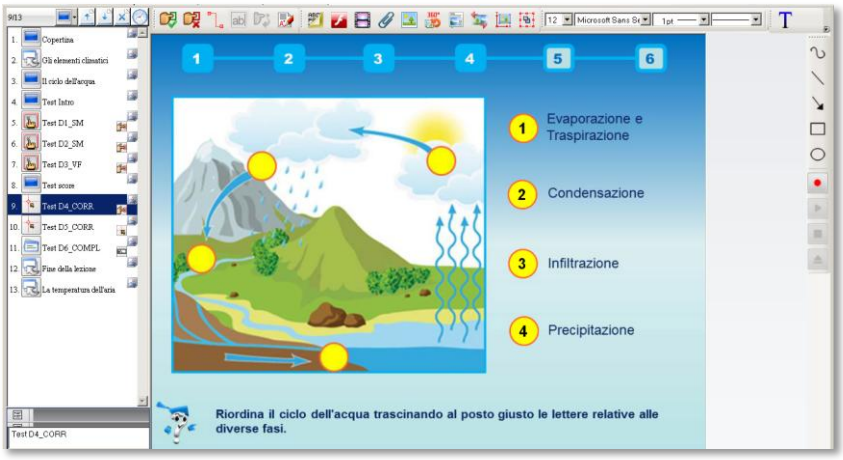

Figure 3. Screenshot of the Storytelling Editor.

The second component is the *Storytelling Player*: a Web application based on *Microsoft Silverlight* that can execute the story according to a designed flow. By interacting with scenes during the story, the learner returns a feedback to the player, while the underlying story engine, basing on them, can reason on the right continuation of the story. Figure 4 shows a screenshot of the storytelling player integrated within the learning environment. On the left pane there is the sequence of situation events while on the right pane the current event is displayed. The learner interacts within the main pane and the flow of events changes accordingly with respect to defined rules.

Figure 4. Screenshot of the Storytelling Player.

ISBN: 978-989-8704-08-5 © 2014

5. AN EXPERIMENTAL STORY

In the context of eJRM, several stories based on the model described in section 3 are currently under development. We present here a first experimental story, covering the topic of mediation in the e-commerce field that we have defined to validate the prototype as well as the underlying model. The didactic objective is articulated into three sub-Objectives: understanding the concept of mediation and situations; understanding the life cycle of mediation and key roles for its correct management; opportunities and possible consequences of mediation. The story flow is graphically depicted in figure 5 while a screenshot of the story within the Storytelling Player is shown in figure 4.

Every situation of the learning resource answers a specific didactic transformation path based on Bloom's taxonomy. The first situation (*Introduction*), presents an *Advancer Event*, where the protagonist, Paola, following numerous commercials of the e-commerce site Orelejo.it broadcast on TV, decided to make her first online purchase, buying a watch with an automatic mechanism. In the *Learning Event*, it is possible to learn key concepts such as methods of concluding contracts online and applicable law discipline, e-payment systems, and personal data protection. The *Reflection Event* clarifies the conclusion of the online contract and finally an *Assessment Event* proposes questions and multiple choice test to understand risks and advantages of online shopping.

The second situation (*Call of Adventure*), in the *Advancer Event*, proposes a scene where Paola receives the clock and, after checked for its proper operation, wears it, and immediately starts using it. Something goes wrong so, only two months after the purchase, the automatic mechanism is blocked. Paola is disappointed and tries to solve the problem by turning the crown for manual charging many times and strongly, but the watch does not work anymore. Paola, not knowing what to do, returns to the website where the purchase was made and reads about the possibility to withdraw from the contract as well as information on product's warranty. The *Learning Event* focuses on concepts of consumer protection, conditions, timing and withdrawal rule exercising procedures, and sale's guarantees. A *Reflection Event* on the importance of consumer protection follows as well as an *Assessment Event* on how to fill the request for product replacement and cases in which you can take advantage of the replacement procedure.

In the third situation (*Problem*), the *Advancer Event*, Paola learns all the needed information that will help her understand that she can make use of a warranty covering her watch purchase. Paola, therefore, communicates the problem to the vendor and requests to have it replaced. After a considerable period of time, the vendor replies communicating to Paola that the company does not intend to replace the watch because, after having analysed the problem, they found the failure to be caused by an incorrect operation made by Paola. She, in fact, in an attempt to unlock the watch, would have forced the watch crown, causing a mechanism fault.

In the seller's opinion, Paola should have immediately asked for a watch replacement, as soon as the problem had occurred, without making any arbitrary attempts. The seller, however, is willing to repair the clock at Paola's expense. Paola does not agree with this solution and insists on her right to replacement. In the *Learning Event*, times and conditions of guarantee are explained as well as the consumer options, including replacement and repair of goods; a price reduction or termination of contract. After a *Reflection Event* on the discipline of guarantee, understanding of the explained concepts is assessed through an *Assessment Event*.

The fourth situation (*Middle*), in the *Advancer Event*, sees Paola contacting a lawyer, who clarifies her that, according to the Legislative Decree no. 28/2010, as recently amended, even if e-commerce is an area not covered by mandatory mediation, there is the option to do so anyhow, trying to avoid arbitration, as well as issues related to it. Paola searches for additional information on the Internet and discovers the existence of eJRM, a system that guides citizens in legal mediation. By this website, Paola does a self-assessment, she shortly describes her case, the system then classifies the case and suggests her to undertake the process of mediation. Through the site, Paola also understands how the mediation is performed and finds similar cases resolved through mediation. The *Learning Event* presents resources that help learn more about the current discipline regulating mediation for civil and commercial disputes, together with the concept of voluntary and mandatory mediation, and key figures in the process of mediation. After a *Reflection Event* on key concepts, the *Assessment Event* requires the student to identify and sort pros and cons of mediation compared to the legal action.

The fifth situation (*Solution*), in the *Advance Event*, introduces the online mediation process and identifies the *expert profile* for similar cases and the preparation of the first meeting. Methods of preparation and presentation of on-line mediation request are detailed during the learning event, and after a *Reflection Event* about managing mediation meetings, a simulation-based *Assessment Event* requires the user to identify the best way to manage a mediation meeting.

In the sixth situation, (*Closing*), the *Advancer Event* shows a virtual room meeting, where the mediator is unable to find a solution between the parties who in the end will go to a trial. The *Learning Event* emphasizes the importance of the mediation process, and after a *Reflection Event*, the user is asked to go through an *Assessment Event* to understand and identify ways of managing an event in order to reach an agreement. In this latter event, in case the learner does not reach a satisfactory score, the system suggests a micro adaptive recovery path where the user is given an alternative scene where through various steps he can achieve a successful mediation. A new facilitated *Assessment Event*, will then test the successful knowledge acquisition.

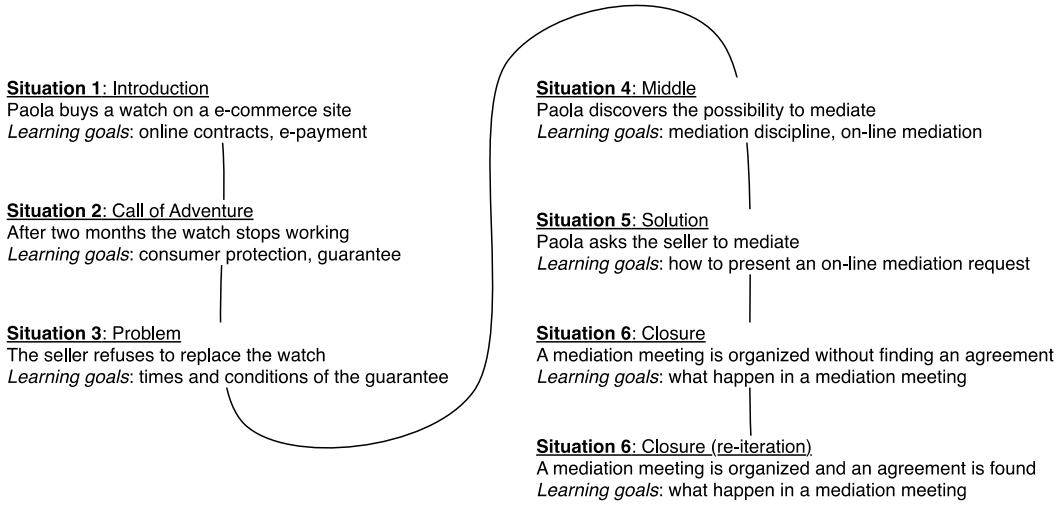

Figure 5. The teaching flow of the experimental story.

6. CONCLUSION

We described in this paper a new learning model, based on narrative pedagogy and storytelling, that integrates dynamic branching facilities allowing re-articulation of the story according to assessed training results. The model has been instantiated in the legal domain to build engaging learning resources about online mediation, targeted to users with limited background on legal topics. A prototype and a sample story have also been defined and developed to provide a first empirical validation of the model. The prototype was shown to a group of teachers expert of legal education and some *trial scenarios* have been simulated.

The results obtained up to now are encouraging and confirm that the storytelling model is capable of building valuable learning resources in the field of legal education. The defined model is able to represent a complex storyboard covering the topic of mediation in e-commerce while the developed prototype is capable of editing and playing multimedia components connected to each story event and situation as well as to model the underlying teaching flow.

The obtained learning resource is a fully interactive didactic element oriented to a real learner centred educational approach and able to provide guidance and to make the reflection easier. The *transmedia* nature of the obtained learning resources allows the creation of an *augmented narrative* that is capable of supporting learners participation and enhancement of concepts and skills.

The work described in this paper is still on-going in the framework of the eJRM project. Additional stories are currently in course of definition together with a complete experimentation and validation plan with real users, involving an Italian mediation entity and a selection of real customers. The validation will follow the *expert-based* approach combined with an *empirical* one. In either cases we will apply an analysis purposed to the verification of both learning results as well as the learner's involvement level.

ACKNOWLEDGEMENT

This work has been partially supported by the project eJRM "*electronic Justice Relationship Management*"[1] in the framework of the *Italian National Operational Program* (ref.: PON01 01286).

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