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An analysis of the SRL potential of *TGS/TES Online Course,* a Technology Enhanced Learning Environment based on the communication platform *Denebola*

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Introduction

The TELE considered in this analysis is an almost completely online course (only a face-toface meeting is planned for the final exam), organized and run by the Foreign Languages and Literatures Department (DISCLIC) of the University of Genoa and addressed to graduated students (for more details, see <u>http://www.farum.unige.it/masterfarum/</u>) in 2005.

The course's objectives are not only the acquisition and development of high level translation abilities, in particular as concerns the juridical field (TGS) and the economic field (TES), but also familiarization with technological tools and collaborative working method. The total length of the course is 24 weeks. Within the course the students work both collaboratively, by facing tasks in groups, and individually, dealing with translations and textual reviews, and they are provided with the possibility to deepen some topics related to their field of interest, such as law or economics.

The TELE is based on **the Denebola communication platform**, which has been configured by the designers by taking into account needs and specific issues arisen from the previous editions of the course. The platform is based on PHP/MySQL technology, the most widespread scripting technology used to product applications for the web and characterized by a *modular* nature^{1.} The prototype of this application, which has been definitively tested during the course, showed a good functioning without the need of maintenance interventions. The main functions of this platform are the following:

- the *notice board*, which can be defined the heart of the environment. It is the starting point of the environment for the user and it is organized in three columns reporting deadlines, notices and data from a personal agenda for each user. It features a structure which allows the user to visualize information rapidly and in as little space as possible;

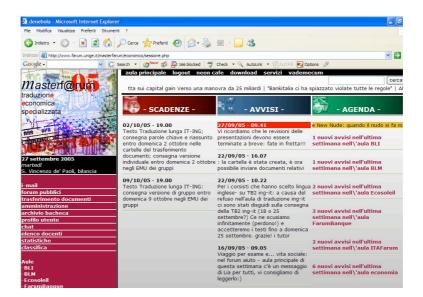


Fig. 1 The notice board with the deadlines, notices and agenda columns

¹ The *modularity* is one of the main issues in the debates on platform for distance learning, see for instance <u>http://www.fabbricadigitale.it/attivita/elearning-offertaAsincrono.html</u>

- the *forum*, considered by the designers the central pivot of the platform, has an open, chronological and lasting in time nature. In the platform the forum has a classic tree-structure which allows to organize messages by thread;
- the *MultiUsers function*, which allows the students to carry out a group work in a collaborative way. Using this function it is possible to download from the environment a document, to modify it and add some comments and finally upload the new version of the file;
- the *Transfer Document function* which allows a rapid and safe documents' exchange between teacher and students.

As regards the configuration of the course, key points in its design were the following:

- strong interactivity;
- particular attention to the tutoring style;
- inclusion of situated simulations (role-playing);
- flexibility within a well structured program.

We decided to analyse this TELE as for its support to Self Regulated Learning (SRL) since we think that the **relationship between self regulation and online learning** is a complex and interesting matter. On the one hand Computer Supported Collaborative Learning requires a high degree of autonomy and self-regulation, while on the other hand, the socioconstructivist approach that underlies most online education initiatives entails a strong dependency of learners from each others and from the tutors' moderating and coordinating actions.

In order to analyse the SRL potential of this environment, we used as evaluation tool a questionnaire developed within the European project TELEPEERS², aiming to evaluate, *a priori*, the support to SRL granted by Technology-Enhanced Learning Environments (TELEs). This evaluation tool is freely downloadable from the web site http://www.lmi.ub.es/taconet/.

This evaluation was carried out in collaboration by one of the designer of the TELE and two researchers of ITD CNR involved in the TELEPEERS project; its results, summarized in part C of this document, will be taken into account for implementing a better version of the course in the next academic year as regards SRL support.

In the last section of this report some observations on the use of the evaluation tool by the TELE's designer are reported.

² "Self-regulated Learning in Technology Enhanced Learning Environments at University Level: a Peer Review", Grant agreement 2003-4710-/001-001 EDU-ELEARN, http://www.lmi.ub.es/telepeers/

This work was carried out by applying an analysis tool developed in the project "Selfregulated Learning in Technology Enhanced Learning Environments at University Level: a Peer Review" (TELEPEERS)". The project is being carried out with the support of the European Commission (Grant agreement 2003-4710-/001-001 EDU-ELEARN). The content of this project does not necessarily reflect the position of the European Commission, nor does it involve any responsibility on the part of the European Commission.

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Part A: Description of TELE

Name and short description of TELE	(please describe shortly what you consider part of this TELE, i.e. software used, configuration, use made of it, agents involved, etc).	
	Master in low and economic translation between Italian and French/English	
Institution where it is in use	Pe University of Genoa, Foreign Languages and Literatures Departmer (DISCLIC)	
Objective of TELE	to provide abilities in the field of specialized translation.	
Educational model	Co-operative, interactive, continuous tutoring	
Mode of delivery	distance, final exam at the University.	
Places of learning	distance, everywhere	
Context	The course is addressed to people already holding a degree in Foreign languages (French or English)	
Level of interactivity	(please mark with X the appropriate item) No interactivity Interactivity with TELE X Interactivity with tutor X Interactivity with peers X	
Technological	(please mark with X the appropriate item)	
component	Commercial In house built X Open source	
Technical requirements for technological component	equirements Standard equipment on both server and client side or technological component	
Importance of technology for TELE	(please mark with X the appropriate level) Low importance 0 1 2 3 4 5 High importance	
Accompanying documentation	(please mark with X the appropriate item) User's handbook (printed or in electronic form) for teachers User's handbook (printed or in electronic form) for students Tutorial Guidelines Help function All information necessary for its use are in a <i>vademecum</i> available at http://www.farum.unige.it/masterfarum/vademecumeco/index.php?op=programma	

Transferability (Portability)	Costs Language Legal aspects Technical aspects (see technical requirements)
Name and institution of person who filled in the PRET	you, e.g. "High-school Teacher in mathematics, Italy")

Part B: Detailed evaluation of support for self-regulated learning

Planning

Cognitive aspects

- 1 The TELE helps the learner to structure the learning content. Not supported 0 1 2 3 4 5 well supported
- 2 The TELE has an easy and intuitive interface. Not supported 0 1 2 3 4 5 well supported See vademecum http://www.farum.unige.it/masterfarum/vademecumeco/index.php?op=programma
- 3 The TELE records a history of learner activities. Not supported 0 1 2 3 4 5 well supported Lessons archive / file transfer / search tool / sent mail...
- 4 The TELE allows the student to plan her/his learning with the help of activity plans, personal development plans, progress reports etc. Not supported 0 1 2 3 4 5 well supported

The workflow is directed by the teaching staff...

- 5 The TELE provides the student with the opportunity to choose between different modules. Not supported 0 1 2 3 4 5 well supported
- 6 The TELE provides the student with the opportunity to choose between different learning paths. Not supported 0 1 2 3 4 5 well supported
- 7 The TELE provides the student with the opportunity to choose between different modes of delivery. Not supported 0 1 2 3 4 5 well supported

Motivational aspects

- 8 The TELE is likely to arouse the learner's interest. Not supported 0 1 2 3 4 5 well supported
- 9 The TELE allows each student to partially personalize the interface used in the environment. Not supported 0 1 2 3 4 5 well supported
- 10
 The TELE eases the student's becoming aware of personal learning goals. Not supported 0 1 2 3 4 5 well supported

The activities are organized through a role-play game.

- 11 The TELE helps the learner plan her/his activities by pointing out to her/him external resources (websites, help options) available. Not supported 0 1 2 3 4 5 well supported
- 12 The TELE reminds the learner of her/his own knowledge and skills relevant to the task at hand. Not supported 0 1 2 3 4 5 well supported

Through the class portfolio and discussion on the translation in the working groups

13 The TELE sensitises the learner with respect to how problems might be solved. Not supported 0 1 2 3 4 5 well supported

This is done, from the technical -methodological point of view, by the vademecum, by tutors and teachers as concerns content knowledge (see group/class portfolio)

 14
 There are explicit mechanisms in the TELE to encourage the learner to tackle tasks.

 Not supported
 0
 1
 2
 3
 4
 5
 well supported

In the main page, there is a remainder of the deadlines and currents tasks.

15There are implicit mechanisms in the TELE to encourage the learner to tackle
tasks.
Not supported 0 1 2 3 4 5 well supported

Done through the fora and tutors' interventions.

Emotional aspects

16

The TELE helps the learner to cope with the challenges of the task. Not supported 0 1 2 3 4 5 well supported

The tutors are on line every working day all day; the vademecum is very rich and clear.

- 17 The TELE may be adapted to reach a congruence between the learner's level of competence and the level of difficulty of the task. Not supported 0 1 2 3 4 5 well supported The complete course program is obligatory for all
- 18
 The TELE is organised in such a way that the learner is likely to enjoy working in it.

 Not supported
 0
 1
 2
 3
 4
 5
 well supported

There are several playful activities and also a recreation area (Neon café)

Social aspects

19

The TELE offers the possibility to set up both public and private communication. Not supported 0 1 2 3 4 5 well supported 20 The TELE provides the learner with the opportunity to negotiate with her/his tutor/instructor how to organise her/his work. Not supported 0 1 2 3 4 5 well supported

The organization of the practical work is negotiated within each group, but the work to be done is fixed, decided by the teachers and the same for all groups.

21 The TELE allows the learner to work together / communicate with her/his peers. Not supported 0 1 2 3 4 5 well supported

(2) Executing and monitoring

Cognitive aspects

22 The TELE allows the user to make decisions on how to proceed. Not supported 0 1 2 3 4 5 well supported

The course is pre-organized, tasks and deadlines can not be discussed or changed, but each group organizes autonomously the work within the group

- 23 The TELE leads the learner to reflect on her/his own problem solving activities. Not supported 0 1 2 3 4 5 well supported
- 24 The TELE provides the user with the possibility to find out to what extent she/he is achieving her/his learning goals. Not supported 0 1 2 3 4 5 well supported

 See homework corrections, classification of works done from the best to the worst
- The TELE allows the learner to switch to another learning strategy if necessary.
 Not supported 0 1 2 3 4 5 well supported

Motivational aspects

- 26 The TELE helps the learner to maintain her/his motivation. Not supported 0 1 2 3 4 5 well supported The motivation is kept up through continuous interactions with the staff
- 27 The TELE provides help facilities that aim at strengthening the learner's perseverance in case of failure. Not supported 0 1 2 3 4 5 well supported

It relies on tutors, peers and the constructive correction style

Emotional aspects

28 The TELE provides the user with formative feedback that facilitates the maintenance of a positive working attitude. Not supported 0 1 2 3 4 5 well supported

The homework correction contains hints and subject information.

29 The TELE provides the user with formative feedback that intervenes at critical points in the learning cycle in order to restore a positive working attitude. Not supported 0 1 2 3 4 5 well supported

Teachers and tutor are always available to explain errors and give suggestions.

Social aspects

- 30 The TELE allows the user to contact and receive help from her/his tutor/instructor. Not supported 0 1 2 3 4 5 well supported
- 31 The TELE provides the user with the opportunity to communicate with her/his peers in order to exchange ideas or to ask for help. Not supported 0 1 2 3 4 5 well supported
- 32 The TELE provides the user with possibilities to collaborate with her/his peers. Not supported 0 1 2 3 4 5 well supported

(3) Evaluation

Cognitive aspects

33	The TELE helps the user to reflect on her/his learning progress. Not supported 0 1 2 3 4 5 well supported
	Indirectly supported through discussion
34	The TELE encourages the learner to compare her/his present state with the state she/he wanted to be in.
	Not supported 0 1 2 3 4 5 well supported
	Indirectly supported.
35	The TELE provides the learner with the means to assess her/his own achievements.
	Not supported 0 1 2 3 4 5 well supported
36	The TELE allows the student to select the achievements to be assessed. Not supported 0 1 2 3 4 5 well supported
37	The TELE allows the student to select the competencies to be assessed. Not supported 0 1 2 3 4 5 well supported

Motivational aspects

38

The TELE provides the learner with feed-back that leads to appropriate selfefficacy beliefs.

Not supported 0 1 2 3 4 5 well supported

Tutoring and teaching activities (discussions and corrections...)

Emotional aspects

39

The TELE provides the learner with appropriate feedback on her/his achievements and on the amount of work done. Not supported 0 1 2 3 4 5 well supported

Implicit

Social aspects

40	The TELE provides the learner with the opportunity to compare her/his results with that of a tutor/instructor Not supported 0 1 2 3 4 5 well supported
41	The TELE allows the learner to discuss her/his results with her/his tutor/instructor Not supported 0 1 2 3 4 5 well supported
42	The TELE provides the learner with the opportunity to compare her/his results with those of her/his peers. Not supported 0 1 2 3 4 5 well supported
	For the moment this opportunity is available only within the group/classroom
43	The TELE allows the learner to discuss his/her results with her/his peers. Not supported $0 \ 1 \ 2 \ 3 \ 4 \ 5$ well supported

43 The TELE allows the learner to discuss his/her results with her/his peer Not supported 0 1 2 3 4 5 well supported There's not a space specifically intended for this

Part C: Summary evaluation of support for self-regulated learning

General impressions on the TELE obtained from compilation of part B

The introduction of ICT in education can have different meanings, potentialities and goals. As regards this TELE, it is clear that the use of electronic means is mainly intended to achieve the goals of a standard course, overcoming physical and chronological distance. In order to succeed in this, different strategies have been worked out such as to alter the traditional process of teaching and learning. SRL support, on the contrary, is mainly related with the active involvement of the student in the elaboration of the activities, which is not an actual feature of the platform used for this TELE, though some of its aspects are addressed.

Nevertheless, it must be noted that the platform offers many opportunities for communication, discussion and cooperation among students and between students and teachers, as some of the positive scores in social and emotional aspects clearly show.

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Part C:	Global evaluation of support for self-regulated learning
Evaluation of	(1) Planning
support of self- regulated learning	<i>Cognitive aspects</i> Not supported 0 1 2 3 4 5 well supported
	<i>Motivational aspects</i> Not supported 0 1 2 3 4 5 well supported
	<i>Emotional aspects</i> Not supported 0 1 2 3 4 5 well supported
	Social aspects Not supported 0 1 2 3 4 5 well supported
	(2) Execution and monitoring
	Cognitive aspects Not supported 0 1 2 3 4 5 well supported
	<i>Motivational aspects</i> Not supported 0 1 2 3 4 5 well supported
	Emotional aspects Not supported 0 1 2 3 4 5 well supported
	Social aspects Not supported 0 1 2 3 4 5 well supported
	(3) Evaluation
	Cognitive aspects Not supported 0 1 2 3 4 5 well supported
	<i>Motivational aspects</i> Not supported 0 1 2 3 4 5 well supported
	<i>Emotional aspects</i> Not supported 0 1 2 3 4 5 well supported
	Social aspects _ Not supported 0 1 2 3 4 5 well supported

Thematic summaries:

Planning	poorly supported 0 1 2 3 4 5 well supported
Execution and monitoring	poorly supported 0 1 2 3 4 5 well supported
Evaluation	poorly supported 0 1 2 3 4 5 well supported
Cognitive aspects	Not supported 0 1 2 3 4 5 well supported
Motivational aspects	Not supported 0 1 2 3 4 5 well supported
Emotional aspects	Not supported 0 1 2 3 4 5 well supported
Social aspects	Not supported 0 1 2 3 4 5 well supported
Overall evaluation of support for SRL	Low support 0 1 2 3 4 5 High support
Evaluation of explicitness	Support implicit 0 1 2 3 4 5 Support explicit

Factors that contribute to the strength of the TELE

The foremost feature of the TELE is surely its deep attention towards information and data retrieval, communication and cooperation. Through a system of data filters and key word search, personal and general information can be easily and rapidly obtained. The good results of the TELE are due to its strength in the social and emotional aspects.

Factors that represent weaknesses of the TELE

As regards the aims of this tool, it must be made clear that the TELE is not explicitly addressing self regulated learning, though some of its feature are aimed at strengthening the students ability to chose and evaluate web-based resources and some aspects of the learning activity, being strongly cooperative, imply a certain quantity of group self regulation. This results in a general weakness of the aspects related to active involvement of the student in the planning and/or evaluation of the learning activity.

Suggestions for improving the TELE

Though the TELE is not explicitly intended for fostering SRL, self regulation can obviously be a great chance to improve it or some of its aspects, both from a technical and an educational point of view. If, for instance, aspects related to the possibility to interact with the teacher to determine part of the teaching/learning process do not appear to fit with the TELE, those concerned with the interaction among students or with various feedback actions can surely be of interest.

Observations on the evaluation experience, by Simone Torsani

Even though this is a tool for analysing and evaluating in a system only parameters which are in relation with SRL, it has nevertheless resulted useful with this TELE (which is not designed having in mind support to self regulation of learning, hence not explicitly including some SRL parameters).

In my opinion, the evaluation made resulted stimulating from different points of view, as concerns both testing the usefulness of the functions present in the environment and suggesting new ones. I appreciated the possibility of evaluating, even though only for some aspects, the course in its main elements, its functional structure and its implementation through the application.

The evaluation, pointing out the weaknesses of the TELE as for SRL, suggested to us to find new modalities to implement the functions which will allow, in the future, to improve some aspects related to SRL.

Since this TELE is a distance course not explicitly oriented to self regulation of learning, several aspects of the course do not correspond to the features taken into consideration by the questions of the evaluation tool and in filling in the questionnaire we had to evaluate them as *Not supported*.

As concerns the platform features which are considered by the evaluation tool, the score is quite high. This is due, in my opinion, to the many possibilities of communication within the environment.

The platform, according to the needs and objectives of the course, presents several spaces devoted to the interpersonal communication (chat, forum, internal mail), besides being based on a communication system aiming to simplify passive communication. The evaluation showed a greater potential to support SRL of the TELE in the Execution and monitoring phase, while results to have some weakness in the Evaluation phase, where only the social aspects are quite high.