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Using Pedagogic Scenarios to Optimize Pluri-Media Resources: The Contribution of the *Scenistic Approach* to Designing Skills-Based Learning Tasks

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1. Introduction

Faced with a fast changing society, the need to develop versatile instructional materials to update the professional skills of experienced practitioners, be they those of teachers or sales assistants, has become a major necessity. Long gone are the days when the creation of such training¹ material happened within the hallowed halls of specialized educational institutions. Instead, a more client-driven approach to professional training has led many educationalists to look at how the reality of the work place (office, factory floor, classroom) and available resources, notably information technology (IT), can contribute to the learning process. It is in this context that we will outline the framework of how a series of instructional fragments for a Digital Versatile Disc (DVD)-video, *Voilà Madame*, was created by systematically harnessing the resources of pedagogues, learners and management.

The value of this project for teacher trainers and instructional material-makers lies in the possibility of transferring the operational framework of this project to other contexts where a premium is put on helping professionals in the field (e.g. classroom teachers) to be more aware of their verbal and non-verbal behaviors. This is of particular interest to those working in the fields associated with communication sciences (e.g. face-to-face interaction, verbal & nonverbal communication) and the linguistic field of pragmatics², for example in the teaching of English/French/etc. as a professional language.

First, in Section 2, we describe the framework for analyzing the needs of the training context and its practical implications. This is followed in Section 3, by an explanation of the five-step *Scenistic Approach* with its *diagnosis*, *scenario*, *scenation*, *scenic* and *setting up the situation* phases in terms of the overall structure of a training DVD-video, called *Voilà Madame*, and its role vis-à-vis other teaching tools, like those of IT. Finally, in Section 4, we present a discussion of the pedagogic implications of our approach.

2. Analysis of the instructional needs

In this particular context, the analysis of the instructional needs can be summarized in three basic questions: (1) Who are the immediate stakeholders³? (2) What are their expressed needs and wants? and (3) What are the desired outcomes? The answers to these questions provide a basis for establishing the parameters of the instructional context and the ensuing “pedagogic scenario”.

2.1 Who were the immediate stakeholders? The principal direct stakeholder was a regional human resources director in charge of supervising and distributing new instructional materials to all the managers of one of France’s major chain stores in the region of *Nord/Pas de Calais*. Other significant stakeholders were: the managers of each of

¹ Definition: “Training” in this context implies a “planned process to modify attitude, knowledge, or skill behaviour through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future needs of the organisation” (Manpower Services Commission, UK, 1981) Lesson 11, *B.A (Hons.) Business Studies*. Bolton Institute, UK cf. http://www.bolton.ac.uk/campus/business/babus/humanresource/restricted/hrm_lesson11/hrm_lesson11.html (Retrieved 9.12.2001). The Welsh concept of *hyfforddi* (to train) offers the complementary notion of “making the way flexible” for the learner, as opposed to *addysgu* (to educate, to instruct) based on the Latin notion of *scala*, (ladder, “a climbing device”).

² Definition: By linguistic *pragmatics* is meant the study of meaning and language use that is dependent on the interrelationships of the speaker, the addressee, and other features of the context of utterance that influence both the means of expression and the interpretation made of an utterance cf. <http://www.ling.gu.se/~biljana/st1-97/pragmlect1.html> (retrieved 7.12.2001).

³ Definition: A *stakeholder* represents groups of people or individuals that can have an influence, in this case, on the training needs. Researchers R. Oudman, A.M. Vos, and J. Biesboer review various methods of “Stakeholder Analysis” at <http://panoramix.univ-paris1.fr/CRINFO/dmrg/MEE98/misop001/> (retrieved 27.10.2001).

the different chain stores of this northern region of France on the border of Belgium; the company's trainers and; the sales assistants as the end-users of the instructional material.

2.2 What were the stakeholders' expressed needs and wants? The issue to be addressed was the upgrading of sales assistants' professional skills by regular and varied in-house training sessions. This meant that new instructional material had to be versatile, so that it could be used both in a traditional, face-to-face instruction, as well as for personal self-study. Furthermore, the technology to be used had to be that which already existed in the work place i.e. VHS videotapes, paper-based documents and email. Interactive multimedia resources, like the DVD-ROM, were excluded because it meant buying new equipment (e.g. multimedia computers) that would exceed the training budget.

2.3 What were the desired outcomes? The essential objective was to show sales assistants how to adapt their verbal and non-verbal behavior to the needs of customers. This was to be done by helping the employees to better understand company policy in dealing with customers. In this context, the instructional material had to help learners become more efficient in their sales techniques by focusing on practical problems that customers encounter at the stores.

3. Scenistic Approach

The principle of the *Scenistic Approach* (Leleu-Merviel 1996) is to provide a framework of scripting a series of "events" in a way that it ensures overall coherence and transparency in the design process. The technique has five major steps: (1) the diagnosis, (2) the scenario, (3) the scenation, (4) the scenic, and (5) the setting up of the situation.

3.1 Diagnosis: This involves everything that belongs to the imagined/proposed setting of the document as expressed through the (lesson) content. This includes taking stock of, for example, the different educational paradigms and approaches (cf. LABOUR *et al.* 2001) that could be used to achieve the objectives identified in the analysis of the instructional context.

In this case, it was decided to use a self-monitoring approach to problem-based learning, centered on skills-reinforcing tasks. This meant that learners would be systematically encouraged to first identify possible dysfunctions in the scenes presented to them, followed by choosing the appropriate solution to remedy the situation. In this way, learners, some of whom have up to 25 years experience in their job, would be called upon to use their existing knowledge to critically reflect on familiar professional situations. It was hoped that by using such a constructivist inspired approach (cf. Jonassen *et al.* 1999) new knowledge would graft itself onto existing knowledge structures.

One of the practical consequences of reflecting on the diagnosis, led to one of the pedagogue-designers of the production team to go on a three-day training course with one of the company's sales teams. This permitted the team to have a more direct understanding of learners' pedagogic needs.

3.2 Scenario: The scenario represents a deliberately thought-out text that has a storyline (closely associated to a series of meaningful events), details of the author's intention, a projected target audience, and a message. In so doing, it constructs the narrative and represents the « story » as it unfolds. In this way, the scenario provides a guide to subsequent choices concerning the production of the document.

The 23-page scenario of the project, called "*Voilà Madame*"⁴, was based on notes taken during the three-day training course, and from interviews with sales assistants, heads of departments and management of the company. This led to some major modifications in what the client wanted, notably not to limit the training to VHS videotapes but to also use the DVD-video⁵, which was not too expensive and offered, for example, more "interactivity"⁶ than videotapes. For the sake of economy, we cannot present the original scenario in any detail, except to say that it has 18 specially written scenes with a playing time of 22 minutes. (A more complete picture of the details of such a pluri-media scenario can be found in a recent paper presented by Labour & Benoit 2001).

⁴ According to Scene 10 of the scenario, the term *voilà Madame* ("Here you are Madam") said as a farewell phrase to a client is to be avoided. When concluding a conversation with a client, one must say *Au revoir, Madame* (Goodbye, Madam) and not, as in this scene, *voilà Madame*, a term used to indicate the handing over of a requested object to someone.

⁵ The DVD-video, made available in the USA in 1997, can store over two hours of video on one layer of the disc. Compared to a VHS videotape, the DVD-video can make seamless skips from one scene to the next in the sequence chosen by the viewer without waiting while the tape goes backwards or forwards. Commentaries, subtitles, alternate endings and additional language tracks can also be added onto a DVD, which offers a high quality picture and sound quality and can scan, pause and chapter access, and as a laser reads the DVD there is no wear and tear, or loss of fidelity over time.

⁶ Definition: By *interactivity* is meant the possibility of action-reaction choices that the system gives to users (cf. LABOUR 2001, p33, 37-44).

In broad terms, after learners have viewed an appropriate narrative fiction recorded on the DVD-video, a series of face-to-face skills-based training tasks can be done on a particular point, for example, in weekly workshops. In this context the observation sheet for Scene 1 (Figure 2), translated from French, shows the pedagogic approach provided for by the scenario. After observing the scene on the DVD-video as many times as necessary, the learner is asked to identify recommended behavior (“Positive points”) from dysfunctional behaviors (“Negative Points”, “Problems related to manners or behavior”). Finally, some “points of reflection and development” are suggested for further discussion on-line (e.g. by e-mail) or off-line, or for self-study.

The DVD-video is thus only one aspect of a pluri-media learning package (Figure 1).

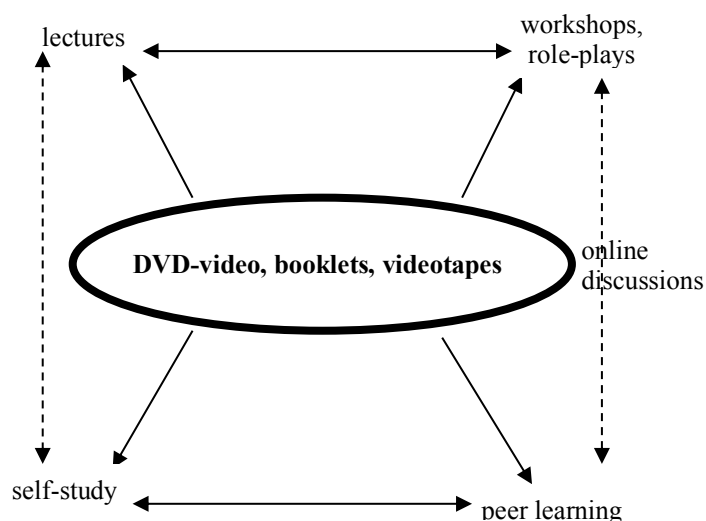


Figure 1: A skills based training scheme

Scene 1: Prologue and answering the telephone	
Length: 1 minute 30	
Start mark: 1mn20. Stop mark 2mn53	
Staff concerned: all	
☺ Positive points	
PQ1	The person picks up the telephone after the 4th ring (or after the 3rd ring).
PG3	The person is not chewing gum.
PQ6	The waiting time is less than 30 seconds.
⊗ Negative points	
PQ2	The person does not mention the company's name.
PG2	The person does not mention the name of the store where s/he works.
PQ2,7	The person does not say "Good morning".
PQ2,7	The person does not present him/herself with his/her first name.
PQ7	The person does not indicate in which department s/he works.
PQ3	The person replies in a muffled voice without articulating.
PQ4	The person does not reply to the client's question.
PQ4	The person does not connect the person to the correct department.
PQ8	The person replies in a disagreeable way, making it clear to the client that s/he is tedious.
PQ5,9	The person does not say "Goodbye Madam" at the end of conversation.
PQ5,9	The person does not add a friendly word, nor a polite one at the end of the conversation.
✂ Problems related to manners or behavior	
<ul style="list-style-type: none"> • The person interrupts the client while s/he is speaking. • The person asks the client to call back later. • The person hangs up on the client. 	
☞ To go further, points of reflection and development	
<ul style="list-style-type: none"> • The person justifies him/herself by mentioning the problems in the store: "I am alone". How could the person have avoided this situation? • The person gives a negative image: "I don't know". What should the person have said? • One should never ask a client to call back. What should one do? 	

Figure 2: An observation sheet for *Voilà Madame*

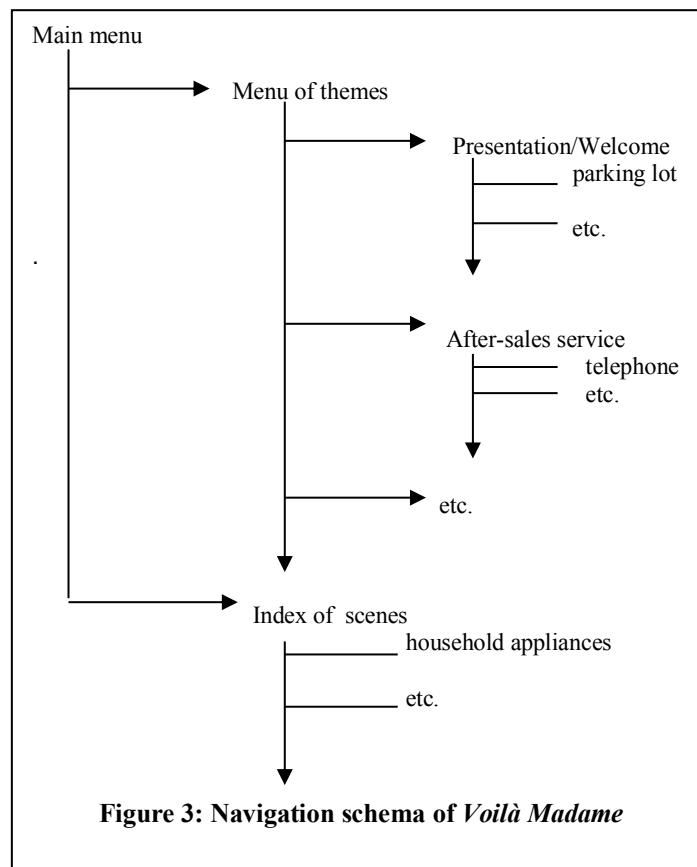
3.3 Scenation: The scenation is the text that organizes the events or states, taken from the scenario, as *operationally* interacting elements. It can be equated as the routes that learners could take. The scenation is comparable to the text of a play “on paper” but it is not the theatrical performance itself.

To make maximum use of the video document the objective was to provide a set of meaningful units that would facilitate an intuitive navigation of the document for learners and trainers. But, the essentially linear format of the video documents provides a limited amount of interactivity, so users of the DVD-video could only access the scenes via a *Menu of themes*, or an *Index of scenes* (figure 3). The *Menu of themes* contains a series of sub-themes/contexts of everyday situations (e.g. in the parking lot) and is aimed more at learners. Whereas, the *Index of scenes* is directed more at instructors who wish to present a teaching sequence around certain objects (e.g. household appliances).

3.4 Scenic: The scenic transposes the scenation into concrete, hands on reality. It is at this stage that one makes aesthetic and logistic choices within the limits of the practical and financial constraints, conditions of usage, etc. (see Section 2 above). This includes the choice of the medium for a given fragment taken from the structure of the scenation (e.g. text, sound, or both together) in order to facilitate the acquisition of knowledge.

In this case, the colors of the company were chosen as the guiding color scheme to present the interactive pages of the DVD-video. Blue, pink, yellow, green and orange hues were added to identify the five different themes in order to facilitate user-navigation and to make the document more attractive.

The choice was confirmed to use the DVD-video in order to maximize the use of the pedagogic material, even if ideally a DVD-ROM, with greater potential for interactivity, would have been preferable.



3.5 Setting up the situation: This final phase defines the practical ways that the user can in fact access the (video) fragments of the document via user-functions. On a computer, this could be a button, an icon, a joystick, and/or a mouse-click.

In the case of a DVD-video one of the main user-functions is the *remote control box*. Unlike, for example, the “mouse” of a DVD-ROM, the remote control box does not provide an on-screen pointer to facilitate non-sequential navigation in the document. The challenge of the DVD-video and its remote control box is then the danger of potentially laborious linear and sequential navigation.

Taking into account the factor of limited navigation possibilities, 15 icons were created to help learners go through the document efficiently. In this way, the relatively few interactive possibilities of the DVD-video format could be put to profitable use.

In order to get maximum use of the specially written scenes, a 25-page booklet was also made for learners, and a separate one for trainers to help them use the material pedagogically. This was linked to more general guidelines concerning the different skill-based learning tasks possible that could be done online and offline with the DVD-video (Figure 1).

4. Discussion

Without taking the details of his observations too literally, Treicher (1967) reminds us in his book, *Are you Missing the Boat in Training Aids? Audio-Visual Communications*, that most people “learn” (retain) 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they both see and hear, 70% of what they discuss with people whose opinions they value, 80% of what they personally experience, and 90% of what they teach other people. In short, a training program should go beyond providing teaching aids that learners can both “see and

hear”. The pedagogic scenario of instructional materials needs also to focus on the human interactional elements of learning to include meaningful “discussions”, transforming inputs into “personal (pedagogic) experiences”, and “teaching” other people (e.g. peer learning). In this light, the video/film format offers some specific advantages, as highlights the film historian Turner.

... (with) the abandonment of the idea that there was a core of meaning in a film which the audience had to discover. Meanings are seen as the products of an audience’s reading rather than as an essential property of the film text itself. Audiences make films mean: they don’t merely recognize the meanings already secreted in them (Turner 1988:121).

A training scenario should then, for example, get learners to discuss how they saw a scene and how this relates to their personal experience and its future implications for them. It is in such domains that network-based technology like the Internet (with its discussion forums, chats, emails, etc.) can facilitate learning by communicating with different people. That said IT, like Internet, is not in itself pedagogic. What makes these tools so, is the appropriateness of what is put in them (content) and how this is done, hence the need for operational frameworks such as the *Scenistic Approach* and other related ones (e.g. Laubin 2002) aimed at making optimal use of the content.

5. Conclusion

In this paper we hope to have taken a step towards reconciling the design process with the need for accountability and transparency in presenting the *Scenistic Approach* as a working framework for designing teaching resources. The flexibility of this approach makes it transposable to other teaching contexts in schools and universities seeking to prepare learners for real-life situations.

The originality of this work and its relevance to IT-based training lays in its attempt to optimize the use of a single visual and audio recording in adopting a pluri-media approach to instruction. A lack of space has not permitted us to present fully the scenario, save to say that such a scenario can be complex and needs careful and systematic planning and team work, hence the need for a transparent operational framework like the *Scenistic Approach*.

Finally, it is our contention that the *Scenistic Approach* can allow an economy of scale, and of time and effort in optimizing available resources for maximum efficiency. This is a crucial factor, as it is our working hypothesis that the more teachers see how their IT-based creations can be optimized, the more they are likely to use IT in their everyday practice.

Abstract

One of the challenges of lifelong education is creating instructional materials to encourage adults to renew what they feel they already know. This is especially true, in the field of professional training, with experienced practitioners and where information technology often plays an important role. Using a *Scenistic Approach* to plan a series of teacher-led and self-access “lessons”, specially written video sequences were reused in various ways so as to optimize the time and effort of material makers. This included making access to the content matter more attractive and more varied so that learners can acquire knowledge in their own way. To do this a series of hybrid pedagogic techniques was used, which included traditional lectures, role-plays, a self-study video, a DVD-video and learning *via* an electronic network.

References

- Jonassen, D.H., Peck, K. L., & Wilson, B.G. (1999). *Learning with Technology: A Constructivist Perspective*. New Jersey: Merrill/McGraw-Hill.
- Labour M., Verclytte, L., Vieville, N. and Leleu-Merviel, S. (2001). Scripting a lesson: a Method to assist the designing of personalized learning environments. *SITE 2001*. Orlando, FL, USA.
- Labour, M. & Benoit, W. (2001). Scripting Pluri-Media Lessons: a case study of designing personalised learning tracks. *EuroCall (European Computer Assisted Language Learning)*. Nijmen, Netherlands. 29 August-1 Septembre.
- Labour, M. (2001). Social constructivism and CALL: Evaluating some interactive features of network-based authoring tools. *ReCALL (Journal of European Computer Assisted Language Learning)*. C.U.P. 13(1), 32-46.
- Laubin, J-M. (2002). Teaching multimedia design using the “tri-component” scenario model and associated methods. *SITE*, Nashville, Tennessee, USA
- Leleu-Merviel S. (1996). *La Scénistique : méthodologie pour la conception de documents en media multiples suivant une approche qualité*. Unpublished post-doctorate thesis. Université de Paris VIII, France.
- Treicher, D.G. (1967). *Are you Missing the Boat in Training Aids? Audio-Visual Communications*. New York: United Business Publications.
- Turner, G. (1988) *Film as a Social Practice*. London: Routledge.