THE 8 LEARNING EVENTS MODEL (8LEM):
A PEDAGGIC CONCEPTUAL FRAMEWORK FOR THE DESIGN OF DEDICATED (AND GENERIC?) SCENARIOS

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ABSTRACT
LabSET (Support Laboratory for Telematic Learning) – ULg (University of Liège) developed, in close collaboration with higher education teachers willing to "go online", more than 100 distance courses, representing a large spectrum of disciplines and a wide range of teaching/learning objectives, methods and challenges. For those courses, LabSET used the "8 Learning Events Model" (Leclercq & Poumay, 2005) as its pedagogic reference framework and a starting point in decision making about instructional design. In the context of the iClass European project, our institution undertook research work intended to fix whether the 8LEM, employed so far for initiating and facilitating the design of dedicated units of learning, could guide the creation of generic pedagogic scenarios, i.e. scenarios stripped of their situated features and, therefore, more likely to be reused. This article presents this work-in-progress and the reference model it flows from.

KEYWORDS
Learning paradigms, pedagogic scenarios, reusability, patterns, personalization

1. INTRODUCTION
Partner of the iClass European project (http://www.iclass.info), LabSET (ULg) has the responsibility to derive, from a coherent theoretical framework called the 8LEM (the "8 Learning Events Model"), types of scenarios covering multiple approaches, from the most instructivist ones to socio-constructivists and recent approaches developing meta-cognitive competences. So far, the 8LEM was being used as a conceptual "tool-kit" facilitating the production of learner-centred and pedagogically-grounded concrete learning designs. The research work conducted within the iClass context tests the model's potential in producing generic reusable scenarios. This effort intersects with highly debated current issues as reusability conditions, learning objects (de-)contextualization and (re-)purpose, patterns of learning identification, "teacher-friendly" representation of what a unit of learning is composed of, selection of learning designs appropriate for particular objectives, profiles, preferences…
2. 20 ACTIVITY STRUCTURES UNDER A MICROSCOPE

The quest for such generic pedagogical scenarios started from the learning design of 20 existing units of learning developed by our institution. A "unit of learning provides an organized series of learning events for learners, satisfying one or more interrelated learning objectives". This definition proposed by Koper (2003) is worth for the work presented here, with one nuance: having decided to take the 8 Learning Events Model as our reference, we restrain the number of "possible learning events" to eight (see the description of the model in the second part of this article). It means that the 20 selected UoLs (available in a still rough format from the research website http://www.labset.net/projets/iclass), are all graphically represented with the 8 Learning Events (LEs) composing the model (see the example hereunder).

Figure 1. The 8 Learning Events Model allows for an understandable and systematic structuring and representation of units of learning

Selected UoLs will be connected to a conceptual documentation including the presentation of its context creation and instructional challenges it helped overcoming. It will be assessed to what extent and in what conditions such a dedicated UoL can be "abstracted" and worked out into a generic scenario/pedagogic pattern. Those generic activity structures will be related to advice for particularizing them to new learning situations, according to different circumstances, ages and domains, objectives, teacher's challenges, degree of freedom left to the learner… Personalization features will also be found out. Those variations of the generic scenario's structure will occur by relevant modifications of the sequencing. The same 8 possible events will always be the components of scenarios but from one variation to another they will not appear in the same order neither with the same intensity. This demultiplication of the patterns through personalization will address, among others, learning styles issues. It will sustain reflection on "different but equivalent" learning paths. Teachers will be consulted about the interest they find in those pre-defined forms and about the way they would make use of them (for things they already do? For thing they would like to experiment? How would they try to instantiate patterns? What content would they populate them with?...)

3. THE 8 LEARNING EVENTS MODEL (8LEM)

The research work on generic pedagogical scenarios described above is conducted in reference to an in-house model. LabSET strongly believes in the added-value of working with a theoretical framework when designing units of learning (dedicated or generic). Any teacher or instructional designer who ponders over the best way to (re-) design a Unit of Learning is confronted by a very wide range of possibilities. Quite soon, he/she will feel the need for a handy and ready-to-use model or, at least, a taxonomy helping him/her to interpret the reality, to reduce its complexity, to guide choices and actions, to rely on a communicable reference vocabulary, to allow him/her safely moving further toward finer-grained concerns. Founding one's work on such a reference model is what separates the experienced practitioner from the novice one, what makes the difference between "learning/teaching recipes" and informed practice. Moreover, working with a model allows also making the instructional design and its rationale apparent to the practitioner (the teacher himself and possibly the learner), helping to defuse the "neutrality" usually professed by providers of e-Learning systems and standards. Several authors have recently questioned this claim (see Koper, 2003,
Poumay, 2005, Ip, 2005, Friesen, 2004). Among available models, our institution chose the "8 Learning Events Model" (8LEM) as the conceptual backbone of its research work on generic pedagogical scenarios. The 8LEM (not deemed to be "true" but "useful") provides a high-level conceptual "tool-kit" introducing standardization of some basic teaching and learning activities. It is composed of 8 documented teaching/learning events, i.e. ways of learning. The 8 events are basic elements, "primitives" (Casey, 2005), which can be applied in any context wherein UoLs' analysis and building are at stake. Using the Learning Events (LEs) for "tagging" situations of learning allows beginning to articulate pedagogy, helping users to identify and clarify the components of their current or future practice. 8LEM is therefore a helpful taxonomy for conceiving, describing, enriching existing or new learning scenarios (and the associated learning objects and services), while keeping down the complexity of reflection and development.

The 8LEM is a learning/teaching model, thus tackling both the learner and the teacher at the same time. It connects in a systematic way both the student's demand and the teacher's supply, and their interrelations (see the hereunder illustration). Learner and teacher's actions are complementary and interdependent, just as the two inner faces of the shell of a bivalve shell (such as a mussel or an oyster).

The other features and instructional benefits of the 8LEM are exposed hereafter.
3.1 8LEM is rooted in Safe Pedagogical Theories

8LEM incorporates important theories of learning. The advantage of encapsulating such theories in a single name (e.g. exercising) is that it is a “chunk” for all its content such as its principles (e.g. shaping, prompting, fading, etc.) that are at a more detailed level and that should be kept for a fine tuning phase.

3.2 8LEM provides Two Types of Help

The purpose of the model is to help in two different ways:

- as a descriptive aid, the model can be used to analyse an existing training strategy/teaching sequence. Teachers, students, course designers, educational researchers and developers will find resources in it for the easy identification of the elements in complex scenarios. From this crucial preparatory stage, the strictly speaking design process can start;
- as a prescriptive aid, the model provides the framework for the creation of a new training strategy/teaching sequence or for enhancing an existing one. So doing, it also acts as a support to educational creativity. As Goodyear & al. (2004) note: "Practitioners new to the area quite reasonably complain if the "guidance" they are given appears too vague or is unsupported by research. Equally, they resist tight prescription – whether it be prescription of the technology to be used, or the pedagogical strategies to be employed". 8LEM looks for this right balance between rigour and creativity.

In both functions, the 8LEM acts as a lever leading teachers to start reflecting about their courses instead of "just making a course". It provides a guiding principle for taking decisions about how to divide the continuum of pedagogic practice into pedagogically meaningful parts.

**Descriptive & Creative functions of 8LEM**

Figure 4. 8LEM is used in a descriptive/diagnostic function (the stethoscope’s metaphor) or as an incentive for pedagogic creativity and diversification (the palette’s metaphor)

3.3 8LEM is Concept-domain Neutral

The 8LEM is resolutely conceptual. Dealing with learning/teaching processes, it is not substantially tied to specific contents. It defines distinct ways of learning/teaching, no matter the topic at stake.

3.4 8LEM is easily understood (and remembered) by users

The 8 learning events represent both a common ground and an exploratory territory for teachers. On the one hand, teachers have already experienced some of the events. On the other hand, its built-in variety of pedagogic approaches invites teachers to get used with new approaches of learning/teaching and therefore
enrich the learning experience they “serve” their students (support to pedagogical creativity). Easy adoption of the model by teachers is also sustained by two cognitive facilitators: its limited number of events keeps it in the limits of human memory capabilities (Miller, 1956) and the "8LEM labelling" sheds light on the level where "conversations about improvement in pedagogy" usually take place, i.e. intermediate in terms of generality and specificity of pedagogical concept (Rosch, 1978). Those factors make the 8LEM a handy approach for teacher training and professional development activities.

3.5 8LEM is fitted to the "European Knowledge Society" as it sustains the Growth of "Polyvalent Learners"

In a “Knowledge society”, it is in the learner’s interest to have experienced a variety of learning methods, since he must be prepared to be an efficient autonomous learner, able to take advantage of any opportunity of learning, being polyvalent in exploiting the variety of methods, resources, constraints, etc. This situation encourages pedagogues to have attention to methods of learning. By being offered a variety of methods, students will be supported in their development of their abilities for “learning to learn”. In this sense, the 8LEM sustains intention of facilitating the spring of “polyvalent learners”.

3.6 8LEM is "plugged in" the Learning Styles Issue

8LEM and selected Learning Styles theories (Coffield, 2004) are both sensitive to the intra-individual variation. It means that they see learning styles and learning methods as dynamic and not fixed approaches to learning. They do not "pigeon-hole" learners. Advocating for variety, they give attention to the learner's capacity to adapt his/her learning style or learning method to the constraints of the situation ("polyvalent learner"), even if it implies for him/her to practise a learning style or a learning method that does not correspond to what he/she would have spontaneously chosen.

3.7 8LEM provides a Way for Representing Units of Learning

Visualisation of a unit of learning is becoming an issue of its own. The 8LEM leads to the production of a global but complete representation of a didactical narrative. Getting teachers and students to articulate what they are doing is the first step and a scary one for many. In this sense, a user-friendly visualisation is crucial. "It seems that teachers have (at least) two important needs here. One is how a teacher can understand the structure of a UoL, author and edit it. Another is how a teacher to recognise what a UoL is and what it means for using it in practice, i.e. how they can get a quick understanding of what it is when they are searching for it" (Griffiths, 2005). The graphical representation in learning events (see fig.1) prompts a very quick grasp of what the sequence is composed of in terms of learning experiences a learner is invited to traverse.

4. CONCLUSION

This article presented a theoretical model orienting already the development of distance courses. It outlined a direction for using it in the definition of generic pedagogical scenarios. The work on these scenarios should help assigning clearer borders to what can or cannot be expected from the model in an instructional design process. Beyond the minimum conditions of possibility of a learning event, which are already well documented by the model, effort on generic scenarios might also sets the stage for a reflection on the events' rules of use. It should also help fixing to what extent the 8LEM principles, clearly rooted in the "learning theory" field, could pertain into the more practical and downstream "instructional design theory" field. Moreover, the work-in-progress described here provides an empirical research approach of the concept of the reuse of resources in education, whose clarification is still necessary for transforming its promises into efficiency and quality gains.
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