CHOOSING CONTENTS THAT ARE RECOGNIZED AND RELEVANT: A MAJOR PROFESSIONAL DIDACTIC DECISION



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In higher education, contrary to primary and secondary education, teachers have to make choices on teaching content. Since the reform, college teachers are involved in the determination of the essential content and how it fits within courses relative to competency development, during the building stage of the program of study.

Concretely, the results of this didactic work are found in course framework plans, documents based on decisions made by program committees relative to the basic premises which define course object, essential contents, as well their justification and importance within the course. A second determination, this one done by the teacher during course planning, consists in defining the scope of the content included in the framework plan.

These are two crucial moments in the professional practice of teachers at this level of education. They are without exaggeration, key professional behaviours that require negotiation between teachers who use different references as well as within the teacher himself who assesses the curricular knowledge based on his own acquired knowledge. It is safe to state that a good number of teachers are not fully conscious of the references they use when choosing content. A clearer identification of these references is a significant profe sional decision that greatly impacts the meaning of learning.

Who and what should guide these choices? What can help facilitate these decisions? On what references can the teachers base their choice of content and the organization of this content?

How can we make sure these choices are made on a basis that is recognized, relevant, well-argued and documented? How are these choices and decisions made? In a context of non-arbitrary choices and of decisions, having valid and sure references becomes a crucial criterion to consider when selecting curricular content. This article hopes to show the importance and the way in which references are used in the choice of content for technical training, pre-university training and general education.

THE REFERENCES OF TEACHERS

Let us say from the outset that teachers have useful references to help them make content choices. What are these references or sources? They are the knowledge that is connected to their disciplinary or professional expertise and their own knowledge of the subject matter being taught. But where does this knowledge come from? It comes from scholarly knowledge, professional situations as well as social and disciplinary practices.

Scholarly knowledge is knowledge that is accredited by the university community and the result of research; for example, the concept of gross domestic product (GDP) in an economics course. Professional situations are activities proper to a profession such as the use of GDP by an economist to explain the good financial health of a country. Social practices, for their part, are activities or interventions that take place in a given environment and relate to the whole of a social sector (Martinand, 1986); for example, the practices of economists on the board of directors of a non-profit organization. Disciplinary practices are research activities, which can be disciplinary, interdisciplinary or multidisciplinary in nature. This knowledge acts as a source or reference when selecting recognized and relevant content in a program of studies.

Until now, scholarly knowledge served almost uniquely as a guide in the choice of content. Developments relative to didactics, in particular those on professional knowledge (Habboub, Lenoir and Tardif, 2005), shed a different light on the references that can be used as bases for content choices.

THE ROLE OF REFERENCES IN TEACHING PRACTICES

What role do references play in teaching practices? References are in fact sources, means and ends when it comes to the curricular knowledge (Raisky, 2001). When they act as sources, references are found at the start of the process that constructs the curricular knowledge. It is the start of negotiation among the reference knowledge of teachers. References play an authoritative role or are used as means to legitimize the knowledge during program building, when deciding on essential content or learning objects that will be part of the courses. Thus, answers must be provided to questions such as: What contents will be associated to these courses, which concepts, which notions, what approaches, which authors, etc.



References also play a crucial role during the planning of teaching activities when the teacher organizes the subject matter and determines the scope and extent of concepts to be taught within the framework plan of the course. Questions to ask ourselves are: Typical questions at this stage include where to start and how far to go in teaching this or that approach or concept, in which order or sequence should contents be listed and introduced to students? This is the second moment of negotiation that usually takes place within the individual teacher or with a colleague.

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When used as means, references serve as guides in the design and realization of training situations or teaching situations. They inspire the teacher to take action as regards the way of approaching the content as well as the choices in teaching and learning strategies.

As an end, references give meaning and direction to the curricular knowledge. They make it possible to choose from the perspective of the finalities of a program of studies and they confirm the relevance of the knowledge that is taught.

THE NECESSITY TO USE VALID KNOWLEDGE AS REFERENCE IN THE CHOICE OF CONTENT

So why is it essential to resort to the concept of references when choosing content? The reason is that a reference validates the knowledge, its correctness, accuracy, disciplinary or professional conformity and its relevance, that is, the connection it has to the finality of the program of studies. The questions we need to ask are:

- What makes my sources reliable? In what way are they recognized? This is the guarantee of authenticity.
- What makes my sources relevant? This is the guarantee of usefulness, i.e. the connection to the finality of the program.

On a program scale, the use of references is highly justified during building and evaluation stages. References make it possible to choose and review content choices made: What notions, practices, procedures, disciplinary or professional approaches must one teach to be accurate and in conformity with scholarly knowledge, professional situations, disciplinary or social practices and the program finality? At course level, references make it possible to better define the extent and relevance of the curricular knowledge, in connection with the targeted finality or competency to be developed.

To be clear about one's references means being able to justify and document one's choices according to the finality of the program. It also means showing students the value of the content taught, so they see that what I teach is valid and relevant. Thus, I contribute to giving meaning to my teaching. It is not a question of contextualizing knowledge, but rather of grasping its nature and complexity and taking this into account so learning can take place.

DIDACTICS IN THE WORKS

Didactics is the study of learning objects, that is, the knowledge to be taught or curricular knowledge, its origin, nature, value, organization and evolution. Didactics also include the relationship that teachers and students have to this knowledge. Didactics analyze the conditions in which knowledge is acquired, its prerequisites, the representations implied and the obstacles to which it gives rise. Didactics focus on the transformation of expert or professional knowledge into curricular knowledge and the way to acquire it through the organization of situations and the construction of teaching sequences (Reuter, 2007).

Initially, the didactic frame of reference allows teachers to position themselves in relation to their own disciplinary expertise and knowledge versus curricular knowledge or knowledge to be taught, by establishing distance between the two types of knowledge. This pruning exercise is a professional activity proper to higher education. It must be based on valid and relevant references and according to the finalities of the program of studies in which the teacher works.

In order to better understand the bases of these didactic choices in college teaching, PERFORMA carried out work projects to identify the components that would enable the framework to be structured along five poles or access points that characterize didactic questioning in college teaching.

To visualize the connection between these various access points, the task force on didactics (GTSEEM, Groupe de travail sur les savoirs des enseignants sur l'enseignement de la matière) developed an image in the form of a metaphorical didactic flower. The didactic questioning that we speak of in this article has five access points.







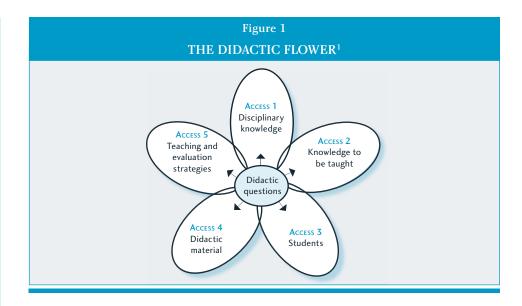
- Access 1: Corresponds to disciplinary knowledge as well as the specialized and professional knowledge of teachers.
- Access 2: Calls upon curricular knowledge or knowledge to be taught.
- Access 3: Refers to the relationships of students to the knowledge.
- Access 4: Corresponds to the didactic material.
- Access 5: Focuses on learning and evaluation strategies.

To teach and help students learn effectively, teachers must have knowledge relative to each of the five access points. As regards the professional action of choosing recognized and relevant content, we will focus on access points 1 and 2.

REPERTORY OF TEACHER KNOWLEDGE: THE REFERENCES

The first petal, access point 1, refers to the knowledge the teacher has about his subject matter. This knowledge is of a disciplinary or professional nature. In addition to disciplinary or scholarly knowledge, the repertory of a teacher also contains practices connected to the discipline or profession. This entry point into didactic questioning relates to the authenticity of the knowledge present in the repertory. Analysis of the knowledge in access point 1 provides answers to the following questions:

 What are the recent developments in my discipline or my profession?
 For example, in economics, what



is the impact of globalization on social inequalities and the development of the State?

- Where does such and such a concept/pratice/application come from? For example, in economics, where does the concept of gross domestic product originate?
- Is this knowledge recognized? By whom? What is its value? For example, in nursing, what research led to changes in the treatment of pressure wounds? Who conducted this research? Are the results convincing?

This didactic questioning connects with the sources of knowledge and requires that the teacher validate the knowledge and practices with expert groups from his discipline or profession. Given that the repertory of teacher knowledge serves as a basis for the choice of curricular knowledge, it is all the more important that this knowledge be valid. And considering the rapid evolution of knowledge, the teacher must be able to situate and validate this knowledge and the references that he uses in order to choose content that is relevant to the program and the courses in which he intervenes, from the totality of disciplinary or professional knowledge he possesses.

CURRICULAR KNOWLEDGE

The second petal, access point 2, refers to knowledge that will be taught. This knowledge is selected from the teacher's knowledge and based on the finality of the program of studies. Here, the question is the relevance of the knowledge relative to the achievement of competencies. Thus, the teacher will have to position his course within one of the program components and relative to the overall program finality.

¹ The didactic flower metaphor can be found in the *Guide d'accompagnement du cours DID 868* for use by local PERFORMA respondants, Sherbrooke, 2007, point 4.1.







To achieve this, there will be some negotiation as to choice of content not only relative to the different types of content to be learned, but also between the teachers themselves. To validate these choices, the teacher must be able to name and also make plain his references. It is on this basis that choices are made. As mentioned previously, references are the authority or means of validation when making choices relative to program finality and competencies to be developed within the courses. They verify the relevance of the curricular knowledge. The question for teachers to ask is: How are these sources aligned with the finality of the program of studies? They guarantee the usefulness of the knowledge required for the acquisition of competencies. The key questions for the analysis of access point 2 are:

- What does it mean to "be" in History? To practice Physics? Sociology?
- What are the concepts, approaches, practices or essential attitudes to be mastered by a novice in this profession?
- In what way are these concepts relevant to the development of the competency in this program, this course? What would happen if this content were removed?
- In which courses of the program do these concepts integrate the best or the least?
- What is underlying theme in my course?
- To what extent should this theme be developed in the course?

PROFESSIONAL SITUATIONS USED AS REFERENCES FOR TECHNICAL INSTRUCTION

What is the significance of using the professional situation as reference in the choice of content for technical instruction? Let's take the observation of self-esteem in children at daycare as an example of a typical professional situation in a course on early childhood education. This situation could be analyzed to shed light on the goals, issues, values, decisions or actions to be taken as well as the knowledge to be used when observing for signs of self-esteem in children within a daycare environment. The analysis would also shed light on the dynamics between the elements present in the action. A teacher would have to reflect on the way in which he could recreate these dynamics in the classroom and develop this capacity for observation in his students. Other examples of professional situations are: determining the waterline by technicians in bioecology, the writing done by a journalist, the initial evaluation of a patient, etc.

In all this abundance of knowledge, how is it possible to preserve the nature, dynamics and complexity of what must be taught? According to Raisky (1996) and Martinand (2001), the references that maximize the chances of ensuring meaningful choices for teaching and learning are found outside of school. They must be shared by a large community of persons, whether of a social and cultural nature, be the object of evaluations and critical examinations, be explicit or able to be made explicit and evolve over time.

For technical instruction, the professional situation provides the right requirements, as we can see in a model created by Raisky and Loncle.

The originality of this model comes from the reworking of the didactic triangle to take into account the professional situation. They preserved the relationship between learner, teacher and content, but broadened the latter component to consider the characteristics of the professional situation. They designed adiagram (figure 2).

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Raisky and Loncle (1993) redefined the didactic triangle content by including professional situations. For them, the content of the didactic triangle is made up of components in dynamic interaction that must be understood and recreated for learning to take place. What then makes up these situations? To start, they are characterized by professional actions and behaviours in terms of decisions to be made that require practical, scientific and technical knowledge. These actions or behaviours are based on goals, values and issues relative to the context in which they occur. The use of professional situations as references in choosing content means improved targeting of the components that must be part of the learning object. It is not simply a matter of contextualization of the knowledge, but an analysis that allows us to grasp the dynamics by which knowledge is mobilized into action and also identify the best way to help students learn it.

The professional situation serves as a reference and must be "processed" to





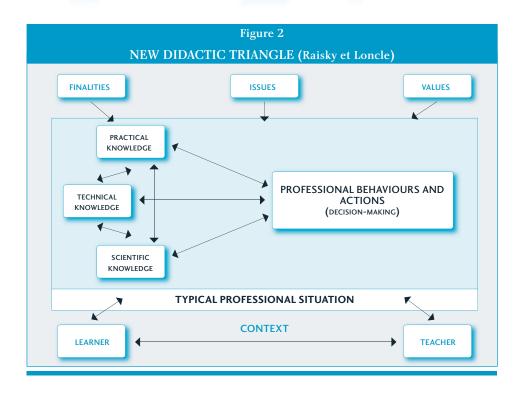
make it accessible to teaching. It is what we call the process of didactization. It is a three-step process:

- 1. Choose a typical professional situation, one that is representative of the profession that corresponds to one or more learning situations in which the course competency will be demonstrated: observation of the child, for example;
- Analyze the professional situation according to Raisky's model;
- 3. Following the analysis, review the learning situation associated with the reference situation while emphasizing the finalities, issues and values. What is the most relevant curricular knowledge? When it comes to students, what relationships to knowledge should be taken into account? What strategies are best adapted to the acquisition of this knowledge? What conclusions should be drawn?

SOCIAL PRACTICES AS REFERENCES

If one of the important references in technical training is the professional situation, the key reference in preuniversity education is scholarly knowledge. However, didactization cannot be achieved this way. It does not proceed solely from scholarly knowledge it must also come from reference social practices (Martinand, 1986, 2001).

Reference social practices have been defined as follows: "practices that refer to the actual activities of an identified social group and can be used as references for the design and analysis of school activities" (Reuter, 2007).



This type of reference allows for the simultaneous building and analysis of the teaching object. This is what distinguishes it from the professional situation which more closely resembles the training situation. Reference social practices are more demanding when it comes to constructing a learning situation for allowing students to learn. Social practices contain a potential for learning disciplinary knowledge, practices and the use of tools and methods proper to one or more disciplines. They must teach students to mobilize and call forth their knowledge, and must therefore possess a certain complexity. Consequently, the modelling of these practices is important in order to identify their learning potential when knowledge and practices are being mobilized and constructed.

One source of social practices that appears promising for college teachers is the handling of socially-pointed questions (Legardez and Simonneaux, 2005), i.e. topical questions that are the focus of debate among specialists in disciplinary sectors and professional experts. In science for example, where the phenomenon of cellular telephony creates controversy from both the physical as well as the social point of view. Topics such as globalization, infections originating in hospitals, social inequalities, and fair trade practices also present controversial aspects that could be used to build and analyze learning situations; in doing so, they contribute to the development of scientific and citizenship competencies. The central question for the teacher is: How to develop teaching objects that are sufficiently "hot" so they are relevantin social debates yet sufficiently "cool" to facilitate school work and learning (Legardez, 2002)?







The didactization process for pre-university and general education can be completed in the following manner:

- 1. Analyze the reference social practice to take into account not only the knowledge involved, but also the practices, objects, tools, problems, tasks, contexts and social roles:
- 2. Analyze the learning situation, clarify its finality and content;
- 3. Analyze and clarify the gaps between the learning situation and the social practice used as reference.

After analyzing the professional situation or social practice and confronting it to the learning situation, the teacher will be able to make strategic teaching and learning choices taking this analysis into account.

These two models have potential value when making content choices. They help make well-argued choices based on significant contexts in which knowledge is solicited and constructed, whether in regard to a profession or a social practice.

CONCLUSION

Our experience teaches us that when the use of valid references corresponds to the finalities of a program of studies, knowledge assumes its rightful role. This method of choosing content is promising for college instruction. Comments of a participant in a didactic training activity confirm this:

"Since the advent of the competency-based approach, I had the impression I was off-balance, standing on one leg, while hiding knowledge beneath a variety of strategies. Resorting to valid sources of knowledge when making content choices and teaching and learning strategies allowed me to re-establish a balance between pedagogical knowledge and disciplinary knowledge and to return my disciplinary expertise to its rightful place."

This is just the type of comment that encourages us to help teachers become aware of the references they use to make content choices and subsequently design learning activities. We can affirm that the act of situating and validating references is a professional behaviour that cannot be ignored when it comes to giving teaching its meaning, and this applies to all aspects of college teaching.

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