26th International Congress of Applied Psychology. International Association Applied Psychology, Atenas, 2006.

Learning the skills of psychologist profession in communities of practice?.

Erausquin C. y Basualdo M. E.

LEARNING THE SKILLS OF PSYCHOLOGIST PROFESSION IN COMMUNITIES OF PRACTICE

Authors: Erausquin Cristina and Basualdo María Esther**.** Buenos Aires University, Faculty of Psychology**.** Argentina**.** ***UBACYT Proyect of Research P061 2004/2007. Director Mgter.Erausquin Cristina***

Introduction

In former presentation to *XXVII International Congress of Psychology at Stockholm*, (Erausquin et al. 2000), *"To become a psychologist: practice communities as contexts of academic learning"*, we had already pointed that Psychology is a discipline whose assimilation strongly involves the own self. Knowledge ought to prove its power with the analysis of the complex reality. Theories should be tools that the psychologists "use" to understand the multidimensional objects of their study. But how are theory and practice articulated in the learning-and-teaching of Psychology of University Courses? Are the conventional "pedagogical devices" at University an appropriate field to make possible meaningful and relevant learning about profession? How much can the learning achieved in that way contribute to apply knowledge to analyze and solve the problems, in the profession or in the research? Can we consider only one direction between basic and applicated knowledge, between theories and practices? What kind of devices could increase the skill to transfer the knowledge to new domains of problems? Which is the goal of involving undergraduate students in the practice that psychologists and other actors develop together in social institutions? In that opportunity, Tutors of Psychology Undergraduate Apprenticeship at Buenos Aires University had said:

- *"Knowledge is appropriated in a more dynamic way. Tutor questions his/her own experience with students,* ***as if they*** *were working together in institutions, as if they were colleagues."Knowledge run more fluently from one to others. Apprenticeship requires strong and constant* ***commitment*** *to accompany students in their encounter with the practice of the role."The activities students do* ***challenge and try out the conceptual frames****. We have to be strongly informed and constantly updated. Feed-back allows us, but also demands us to re-organize activities and knowledge, to reach the best link is possible between theory and practice."Tutor is supposed to be the* ***"model"*** *of professional labor. We have to hold that assumption but not to believe it completely. We should avoid identifying completely with a model, shaping one way of behavior as psychologist duty. It must appear the* ***difference, the conflict, the resistance****, because it is an important part of "learning to be" and "learning to do""Knowledge is built on the basis of* ***obstacles, difficulties****. From that tension, students question the conceptual frame and wonder about its extent.Our teaching role is different: we develop not only the speech but also the direct action. We have* ***to put the body, to involve ourselves in the task.****. We are more exposed, naked, challenged, but more satisfied at the end."Students are interested specially in the* ***"subject****", that is the object of analysis and practice in their Apprenticeship."As they are few, the link between them and us is closer and game is interactive. The relation* ***with texts and authors****, is also different. It is designed day to day, starting from the problems, not following a previous plan. Students search the texts according to their interests but also according to the problems that reality presents to understand and solve."Students need* ***holding and listening*** *to share their experiences. The relationship inside the teaching team, and with professionals who work in institutions, is also closer and fluent, with feed-back and exchange of ideas and tasks. The experience allows students to* ***appropriate the tools*** *that are used when it's played the professional role."For us, it is an important step in our professional education, a chance to widen our exchange with other social actors. We think it's important to develop specific competences to be a tutor. But we haven't had specific academical education to qualify for the role".*

Theoretical Framework

The metaphor of **"scaffolding**" of Bruner et al (1) explains the device built in Professional Practice Apprenticeship, the interaction between tutors and students in **appropriation** of skills and attitudes of the professional role. Scaffolding is *temporary, adjustable* to the development of cognitive and social skills, *visible and audible* – Cazden (2) -, *explicit* about its role in the results of actions. But, it remains ambiguous, in paradoxical sense of "strategic fiction" that assigned Newman, Griffin and Cole to **"cooperative task"**(3). The performance precedes the competence. **Cognitive change** happens in Vygotskian **"zone of proximal development**"(4), a zone of interactive construction of knowledge, with different alternatives of departure, open representations, a teacher guiding and directing the development of competences, in an asymmetric but reciprocal appropriation. Scaffolding is adjustable also in delegation of power to direct the action, from the expert to the novices (5).

Critical perspective of socio-historical- cultural theory, bring a dialectical perspective, based in Vygotsky thought. In line to Wertsch "action mediated by artifacts" (6), Engestrom concepts of **"system of activity"** (7) has

inspirited the "unit of analysis" to reflect the complexity and interdependence of dimensions in Psychologists Training. Engestrom (2001) has studied the relation between microcontext, macrocontext and human actors in diverse settings of work and emphasized the role of **tensions and contradictions** in the possibility of changing the activity, through "**internalization and externalization".** "**Cognitive change**"is studied by Rodrigo (8) as development change in educational settings. To distinguish from a more stable representation such as "schemas", Rodrigo used in 90s the concept of "mental model", created by Johnson Laird in 80s. **Mental models** are *"psychological constructions, dynamic and temporal representations, based on a specific part of our beliefs and knowledge about the world, that are activated by the content of the task or the situation, and that depend on the subjective intention of the person, related to the event that he/she has to cope with"*(Rodrigo:1993). In a former paper the **"unit of analysis"** – "the very small unit in which you can divide a problem of study without loosing its essential nature" (Vygotsy,1998) (9) – was defined as *"mental models that students of psychology build for reflective analysis of problems situated in contexts, which need a professional intervention strategy from psychologists in different fields of activity"* (Erausquin, Basualdo 2004) (10). Psychologists in training develop a **"participative appropriation**" of tools (Rogoff) (11), building general and specific "competences" for the profession in different **communities of practice** (Lave and Wenger).(12) A **competence** is something you know how to do, a skill, but more than that, it is a strategic ability, necessary to face complex situations. *"A competence is a capacity of effective action toward a family of situations, that people can construct because they have the necessary knowledge and the ability to mobilize that resource in an appropriate way and in an opportune time, to identify and solve the problems"* (Ph. Perrenoud,2004)(13). The competences: a) are knowledge, skills and attitudes and at the same time, they mobilize, integrate, and guide those resources, b) that mobilization is related to a situation, which is unique, but can be similar to other known situations, c) are built and proved through complex cognitive operations, supported by a mental model of situation, that identify general formats of reasoning (Rodrigo, 1994, Perrenoud, 2004), to determine and perform an efficient action, d) are built in academic education but also in training of performance, in work situations, one by one.

Methodology strategies. This a descriptive and exploratory study with qualitative and quantitative data analysis. The sample is formed by 47 Tutors, Assistants and Professors of Professional Practice Undergraduate Apprenticeship of Psychology, developed in Buenos Aires University in different fields: Clinical, Education, Work, Social-Community, Justice, and Research. Teachers were interviewed since 2003 to 2005 and they answered an open Questionnaire that had been formerly answered by three generations of Psychology students, whose results were studied by the Proyect of Research with the categories mentioned above. In current study the unit of analysis is composed by four **dimensions**: a) problems situated in contexts of Tutors and Professors professional activity, b) their professional intervention, c) the tools they use, d) the results with whom they evaluate their intervention and their attribution of reasons or causes to those results (Erausquin, Basualdo 2006) (17). In each one of the dimensions, different **axes** are displayed, conforming lines of run, ways and tensions identified in process of "getting professionalism" as psychologist in our context. In each one of the axes, we distinguish five **indicators**, that mark qualitative differences of the mental models, ordered in line of enhancement and improvement in the process of getting professionalism. It is not supposed a "representational hierarchy", neither genetic nor of power or efficiency in a strong form. We have demanded also questions related to their function and activity as Tutors and Professors of Undergraduate Apprenticeship, and we analyse three of them in this study: 1) What do students **learn** through Professional Practice Apprenticeship?, 2) What do you expect students **develop** through Professional Practice Apprenticeship?, and 3) Which are the **functions** of psychologist in the field of activity the Apprenticeship is situated?

Data Analysis and Results

2nd question. From the perspective of Tutors and Professors, Professional Apprenticeship is an educative and modelling **experience** for becoming psychologists, that favours the **development** of abilities, skills, knowledge or attitudes, whose categories are pointed out in **2nd pie**, according to the first answers of 47 Tutors and Professors. In their 2nd answer, the emergent increase is situated in categories 3rd, 8th and 1st. The 10th appeared in only one 3rd answer: "Thinking the own self as a professional and as a subject"**.**

3rd Question. Functions of Psychologist in the Field of Apprenticeship.

Clínical Area

- Psycho-profilaxis and Prevention.

- Holding, evaluating and solving situations of psychological urgency.
- Inter-consult and collaborative intervention in inter-disciplinary team.
- Psychotherapy
- Clinical assístance of children (admission, evaluation, diagnosis, individual and group treatments, parents orientation)
- Evaluation and Clinical Diagnosis

Social-Community Area

- Work in teams and with groups.
- Promoting health and avoinding illness.
- Development of wefts of social support.
- Understanding and analysis of "institucional issue".
- Guiding reflection of institutional collective about "institucional issue".
- Primary attention of health.
- Investigation and analysis of socio-cultural reality.
- Holding the consult and changing the "goce" condition of **patient.**

Work Area

- Facilitating the change
- Mediating between the organization and the people

Educational Area

- Relationship with: a) other professionals, b) institutional situations, c) children or jouth, d) parents.
- Assístance and follow-up of children with emotional perturbations
- Institutional analyser for solving conflicts and mediator among different actors.

Justice Area

- Expert and consultor
- Therapist.
- Supervisor
- Interdisciplinary team in Justice Institution
- Intervention in crisis
- Working with families in conflict.
- Psycho-social evaluation in penal context.
- Defense of human rights of people without freedom

MENTAL MODELS AND COMPETENCES OF TUTORS AND PROFESSORS OF APPRENTICESHIP
(Only report the state of some significant Axes of two from 4 Dimensions)

1st. Dimension: **Problems situated in contexts of Psychologist Intervention**

1st. Axis. Cutting complex and multidimensional problems for analyzing and facing them in contexts of professional practice. Tutors/Professors 42,6% answers in level (5) *Cutting complex problems that articulate relational psychosocial and interpersonal wefts among diversity of actors and dimensions.*

2nd. Axis. Describing, explaining and formulating hypothesis about problems situated in contexts of professional practice. Tutors/Professors 34% answers in level (3) *Mentioning some inferences besides data* and 34% answers in level (4) *Formulating hypothesis about factors or reasons that explain the problem.* Significant differences among Areas (**Table 2**).

4th Axis. Expliciting historical antecedents / background of the problem with meaningful relations. Tutors/Professors 31,9% answers in level (4) *Mentioning diverse inter-related antecedents of the problem.* And 23,4% answers in level (2) *Not mentioning any antecedent.* Significant differences among the Areas (**Table 3**)

6th Axis. Taking different perspectives in the focus of the problem, dis-centering of "unique thinking" about it: toward perspectivism (Rodrigo) Tutors/Professors 48,9% answers in level (4) *Dis-centering from only one scientific perspective for understanding the problem*

7th Axis. Analysing subjective and inter-subjective problems in context, with singular and structural components, conflicts dynamics and ethic dilemmas. Tutors/Professors 34% answers in level (4) *Combinating singular and*

structure factors with dynamics of conflicts intra and inter-system and 29,5% answers in level (3) *Singular and structure factors explain regularities.* Significant differences among the Areas (**Table 4**).

3rd Dimension: Tools that are used by psychologists in intervention

1st Axis. Using different tools in professional action over different dimensions of the problem. Tutors/Professors 40,4% answers in level (4) *Using different tools related different dimensions of the problem.* And 21,3% (2) *Mentioning only one tool related to only one dimension of the problem.* Significant differences among Areas (**Table 5**)

As a final reflection and for opening the debate:

As it was pointed out in other studies, there is enough evidence about de dominance of "clinical model" of intervention in the task of modeling new psychologists, confirmed through the answers of Tutors and Professors: But is remarkable their awareness of necessity of different knowledge, tools and devices, appropriate to specific contexts and fields of psychological "systems of activity". There are detectable **strengths** in mental models of tutors and professorsin their analyze of the problems in context of professional intervention: cutting of complex problems with articulation of components, including psycho-social and inter-subjective wefts, specificity of cutting related to psychologist role with opening to views and actions of other professions, perspectivism in practice and discourse. But also are detectable **weaknesses** in their mental models in other issues: urgency and structuralist models sometimes avoid re-building the history of the problem in significant events, the hypothesis explaining the complexity of the problem are mainly based in clinical theories and the articulation of structure and singular factors with the dynamics of conflicts and tensions has diminished in the study of problems. Perspectives of possible changes, developments, or shifts in intervention contexts decrease, and the vision of the problems get "plane" in wefts of relations ordered by structures, specially clinic diagnostic ones. In these issues, there are significant differences among the areas of professional practice of Tutors and Professors: history is strong in Education, explanation with hypothesis in Clinic, conflicts and tensions in Justice and Education. It is very meaningful what happens with Tools, the "Cinderelle" of the dimensions in our context: there are significant differences among Areas, it is a strength in some of them and a weakness in others, but all of Tutors and Professors are getting strongly aware about the necessity of developing in Students becoming Psychologists the appropriation of useful and powerful tools for specific interventions. If generally there is a polyvalent title of Psychologist in different countries at world, and specially in a historic moment in our country that Psychology has been stated as a "public interest" profession, "because the activity of Psychologists has significant effects over life and the health of people", we have to guarantee, in professional modeling of psychologists, that diversity of logics and perspectives can be appropriated by every psychologist graduated in University, whatever will be the field they "choose" or they "find" to work, for the enhancement and integration of their knowledge and activity with human beings.

References

(1) Wood, D.; Bruner, J.S. y Ross, G. (1976): "The role of tutoring in problem solving". *Journal of Child Psychology and psychiatry, 16*

(2) Cazden, Courtney (1991) *Classroom Discourse. The Language of teaching and learning.* Paidós. Buenos Aires.

(3) Newman D, Griffin P y Cole M. (1989) *The construction zone: working for cognitive change in school.* Cambridge University Press. USA. Madrid, Morata 1991.

(4) Vigotsky, Lev (1966*): "Development of the higher mental functions"*.Moscu:Progress Publishers. Crítica. Grijalbo ,México 1988

(5) Palincsar A.S., Brown, A.L. (1984): "Reciprocal teaching of comprehension-foresting and comprehension-monitoring activities*". Cognition and Instruction*, I.

(6) Wertsch, J. (1999)*Mind in action.*. Buenos Aires. AIQUE.1999.

(7) Engestrom Y.(1988) "Seeking the zone of proximal development in physician´s work activity", in *Hildebrand et al. eds.* Proceedings of the 1st. International congress on Activitys Theory. Berlin.

(8) Rodrigo, M.J. (1994) “Etapas, contextos, dominios y teorías implícitas en el conocimiento escolar”. En: Rodrigo, MJ. (ed.): *Contexto y desarrollo social,* Madrid. Síntesis.
(8bis) Rodrigo, M.J. y Correa N. (1999) “Teorías implícitas, modelos mentales y cambio educativo”, en Pozo I. y Monereo C. (comps.) *El aprendizaje estratégico.* Aula XXI. Santillana. Madrid.
(9) Vigotsky (1986) *Thought and language.* Cambridge MIT Press. Buenos Aires, 1977.
(10) Erausquin C. , Basualdo M.E. et al.(2004) “The apprenticeship in “communities of practice”: a cognitive contribution to model a professional psychologist” *28th International Congress of Psychology (ICP 2004)August 8-13, 2004.*
(10bis) Erausquin C. et al.(2000) “To become a psychologist. Construction of Practice Communities as contexts of academic learning”. *27th International congress of Psychology,* Stockholm, Sweden, 23-28 July 2000.
(11) Rogoff Barbara (1997) “Los tres planos de la actividad sociocultural: apropiación participativa, participación guiada y aprendizaje”. En Wertsch y otros (eds.) “*La mente sociocultural. Aproximaciones teóricas y aplicadas”*.Fundación Infancia y Aprendizaje. Madrid. España. 1997. “Children´s learning in the “zone of proximal development”, *New directions for Child Development,* San Francisco, 1984.
(12) Lave J and Wenger E (1991) *Situated learning,* Cambridge, MA.
(13) Perrenoud Philippe (1997) *Construire des competences dés l´école.* France.
(13bis) Perrenoud Philippe (2001) *Développer la pratique réflexive dans le métier d´enseignant. Professionalisation et raison pédagogique.*
(14) Pintrich, P. (1994) “Continuities and discontinuities: future directions for research in Educational psychology”. *Educational Psychology 29 137-148*.

Table 2.- Problem situation Axis 2 X Practice Area

Problem Situation Axis 2	Practice Area						T
	Clínic	Education	Social-Community	Justice	Work	Research	
2	5%	0%	14%	33%	0%	40%	1
3	33%	40%	29%	33%	33%	40%	3
4	33%	40%	57%	17%	67%	0%	3
5	29%	20%	0%	17%	0%	20%	1
Total	100%	100%	100%	100%	100%	100%	10

Table 3.- Problem situation Axis 4 X Practice Area

Problem Situation Axis 4	Practice Area						T
	Clínic	Education	Social-Community	Justice	Work	Research	
1	14%	0%	0%	33%	0%	60%	1
2	24%	20%	42%	17%	33%	-	2
3	19%	0%	29%	0%	0%	-	8
4	24%	60%	29%	50%	33%	20%	3
5	19%	20%	0%	0%	34%	20%	1
Total	100%	100%	100%	100%	100%	100%	10

Table 4.- Problem situation Axis 7 X Practice Area

Problem Situation Axis 7	Practice Area						T
	Clínic	Education	Social-Community	Justice	Work	Research	
2	14%	0%	14%	0%	0%	20%	8
3	29%	20%	43%	17%	33%	40%	3
4	29%	80%	14%	50%	33%	20%	3
5	28%	0%	29%	33%	34%	20%	2
Total	100%	100%	100%	100%	100%	100%	10

Table 5.- Tools Axis 1 X Practice Area

Tools Axis 1	Practice Area						T
	Clínic	Education	Social-Community	Justice	Work	Research	
1	5%	0%	0%	17%	33%	0%	9
2	0%	0%	42%	0%	0%	0%	7
3	28%	0%	29%	0%	0%	40%	1
4	29%	60%	29%	66%	67%	40%	4
5	38%	40%	0%	17%	0%	20%	1
Total	100%	100%	100%	100%	100%	100%	10