TRAINING TEACHERS FOR TOMORROW;
ISSUES, TRENDS AND QUESTIONING THROUGH TWO EXAMPLES OF INNOVATIVE TRAINING METHODS

Amalia Terzidis
Haute Ecole Pédagogique Vaud et Haute Ecole Pédagogique Valais (Switzerland)

Abstract

How we approach teacher training today raises several questions and issues. Considering the context of a worldwide society and constant changes in technology and globalisation, the evolution of our education systems is directly and seriously impacted. Thus, Innovation In Education (Cros, 1997, Gunnasrdòttir, 2013) can be seen as the future of education in Europe (Gunnarsdöttir, 2013). Through the introduction of new innovative training modules (Choplin, 2002), teacher trainers could now address the problems raised by such rapid change.

This communication aims to present two innovative training programs that have been implemented in a Teacher University in Switzerland; one about an initial innovative training program on creativity, another one about an innovative continuing training course on yoga as a tool for teaching and learning and to analyse their features in order to seize their impact on the quality of tomorrow's education.

Through these two examples we mean to explore the issues pertinent to training teachers today, for tomorrow.

Keywords: Teacher Training, Innovation, Creativity, teaching/learning studies, training programs.

1. Training teachers for tomorrow; a brief introduction

As Hargreaves (1994) pointed out, Education must be thought within the context of postmodernism which has the characteristics of rapid and strong changes amongst institution, and school is deeply concerned. In this particular context, it is often pointed out that teachers suffer massively from difficulties, leading to quitting, or professionnal burn-outs (Karsenti, Collin and Dumouchel, 2013; Lantheaume, 2008). On the other side, the number of cases of dropping out of school are increasing, and pupils are constantly more to be unmotivated and discouraged (Blaya, 2010). Constant and rapid changes, exponential social and technological evolution, multiculturalism, kids with special needs are examples of what needs to be taken into account to envision the contemporary Education. From this point of view, it is pertinent to question teachers training, to address these issues. In Switzerland, teacher training is fulfilled by Pedagogical Universities, in a dual training system; theory and practical training simultaneously shape the program. Teachers are initially trained this way during various years –depending on the educational level they wish to teach. Continued training and postgraduate courses exist as well, to major their skills all through their career. The considerations proposed here take place in this context and offers to study two specific courses, designed within innovative approaches.

2. Methodology and theoretical framework

In order to cross data and put them in perspective, it was chosen to use two case studies, and link them through the idea of innovation in teacher training, serving professionalization in the particular context of constant and quick changes.

This project embeds itself in the Participatory Action Research framework, as we are describing and analysing items in which we actively take part; this kind of methodology aims to advance both science and practice (Whyte, 1991), alternating reflections, analysis and action. Both cases have been rooted in a particular theoretical context, and built up within them. Data has been systematically collected through different ways and cross-analysed. At the end of both programs, the same quiz has been collected, with questions about the learnings, the links with practice and professionalization potential of the training.

The first case becomes rooted in a cognitive psychology framework; creativity is seen from a differential psychology point of view, where creativity is the capacity to find new solutions, adapted to context (Lubart, 2003). We understood creativity as potential professional skill for teachers, that could help them to face different problems they meet, but also as a transversal competence for pupils, that can use it to learn better, as it is stated by the Western Switzerland scholar curriculum (CIIP, 2010). The second one also lays within a cognitive framework, with specific orientation of neurosciences and brain studies (Della Chiesa, 2007) that consider brain, body and emotions as a whole system (Dai and Sternberg, 2004; Boroditsky and Ramscar 2002). Specific contributions about yoga approaches at school (Wagener, Boujon and Fromage, 2011; Laborde, 2006; Rohard, 2004) have backfilled this theoretical background.

3. An example of innovative program; Creativity on board

One issue within the questioning we are dealing with concerns the professional development of teachers in the context mentioned above. Indeed, a methodological approach of applying rules to typical situations can obviously not be used anymore, and training is now trended towards lifelong learning (Knapper and Cropley, 2000), with the aim of educating reflexive practitioners (Schon, 1983; Altert, Perrenoud and Etienne, 2013). From this perspective, *Creativity* can be considered a professional skill for teachers (Terzidis, 2016), and training them for it represents an important issue in today's education, as well as fostering creativity throughout the whole educational system (Rey and Feyfant 2012; Taddei, 2009). Based on this idea, a training module for a western swiss university was designed, intending to teach creativity as a stand-alone subject, (Terzidis, 2014) including, creative pedagogics and reflexives issues, through blended learnings (Page & Thorsteinsson, 2008), creative learnings and teachings (Craft, 2005). The innovative dimensions of this particular course take the form of didactical, pedagogical and technological components. As a matter of fact, students are required to be immersed in creative processes, in order to live them from the inside and therefore, to think and learn about theoretical features about creativity. This inverted system is accompanied by an e-learning program where students can learn by themselves, to their own rhythm –within headlines and deadlines-, collaborate and adapt learning times to their professional schedule. Last but not least, theoretical and reflexive contents are offered to student to be creatively learned, through workshops and cooperation.

The analysis of this module has been lead through a diachronical study, before, during and after the course, using different types of data (course guideline documents, data from tasks completed by students, and final quiz about students' opinions). This in-depth research (Terzidis, 2016) has brought out different items that emerged. It has been showed across these categories, that training teacher to creativity, through this particular system, was contributing to professionalization, as students are brought to develop a sharper consciousness of what they are doing and why, a modification of the point of view they had on the profession, a (re)insurance of their abilities to teach and use creativity, and a mastery in creative skills that can be used in teaching and learning processes. What is negatively mentioned concerns the time factor; if this six month module tends to improve professionalization, the training time appears as way too short to really take it as granted, and the principle of immersion used among this program requires time to come to terms with such processes. As well, the time of practice and expertise of students seems to weigh on the ability of dealing with creativity in the professional context; students with short or no practice dare less and have less materials to create adequate responses, as students with some years of practice are more in a position to be creative and to foster creativity with their pupils.

4. Another example; an holistic point of view of teaching and learning

Another important question stands in the existing changing educational paradigms to empower teachers to provide better and easier teaching; thus enabling them to create a stimulating and efficient learning environment for their students. One of leading paradigm within educational training at present is that of a particular cognitive point of view, which assumes learning only in terms of brain concerns (Dai & Sternberg, 2004). Current research into the roles of emotions and body in cognitive issues may pave the way for a new era of pioneering training methods. One such program, drawing its inspiration from this changing paradigm (Andrieu, 2007; Corbetta, 2000), offers to study aspects of yoga to greater improve learning and teaching potential. (Wagener, Boujon and Fromage, 2011; Laborde, 2006; Flak and Coulon, 1985). A continued training course for teachers, still in a western swiss teacher university is exploring the potential of using certain aspects of yoga in schools, with particular focus on the emotional, metacognitive and physiological conditions found within learning and teaching. (Terzidis, manuscript in preparation for submission).

This innovative topic for teacher training, is studied through workshops and courses that allows students to experiment yoga for itself, therefore reflects upon its features and the ways it could be used to optimize teaching and learning. Didactical and pedagogical leads are given as well, and the participants are asked to test them in their classroom between each session of the day. This program has been lead two years through, with different kinds of teachers interested in these questions, from different schools, through seven training sessions of three days, with about fifteen teachers at each session.

A quiz about participants' opinions has been systematically collected, with a hundred people. The data is being analysed more deeply at the moment, but the first results are showing serious links between this training and professionalization. What mostly comes through is the power of this kind of training in offering reflexivity about how teaching and learning are understood, for instance the strong link between body and mind, the point of view about movement in the classrooms, the way emotions and cognition are embedded. The second point generally mentioned is the way this training offers real potential implementations to improve profession and quality of learnings, like using breathing control, stress management, body consciousness or even postures to deal with problematic situations on the teacher side or the pupils side. The possibility of living such processes and test them with feedbacks. The main limits pointed out consist of not being sufficiently trained and the prejudices that colleagues or parents could have about these kinds of approaches.

5. Discussion

Obviously, these two case studies need to be put in perspective with other ones, within a longitudinal approach, in order to understand better all parameters of innovation and their impact on teacher training.

However, through the examination of these two specific training programs, we could design some outlines that may answer some of the major problems that teacher training seems to come across (Navaro and Verdisco, 2000); failure in pedagogic methods used to teach teachers (frontal, constructivist and individualistic approaches), failure in the content of training, failure in the impact of training, failures in integrating teachers into the larger context of education policy. (p.11)

The main obstacle that comes along with both cases seems to constantly be problems linked with time. Training asks for time, and becoming a professional even more. This is a major problem that trainers and Educational policy maker need to take in consideration. A possible solution could lie in a larger scale of continued training, which would provide a monitoring about skills development. Another contribution to this problem resolution stands in the use of e-learning, as some students have noticed: these specific training modalities offer to students a good way of managing their time and learning at their own rhythm, which is a crucial point in learning process.

Some further research should clarify specific innovation features that could improve and optimize teacher training, but may also think about how this could be transferred into classrooms, with innovation benefits for teacher practice and for pupils' learnings.

6. Conclusions

Through two actual training programs, we have presented particular ways of thinking teacher training. By innovative didactical, pedagogical and paradigmatical approaches, we have noted an obvious positive impact on professional development. The deep personal involvement, the collaboration, the mobilization of innovative topics (creativity, body and emotions within learning process), as well as the radical change in the points of view about teaching and learning and last but not least the uses of e-learning as a learning medium seem to play a large part in teacher training in the mentioned context. To address an educational context where instability, complexity and constant evolution rule, teacher training and decision makers need to think outside the box and implement innovative ways to think the Educationnal professions, thus the training.

References

Altet, M., Perrenoud, P., and Etienne, R. (2013). *Former des enseignants réflexifs*. De Boeck.
Andrieu, B. (2007). La chair vécue du cerveau: un objet épistémologique du cerveau psychologique. *Psychologie francaise*, *52*(3), 315-325.
Boroditsky, L., and Ramscar, M. (2002). The roles of body and mind in abstract thought. *Psychological Science*, *13*(2), 185-189.

Cachia, R., Ferrari, A., Ala-Mutka, K., and Punie, Y. (2010). *Creative learning and innovative teaching: Final report on the study on creativity and innovation in education in EU member states* (No. JRC62370). Institute for Prospective and Technological Studies, Joint Research Centre.

Craft, A. (2005). *Creativity in schools: Tensions and dilemmas*. Psychology Press.

Cros, F. (1997). L'innovation en éducation et en formation. *Revue française de pédagogie*, *118*(1), 127-156.

Conférence intercantonale de l'instruction publique de la Suisse romande et du Tessin (CIIP). (2010). *Plan d'études romand* (PER). 1 coffret (5 fascicules). Neuchâtel: CIIP, Secrétariat général [Page Web]. Retrieved February 20th, 2017, from http://www.plandetudes.ch

Corbetta, D. (2000). Partie II: Le bébé, le geste et la trace. Le corps et la pensée chez le bébé: Apport des systèmes dynamiques. *Enfance*, (3), 259-273.

Della Chiesa, B. (2007). Comprendre le cerveau: naissance d'une science de l'apprentissage. *París. Ed. OCDE*.

Gunnarsdóttir, R. (2013). Innovation education. *The Routledge International handbook of innovation education*, 17.

Dai, D. Y., and Sternberg, R. J. (Eds.). (2004). *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development*. Routledge.

Flak, M., and de Coulon, J. (1985). *Des enfants qui réussissent: Le yoga dans l'éducation*. Paris: Desclée De Brouwer

Karsenti, T. and Thibert, G. (1998). *The interaction between teaching practices and. the change in motivation of elementary-school children.* Paper presented at the annual conference of the American educational research association (AERA), San Diego, California. (Document ERIC n°ED420397)

Knapper, C., and Cropley, A. J. (2000). *Lifelong learning in higher education*. London: Kogan Page

Laborde, M. (2006). *La pratique du yoga à l'école primaire: pour une co-disponibilité. Mémoire professionnel en pédagogie.* Perpignan : IUFM de l'Académie de Montpellier

Laborde, M. (2006). *La pratique du yoga à l'école primaire: pour une co-disponibilité.* (*Mémoire professionnel en pédagogie). IUFM de l'Académie de Montpellier, Perpignan, France*.

Lubart, T. (2003). *Psychologie de la créativité*. Paris : Armand Colin.

Navarro, J. C., and Verdisco, A. (2000). *Teacher Training in Latin America: Innovations and Trends. Sustainable Development Department* Washington: Technical Paper Series.

Page, T., and Thorsteinsson, G. (2008). A Blended Learning Route to Improving Innovation Education in Europe. *I-manager's journal on school educational technology*, *4*(1), 18-23.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action* (Vol. 5126). Basic books.

Rohard, A. F. (2004). *Corps et mental en éducation: le yoga: un outil complémentaire au service des apprentissages?* (Doctoral dissertation).

Rey, O., and Feyfant, A. (2012). Vers une éducation plus innovante etcréative .*Dossier d'actualité Veille et Analyse*, n°70. Retrieved August 25th 2017 from : http://ife.ens-lyon.fr/vst/DA/detailsDossier.php?parent=accueil&dossier=70&lang=fr

Taddei, F. (2009). Former des constructeurs de savoirs collaboratifs et créatifs: un défi majeur pour l'éducation du 21ème siècle. [online] Retrieved August 25th, 2015, from: http://cri-paris.org/wp-content/uploads/OCDE-francois-taddei-FR-fev2009.pdf

Terzidis, A. (2014), *La créativité, un objet d'apprentissage, didactisable, didactisé ? Enquête à la HEP Vaud*, travail réalisé dans le cadre du MAS « théories, pratiques et dispositifs de formations d'enseignants», Genève: Universités de Genève, Lausanne et Fribourg.

Terzidis, A. (2016). *Teach different! Créativité et enjeux de professionnalisation des enseignants de demain; mais que fait la formation? L'exemple d'un dispositif de formation au sein de la HEP Vaud*. Mémoire de Master of Advanced Studies en Sciences de l'éducation, Genève: Universités de Genève, Lausanne et Fribourg.

Terzidis (mansucript submitted), *Le Yoga au service de l'enseignement/apprentissage? Au-delà du trend, des enjeux cognitifs, métacognitifs et émotionnels dans une perspective cognitiviste intégrative.*

Wagener, B., Boujon, C., and Fromage, B. (2011). *Contribution de la relaxation aux apprentissages et à la métacognition.* Retrieved december 12th, 2016, from: academia.edu

Whyte, W. F. E. (1991). *Participatory action research*. Thousand Oaks: Sage Publications.