

## ACTIVE LEARNING METHODOLOGIES: POTENTIAL OF REFLECTIVE PRACTICE GROUPS IN THE UNDERGRADUATION OF OCCUPATIONAL THERAPISTS

### METODOLOGIAS ATIVAS DE APRENDIZAGEM: POTENCIAL DOS GRUPOS REFLEXIVOS DA PRÁTICA NA FORMAÇÃO DE TERAPEUTAS OCUPACIONAIS

### METODOLOGÍAS DE APRENDIZAJE ACTIVAS: POTENCIAL DE LOS GRUPOS REFLEXIVOS DE LA PRÁCTICA EN LA FORMACIÓN DE TERAPEUTAS OCUPACIONALES

Received: 21/08/2014  
Approved: 03/02/2015

Paula Tatiana Cardoso<sup>1</sup>  
Daniel Marinho Cezar da Cruz<sup>2</sup>  
Patrícia Carla de Souza Della Barba<sup>3</sup>

This study aimed to analyze the curricular experience with "Reflective Groups on Professional Practice" in the training, from the perspective of professors and students of an undergraduate program in Occupational Therapy. This is a qualitative research, performed with 26 students and two professors at a public University in 2011. The thematic analysis allowed three categories: Reflective group as a learning space: collective construction and professional development, The process of learning to learn, and The role of the facilitator and the sense of the "Reflection group on professional practice". It was found that the educational activity in question indicates positive potential of methodological approach used with small groups to discuss the practice. The group presented itself as a dynamic and meaningful space, in which impressions, experiences, doubts and anxieties regarding the practice could be reported, reflected, discussed and shared between students and professors, with the theoretical foundations relevant to topics.

**Descriptors:** Education; Occupational therapy; Problem-based learning.

Este estudo teve por objetivo analisar a vivência curricular com "Grupos Reflexivos da Prática" na formação, a partir da perspectiva de docentes e alunos de um curso de graduação em Terapia Ocupacional. Esta é uma pesquisa qualitativa, realizada com 26 alunos e dois docentes numa universidade pública, em 2011. A análise temática categorial possibilitou três categorias: o Grupo Reflexivo como espaço de aprendizagem: construção coletiva e desenvolvimento profissional, O processo de aprender a aprender e, O papel do facilitador e o sentido do "Grupo de Reflexão da Prática. Verificou-se que a atividade educativa em questão indica potencial positivo da estratégia metodológica utilizada com pequenos grupos para discussão da prática. O grupo apresentou-se como um espaço dinâmico e significativo, em que impressões, vivências, dúvidas e angústias referentes à prática puderam ser relatadas, refletidas, discutidas e compartilhadas entre os alunos e docentes, com os fundamentos teóricos pertinentes aos temas.

**Descritores:** Educação; Terapia ocupacional; Aprendizagem baseada em problemas.

Este estudio tuvo como objetivo analisis la experiencia del plan de estudios con "Grupos de práctica reflexiva" en la formación, desde la perspectiva de los docentes y alumnos de la Licenciatura en terapia ocupacional. Esta es una investigación cualitativa, realizada con 26 alumnos y dos profesores de una universidad pública en 2011. El análisis temático categorial permitió tres categorías: Grupo reflexivo como un espacio de aprendizaje: construcción colectiva y desarrollo profesional, el Proceso de aprender a aprender y el Papel del facilitador y el sentido del "grupo de reflexión práctica. Se verifico que la actividad educativa en cuestión indica resultados significativos de la estrategia metodológica con grupos pequeños para discutir la práctica. El grupo se presentó, como un espacio dinámico y significativo, donde las impresiones, experiencias, dudas e inquietudes con respecto a la práctica podrían ser reportados, reflejadas, discutidas y compartidas con los estudiantes y profesores, siguiendo los fundamentos teóricos relevantes a los temas.

**Descriptorios:** Educación; Terapia ocupacional; Aprendizaje basado en problemas.

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<sup>1</sup> Master in Special Education. Professor of the Graduate Program in Occupational Therapy, Federal University of Triangulo Mineiro. paulatcar@yahoo.com.br

<sup>2</sup> Master and PhD in Special Education. Adjunct Professor, Department of Occupational Therapy and of the Graduate Program in Occupational Therapy at UFSCar. cruzdmc@gmail.com

<sup>3</sup> Occupational therapist. Specialist in Educational Psychology. Master and PhD in Special Education. Adjunct Professor of Undergraduate and Graduate Program of UFSCar. patriciabarba@ufscar.br

## INTRODUCTION

In order to decrease the gap between the education of health professionals and the guidelines, principles and requirements of the Unified Health System (SUS), public policies and health services extend the relationship with education and propose a reflection on the teaching methodologies<sup>1-3</sup>.

Since the 1990s, especially from the LDB/1996 - Law of Directives and Bases of National Education (Law No. 9.394/96), the National Curriculum Guidelines have recommended training with a generalist, humanist, critical and reflexive approach<sup>4</sup>, which implies the need for methodological changes in the pedagogical projects of health courses. This study presents a discussion on this proposal, also identified in other documents of the Ministry of Education and Ministry of Health<sup>5</sup>.

The active learning methodologies have arisen as a pedagogical proposal for health professionals training from the questioning of the approaches widely used in higher education institutions, which offer the transmission of information and the essentially passive attitude of the student<sup>6</sup>. Such questioning discusses how the teaching-learning processes can influence the education of professionals with important skills and abilities for identifying and proposing solutions to the complex problems of everyday life.

The undergraduate program in Occupational Therapy from the Federal University of São Carlos (UFSCar) develops an integrated curriculum and guided by skills, based on the National Curriculum Guidelines for health area and on the inclusion of undergraduate students in real scenarios of practice since the first year of course<sup>7,8</sup>.

In this educational project model, the syllabus of the undergraduate program in Occupational Therapy is organized in each series by interdisciplinary Educational Units, instead of disciplines, designed for each of the areas of competence, in a perspective of social intervention<sup>9</sup>.

In the structure of the pedagogical program in question, students perform field activities

of the Educational Unit Supervised Practice in Occupational Therapy (UEPSTO) in diverse scenarios. In the first two years of the course, students are placed in primary care settings in health and in the third and fourth years in specialized care scenarios in Occupational Therapy.

In all fields students are monitored by occupational therapists tutors of the services. As part of the activities and supervision in this context, small groups of reflection are developed, coordinated by the course teachers, using the contextual problematization as a method, in which the student builds knowledge individually and collectively, following the movements of provisory synthesis, search in theoretical referential and new synthesis<sup>7,10</sup>. These groups are the focus of this study.

The unit of supervised practice of the third year aims to provide students the experience with several practices in the context of specialized care in Occupational Therapy, by monitoring and participation in supervised actions together with individuals, groups and/or populations from the insertion in different scenarios, such as Psychosocial Care Center (CAPS); CAPS alcohol and drugs; Mental health; Social field; Gerontology, geriatrics; Physical Impairment; School Health Unit (USE-UFSCar); Municipal Teaching Hospital. The different life cycles (Childhood, Adolescence, Adulthood and Old Age) are the reference for these practice scenarios.

Thus, this study aimed to describe and discuss the curricular experience with "Reflective Groups on Professional Practice" in training, from the perspective of teachers and students in an undergraduate program in Occupational Therapy from UFSCar.

## METHOD

### The experience scenario

To better understand the potential of "Reflective Groups on Professional Practice" we decided to analyze the experience of a group of 26 students of the third year of a course in Occupational Therapy.

The proposed monitoring and practice in services are part of the menu of the Educational Unit of Supervised Practice in Occupational Therapy - UEPSTO, which also offers supervision of students by expert preceptors, responsible for students in services, and the facilitation by graduate teachers in reflection groups, which take place at the University.

The "Reflective Groups on Professional Practice" were part of UEPSTO VI of year 2010 and were held in the second period of class integration in specialized services, when students conclude their first period on this proposal and change institution, monitoring area and practice. Participants in groups were: two facilitator teachers and 26 students divided into four small groups, as Table 1 shows:

**Table 1:** Presentation of reflective groups analyzed. UFSCAR, 2011.

Reflective groups analyzed				
	Grup 1		Grup 2	
<b>Facilitator A</b>	Grup 1A (5 students)		Grup 1B (7 students)	
<b>Facilitator B</b>	Grup 2A (7 students)		Grup 2B (7 students)	

**Instruments of data collection and analysis**

In addition to the evaluations conducted at the end of each meeting of the group, two moments of formalized procedural evaluation were proposed in the middle and in the end of the semester. Three forms should be completed and discussed between student and facilitator in each procedural evaluation: students' self-evaluation, evaluation of the student by the facilitator and evaluation of the facilitator by the student.

For investigation we selected the procedural evaluations of the participants (students and facilitators) and the method used for analysis was Categorical Thematic Content Anaysis<sup>8</sup>. In this process, three steps were followed: pre-analysis; exploration of material or coding; treatment of results, inference or interpretation. From the exhaustive reading of the material it was possible to identify themes that were quantified and grouped into categories,

according to theoretical, empirical criteria and analytical assumptions<sup>5,11</sup>. It is believed that the choice of qualitative analysis was the most appropriate in order to give voice to the actors involved in this process.

**RESULTS**

We investigated 133 documents validated for the study, namely: procedural evaluations of each student and individual procedural evaluations of the facilitators (n=131); and general evaluation of the facilitators on the group process (n=2).

Evaluation forms completed by students and facilitators proposed a reflection on: participation and student's contribution in the group; his/her development in the process of learning to learn; compliance with agreements and participation of the facilitator in the learning process. In addition, it opened space for suggestions and comments.

It should be noted that grades were not assigned, but it was necessary to evaluate with the student whether his/her process was satisfactory, considering the construction of knowledge and the appropriate skills to a specific phase.

At the time of conversation between facilitator and student forms were read and discussed. This provided an understanding of the views and clarification of questions in addition to the emergence of issues assessed as "difficult" for the students and that, most of the times, were not exposed at another time.

The analysis of the evaluation forms enabled the emergence of three categories, which will be presented and discussed in the light of theoretical references related to active learning methodologies and to training of health professionals in Brazil.

**DISCUSSION**

***The Reflective Group as a learning space: collective construction and professional development***

The evaluation method proposed in discussion groups, based on dialogue and shared reflection, provides a look at teacher and student, from an evaluation that seeks

the critical understanding of the teaching-learning process and professional/personal development. As stated by Mitre et al<sup>12</sup>

*Teaching requires respect for the autonomy and dignity of each individual, especially in the scope of a progressive approach, which is a foundation for an education that takes into account the individual as a being who builds his/her own story. This respect only emerges at the core of a dialectical relationship in which the actors involved - teachers and students - recognize each other (...) so that there is no teaching without learning, to the extent that the both explain themselves, and their subjects, despite their differences, are not reduced to the condition of object of each other (p. 2135-2136).*

Throughout the process in the "Reflection Groups on Professional Practice" analyzed, students were urged to think about the construction of knowledge in that context. How did the established interests and relationships influence the development of the group and of each member? How their participation and contribution could enhance or weaken production in that space-time?

*I believe that (participation and contribution) have been good, but it could be better. This semester I fell more difficulty in participating and contributing to the group. I adopted a slower pace, as the group in general has a different stance, so I have more difficulty in participating (Student/Evaluation 1).*

In the proposal in question, while optimizing the intervention of the facilitator, students observe, analyze and act on the dynamics of the group to which they belong and perceive themselves as key players in the construction of knowledge. This process is crossed by the established relationships and by commitment of each subject in the individual and collective development, as evidenced by the following quote:

*I tried to understand the purpose of this focus group together with the group and to find solutions to a significant learning. I have contributed with theoretical research and in discussions, trying to express my doubts and reflections. I could have expressed more my*

*reflections, I have kept quiet at times (Student/Final Evaluation).*

This constant exercise facilitates the formation of a more critical professional about the processes of collective construction and potentiating agent of actions and relationships in groups/work team.

According to the *PRO-SAÚDE* (PRO-HEALTH) document, it is necessary to propose changes in teaching methods in order to allow the formation of a more connected professional to the real problems experienced in the everyday life of health services and community: a more critical and reflective practitioner about health processes and assistance, with ability to understand community and health care problems and to propose solutions within an interdisciplinary and intersectional logic<sup>6</sup>.

For this it is important to consider that

The adult education process requires the use of teaching-learning methodologies that propose concrete challenges to be overcome by the students, to enable them to take the place of subjects in the construction of knowledge by participating in the analysis of the process itself (...)<sup>3</sup>.

By analyzing the forms, it was observed aspects valued by students in their group processes, such as the importance to feel welcomed in their doubts and professional/personal anguish and the commitment of each participant to the proposals, bringing contributions to studies and reflections and meeting established agreements.

In a space where there is respect for the experiences of others, host, commitment to construction of knowledge and to collective development it is possible to make sense of the meetings and produce power, as this speech:

*As I have mentioned in previous times, definitely, in all that time of graduation, this UEPSTO group was what made the most sense to me and it was where I was able to establish more relationships with my practice, to understand and express my anxieties and fears. My objective was to seek and share the established issues, and I made an effort to try*

*to express myself to the group and also to express my feelings, doubts and reflections (Student/Final Evaluation).*

In the facilitator's speech:

*It should be highlighted the optimal use of reflective group as a powerful space for reflection/understanding, hosting, building and strengthening practice. (...) The commitment and group integration enabled the collective construction of a powerful space of professional development, based on deep theoretical and practical reflection (Facilitator A).*

### **The process of learning to learn**

One of the main points presented and discussed in the documents focused on training of health professionals in Brazil is regard the development of capacity in students of self-management learning process<sup>1,2,6</sup>.

Since graduation has a limited time and the challenges for knowledge arise all the time in daily practices, it is "critical to think in a methodology for a liberating educational practice, in training an active professional and able to *learn to learn*"<sup>12(p. 2135)</sup>.

Throughout the process in the "Reflective Groups on Professional Practice" students are asked to think about their progress in this regard. Search strategies, organization, reflection and sharing of knowledge are often evaluated and rethought in order to develop in the student more autonomy and effectiveness in the process of learning and training.

*I am becoming more and more organized so that my studies become synthesized. This organization and teamwork contribute greatly to my learning (Student/Evaluation 1).* Paulo Freire<sup>13</sup>, by proposing education as a liberating practice, questions the depositary education, inserted in the logic of knowledge transmission and in thinking about student as a subject that receives, and he discusses the concept of problem-based/dialogical education between teacher and student. In this sense, the problem-based education values the knowledge brought by the actors involved in the learning process and works formation from significant experiences<sup>10</sup>. In "Reflective

Groups on Professional Practice" that compose the UEPSTO, this process is intensified as the problem-situations are developed from the experiences, doubts, fears and reflections on the experiences of students in the fields of activity.

*I believe that my process in this small group was very important to my education. In it, I could see my frustrations on the practices and deal with them (Student/Final Evaluation).*

The development of learning methodologies based in the transmission of knowledge or traditional education<sup>13</sup> historically favored the development of a passive attitude of the students in the different teaching and learning contexts, including the university.

In a case study carried out in Portugal<sup>14</sup>, Silva presented his experience in teacher training in order to develop learning questioning skills. As he was mobilized by the belief in the importance of forming critical professionals in understanding and transforming reality, he pointed out that he has tried strategies in this direction and met with a passive attitude of most students in the learning process, which is incompatible with the conception of the reflective practitioner. After analyzing the perception of students on the dimensions of learning mobilized in collaborative exploration of problem-based situations, the author highlighted:

*(...) the importance of raising the awareness of students about the relationship between the quality of their learning and their role in learning, which requires methodologies in which students take responsibility for their learning process*<sup>11</sup>. (p. 44).

The author concluded, however, that the development of an education focused in learning requires some changes in curriculum, such as changing the type of classes, reducing the number of students per teacher, changing the class space configuration so that it promotes cooperation and new design of discipline program (negotiated with the student)<sup>14</sup>.

In small groups, the strategies for enhancing the teaching-learning process were frequently discussed, shared and evaluated

by facilitators and students, as pointed out by a researched student:

*Since the group is smaller than the others, I can participate and contribute more to it. I really enjoyed that the Professor have divided the group because now it is not so tiring (...) (Student/Evaluation 1).*

In the facilitator's speech it is possible to identify the potential of the strategy when working in small groups (maximum of 7 students), and the emphasis on the collective pacts that enabled a strengthening of the learning process along the way:

*Confirmation of the potential of the strategy of smaller groups: students who came from another group formation (larger) in the previous semester highlighted this issue in the evaluations throughout the process. Strategy agreed with the groups from the previous semester brought again great results: decreasing the amount of (theoretical) references and increasing the depth on the subject, trying not to repeat in the group references studied by each student (Facilitator A).*

Practical experiences, prior knowledge, study of theoretical references, anguish, group dynamics, process of learning to learn were reflection topics and constantly discussed in groups, approached on a problem-solving perspective. In this context, students were mediated to build a complex and reasoned view on the topics discussed and not to seek/expect prompt responses, as in the following quote:

*I have learned a lot, I think this group makes me very reflective (...) (Student/Final Evaluation)*

### ***The role of the facilitator and the sense of "Reflection Group on Professional Practice"***

When discussing changes in the teaching-learning processes, many aspects are rethought and revised. The concept of education, strategies, relations between the actors involved, the social meaning, among others.

In a proposal that believes in the transformation and bears the restructuring of an entire curriculum, the people involved

rediscover and recreate themselves all the time:

*In this period I could better understand the purpose and role of this reflective group, so the learning has been very positive for me, mainly because of the content we are discussing, which is practically something new throughout our graduation (Student/Evaluation 1).*

In the facilitator's speech:(...) *students highlighted that they saw meaning in reflective group, but many did not understand the real purpose of the proposal so far: they relate group appropriation at the time to better use and motivation. (...) It is not yet fully clear between the facilitators and tutors the purpose of the group, there is a still confused understanding (...) (Facilitator A).*

In this context, teachers and students of occupational therapy course at UFSCar are questioning, rethinking, learning, creating and discussing every aspect involved in the new curriculum proposal and finding together meaning and direction.

*(...)For the first time I am really enjoying UEPSTO, and sometimes I end up becoming excited and talking more than necessary or talking without thinking. But still I am striving to be able to contribute to the group and with our growth. (...) I think it is good, better and more effective than before. Now I can study harder and with more interest in the proposed themes. (Student/Evaluation 1)*

In the facilitator's speech:

*- GROUPS with much affinity (students and facilitator): power and exploitation of meetings; strengthening of commitment to the group; investment from both sides (facilitator and student); decisions on the group process/knowledge building with participation of all...complicity between participants...concept of healthy team and problem solving in their own team (Facilitator A).*

*- They understood the reflection group on practice (sense), expressed troubles, issues related to their insertion in practice of childhood and adolescence (practice insertion and field/specificity), valued the figure of the facilitator as trigger of questions and facilitator of reflections (Facilitator B).*

In this direction, the facilitator's role is also thought and discussed. According to Mitre et al<sup>12</sup>, in the context of active learning methodologies it is important that the teacher/tutor/facilitator develops skills such as the ability to allow students to actively participate in their learning process, since facilitators are responsible for critical and creative formation of a citizen.

These changes represent a singular impact when demand significant movements of changing into an academic culture marked by the transmission of information. The mediating function of the educator emerges from the willingness to learn with new things and to take the role of guiding, facilitating and listening<sup>15</sup>. This function is directly related to the development of autonomy of learners.

When evaluating the facilitator, the student indicates aspects that considered positive and/or negative, such as in speech below:

*Very good, you guide in a way to raise doubts, reflections, discussions, which always urges us to think, reflect and study (...) (Student/Final Evaluation)*

According to Cyrino and Toralles-Pereira<sup>10</sup> teaching experiences developed in the context of the conflicts and contradictions of institutional relations, related to changes of processes, relationships and content may represent an innovative trend towards a more meaningful learning for the student.

However, we need to critically understand the possibilities and limitations of proposals and changes, guided by their theoretical and methodological foundations, and to analyze the actual conditions of each institution<sup>10</sup>.

In this study, the experience of teachers and students in "Reflective Groups on Professional Practice" signaled significant results of the methodology with small groups to discuss practice. The group was, from the reports, a dynamic and significant space, in which impressions, experiences, doubts and anxieties regarding the practice could be reported, reflected, discussed and shared among students and teachers with the relevant theoretical foundations on topics covered.

It is noteworthy that this research makes a contribution to the latest studies on existing professional training in Occupational Therapy<sup>16-19</sup>, in this case, highlighting the issue of methodology as an important issue to be discussed in training.

## **CONCLUSION**

The evaluations of the participants suggest that "Reflective Groups on Professional Practice" have been meeting objectives of the curriculum (meaningful learning and reflective, autonomous and participatory student) and of the guidelines for the training of health professionals (professionals with critical attitude and transformers of social reality).

It was concluded that the groups enabled, from the expansion of the process of action-reflection-action, the development of critical attitude of the students about the events experienced in the expanded health network and favored meaningful learning.

It is noteworthy, however, that the systematization of education focused on this curriculum design still has been constantly studied, regarding its effects in the teaching-learning process involving teachers and students.

The development of "Reflective Groups on Professional Practice" in an active and meaningful learning perspective has proven relevant for training in Occupational Therapy. We pointed out the importance of broadening and deepening research and discussions on the changes in the formation of occupational therapists and other professionals involved in the development of Public Health in Brazil.

Some of the aspects that need to be investigated are the costs of this type of methodology and all the equipment necessary for its implementation, including the practice fields with tutors, training hours settled in the curriculum and the training of students and teachers for this methodology education.

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## CONTRIBUTIONS

**Paula Tatiana Cardoso, Daniel Marinho Cezar da Cruz and Patrícia Carla de Souza Della Barba** had equal contributions in writing