COLLABORATIVE LEARNING AND TEACHING IN PRACTICE

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Abstract: Emphasizing on many other collaborative learning or co-labouring (Latin-based term) and co-teaching approaches nowadays is wellknown as an essential 21st century skill that brings educational and social benefits identified on educational research studies. In order to establish a common approach, we can use the definition of Smith and MacGregor (1992) in which it's acknowledged that "collaborative learning" is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. In most collaborative learning situations students are working in groups of two or more, collaboratively searching for understanding, solutions, or meanings, or creating a product."(p. 11). The difficulties regarding the implementation of activities in collaborative learning are of different nature, but frequently relate to the inability of the teacher to organize cooperative groups effectively and to transfer the findings of the investigation in this area of knowledge and its practical use in the classroom (Gillies, Ashman, & Terwel, 2008, p. 2). Despite the difficulty of transferring theory to practice, we can also highlight that "many teachers noted that constraints to moving beyond pedagogy included lack of time and the need to cover the curriculum" (Cohen, Brody, & Sapon-Shevin, 2004, p. 63). So the main question remains how to improve children's learning quality and teaching effectiveness. The advantages of collaborative learning on engaging students in active learning are obvious when related to traditional methods and strategies co-labouring brings to large group activities. The benefits include the importance of sharing ideas, resources, outcomes, peers and blended features, facilitated learning by a flexible, interactive classroom, project-based learning, collective and reflective learning and leadership forming competences.

Keywords: collaborative and cooperative learning, classroom-lab, coteaching, critical thinking, based-project learning, outcomes learning,

Introduction

The origins of the concept of "collaborative/ cooperative learning" are timeless and with no inquire related to human activities developed within society. However, in order to establish a common approach, we can use a definition given by Smith and MacGregor (1992) in which we have already established that "collaborative learning" is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together".

Collaborative learning offers real learning opportunities for students to develop self-critical thinking, to achieve valuable interpersonal and team skills, participate in task-oriented learning groups. Also the main purpose of *co–teaching* is implementing group learning activities and design learning. Being an informed teacher requires making instructional decisions based on collective wisdom from scholarship and practice. Reflective teaching implies assessing and documenting its efficacy promoting a philosophy of cooperation rather than competition.

In practice scholars and teachers alike seem to use cooperative and collaborative terms similarly, not taking into account the epistemological meaning. Most teachers don't always have a non-associated perception on using semantically distinguished terms but instead, focus on accomplishing their goals no matter whether learning is achieved.

Thus, the terms collaborative and cooperative have similar meanings, the debate comes whether they mean the same thing when applied to group learners. (Cuseo, 1992) Others sustain the most common approach for collaborative and cooperative learning is an extended position from most structured (cooperative) to least structured (collaborative). (Mills & Cottel, 1998). Some authors insist on having a separated division between terms, Brufee (1995) asserts describing collaborative and cooperative learning. The goal for cooperative learning is to work together, joint for the final solution and the aim of collaborative learning is to flourish self-determining, eloquence, reflective-thinking people, even if declining the competition seems undermining the theory of cooperative learning. Offering the epistemological dissimilitude scholars use their arguments for choosing one way or another. The most forthright definition of cooperative learning is "the instructional use off small groups so that students work together to maximize their own and each other's learning". (Smith, 1996, p.71)

Theoretical Foundation

There is a substantial agreement in literature on what cooperative learning is not, so: it is not having students side by side or small groups at the table, it is not assigning properly the report to a group of students on which some of them do all the work and others don't, it is not having

students on doing tasks individually and then help the slower ones. (Smith, 1996 p,74)

Cooperative learning has been defined as "the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson et al. 1990), cooperative learning is based on the social interdependence theories of Kurt Lewin and Morton Deutsch (Deutsch, 1949; Lewin, 1935). We recognise and appreciate studies of the pioneers in cooperative learning such as David and Roger Johnson at the University of Minnesota, Robert Slavin at Johns Hopkins University, and Elizabeth Cohen at Stanford.

In addition to the structured activity, Smith (1996, p.74-76) lists five elements considered as essential for successful cooperative learning groups (Johnson, Johnson & Smith, 1998,a., pp.21-23): positive interdependence, promoting interaction, individual and group accountability, development of teamwork skills, group processing. According to this statement, students can practice cooperative learning by working together and holding responsibilities for both members team. Teacher responsibility is to check the presence of these elements. According to Slavin that is not enough and considered'to simply tell students to work together; they must have a reason to take one another's achievement seriously. (1996, p.21)

Collaborative learning brought in higher education as a pedagogical method as a cooperative learning, based a different epistemological finding, it assumes that knowledge is "socially produced by consensus among peers". The conception of knowledge as "a mirror or reality" is replaced by the conception of the social construction of reality focus on interpretation and settling a meaning to the world. (Kvale, 1996, p.41). Thus social interpretation conveys rather than focusing on mind (cognitive approach) needing to well-known in the groups construct knowledge" by creating a culture with shared meanings"

Kenneth Bruffee who "made some brand of collaborative learning" reflected his assumption when he shaped that knowledge is "something people construct by talking together and reaching agreement" (1993,p.3) Metthews offers the definition" Collaborative learning occurs when students and faculty together and that the process enriches and enlarge them"(1996,p.101)

Research has continued their documentations through time and passing ten years from first" reviewed the literature on interactive group learning. Nowadays educators must feel self-confident in coordinating an adequate supporting group on learning as an effective instructional approach in today's onsite and online classrooms.

Recent research submit that"learning is fundamentally influenced by the context and activity in which it is embedded" (Brown, Collins and Duguid, 1989). Attending collaborative learning activities offer students opportunities on challenging tasks or questions. Rather than beginning with facts and ideas and then moving to applications, collaborative learning activities usually begin with problems, for which students must gather real solutions, facts and ideas and become immediate practitioners.

"Learning in manner of groups, face-to-face experiences and online contexts authorise students to have more room to negotiate meanings and to express themselves and their own ideas. It also helps them to establish more effective relationships and can play a central role in developing key professional skills, such as listening, presenting ideas, persuasion, self-direction, self-monitoring and team working." (Jaques & Salmon, 2007, p. i).

In the last ten years the term *co-teaching* was defined as a collaboration between general and special education on all the teachers responsibilities toward students assigned to a classroom (Gately&Gately, 2001). So co-teaching remains scattered in schools because of a lack of understanding that real collaboration in an educational setting means, and because existing policy conditions that hasn't always enabled it to flourish. Practitioner students and teachers also need to convey for space and time to experiment collaborative teaching and learning in practice.

Kenneth Bruffee remains one of the authors who most handed out patterns of a methodology of learning associated with collaborative learning. In one of his main works he proposed a convention or an operational protocol that is still so relevant up to nowadays.

Problem-centred instruction, extensively used in professional education, is recurrently gathered around collaborative learning strategies. "Many of these spring from common roots", especially the work of John Dewey in the beginning of this century. The strategic framework for education and training (ET 2020) established by the Council of the European Union now counsel policy-related to identify the quality of education and training stating that "there is a need to ensure high quality teaching, to provide adequate initial teacher education and continuous professional development for teachers".

As highlighted in the Communication from the European Commission, Rethinking Education" are opportunities to undertake 'skills renewal across the profession' and help schools become more geared to the modern world".

The effort is to sustain Initial Teacher Education (ITE) and Life Long Learning more efficiently while underpinning "the role of induction and mentoring; and to drive professional development towards more flexible, individualised, collaborative forms, and link it to teachers' career prospects and school development plans". Earlier 2014, the Council of the European Union "emphasised that teacher education is just one aspect of the wider

policy objective of raising the attractiveness and quality of the profession, along with appropriate policies for teacher recruitment and retention, effective ITE and early career support".

EU Council further settled "that countries should ensure that teachers have regular opportunities to update their subject knowledge and to receive support and training in effective and innovative modes of teaching, including those based on new technologies".(Council conclusions of 20 May 2014 on effective teacher education, OJ C 183, 14.06.2014, pp. 22-23)

Methodology

Creating a collaborative classroom can provide real fulfilment and also bring challenges for both students and teachers as well. Few of us have experienced collaborative labour in our own undergraduate stage, and much of our graduate school training increased the teacher-centred, lecture-driven model of college teaching. Stepping out of the centre and engaging students in group activity means learning incitement for both sides.

In collaborative labour, students require differences, and must struggle with admitting and dealing with it. In collaborative work it is fundamental to develop the conscience that by sharing objectives and responsibilities, the members of the group benefit as a group and individually of the success they have.

The definition of "group learning" is considered by Jaques and Salmon (2007, p.6) posing this feature: collective perception, needs shared aims, interdependence, social organisation, interaction, cohesiveness and membership. In this case the group learning is related to the way new objectives and motivations are established, both in situations of cooperation and competition, as Johnson and Johnson (1995) have described.

Studies of collaborative learning have identified social and educational benefits and important issues like sharing ideas, wisdom and resources with peers, gaining experience in conflict resolution, collective learning and leadership competences, developing self -criticism, self - evaluation and self - reflection. Teachers are developing competences such as leadership skills and improve their transversal competences designing learning strategies and adapting resources.

Teachers must organise efficient cooperative groups, and gather strategies in transferring the findings of researches in this area of knowledge and practical use of onsite/online classroom-laboratory. It's important to notice the fundamental development of conscience that sharing objectives and responsibilities the members of the group award to the individual and also to the group success. Westberg and Jason (1996, p.52) propose a short check-list of working conditions on creating groups in facilitating teachers actions.

"Learning in groups in both face –to -face and online contexts allows students to have more room to negotiate meaning sand to express themselves and their own ideas. It also helps them to establish more effective relationships and can play a central role in developing key professional skills, such as listening, presenting ideas, persuasion, self -direction, self -monitoring and team working." (Jaques & Salmon, 2007, p. i)

Tuckman first defined four stages in the preparation of group learning, having added a fifth stage later, summarized in the expressions "forming", "storming", "norming", "performing" and "adjourning" (Tuckman, 1965;Tuckman & Jensen, 1977, 2010)

Practicing collaborative learning in this preschool stage is a real provocation for teachers and even efficient for children. This micro-research reveals the fulfilment of increasing preschool key competences and teaching skills by engaging all the educational partners in practicing collaborative learning in the detriment of traditional learning. Teachers are responsible for studying the best formation in this case and for choosing defined criteria adequate to the objectives and duration of activities.

This micro-research proposes practicing collaborative learning in a nursery school for a definite period of time, monitoring the learning process due to practicing traditional learning to another nursery school and assessing the results at the same period of time.

Collaborative learning requires learning in small groups face to face and in online contexts when needed, developing key skills, learning outcomes (communication, social, basic skills, digital skills, literacy, critical and creative thinking, working with others, being personally effective and extending boundaries. *Co-learning* provides Real-world Problem-Solving and Innovation.

The "control group" is formed by 24 children aged six is proceeding on a traditional learning, and the experimental "group community" is also represented by 24 children of the same age and their teachers represent the "experimental group". The experiment was established for a limited period of time (exactly 412 min). Children were engaged in different activities in small groups (4 members) or face to face activity engaged in different strategies and resources in providing outcomes learning by their teachers.

The independent variable was the collaborative learning and teaching shown in the experimental design. The specific guidelines planned in the experimental group attended in co-laboratory class were: Dream, Map, Explore, Ask, Re-make and Show.

The role of teachers in Dream activity was: team leader, team reporter, organiser and lead researcher. They had to create team blog to register and report their progress, and also can provide on line tutoring and mentoring activity. Also children learn to work independently how to access e-portfolios and also to reflect on formative assessment.

Learning activity related to Explore focuses on developing team work and interpersonal skills. Teachers should observe children's digital skills, offer a collaborative learning environment in classroom or at home as well.

They used Map activity both with teachers to organise learning tasks working on small groups and using virtual tools and rubrics. This kind of activity is more efficient for students and teachers in peer learning. Students may use also Mind-Mup, Poplet, Paddlet.

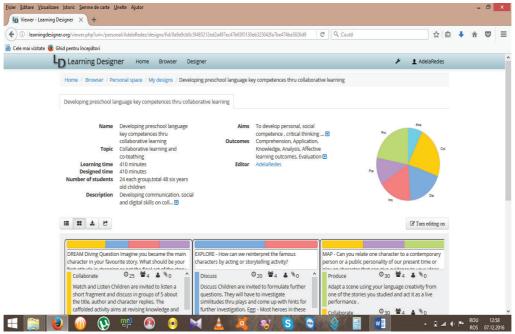
The goal of the Make activity is to develop digital competences in using ICT efficiently. Also, by using Make activity students can self-assess on different topics and elaborate alternative strategies for other students.

Using Ask activity teachers in the experiment group created an online debate with interview results and collected different opinions on classroom learning.

During Re-Make activities teacher had the opportunity to connect with local personalities by e-mailing on the theme project developing language and social competences using collaborative learning". They had the opportunity to send online invitations and invite them to participate during nursery activities.

Show activity completed the project by setting out the process and the results of the class. Teachers facilitated their results using a webinar where offered the assessed work to other preschool teachers. It's a good strategy to self-reflect, self-assess upon the outcomes. Teachers disseminated project information and children's portfolios and gave a real feedback for other *actors* of school community and experts. "Show" reveals the pattern of the institutional model recognition.

We will attach a print-screen indicating the project-based learning of the Learning Designer project described in the research. (Follow –up)



Results and Discussion

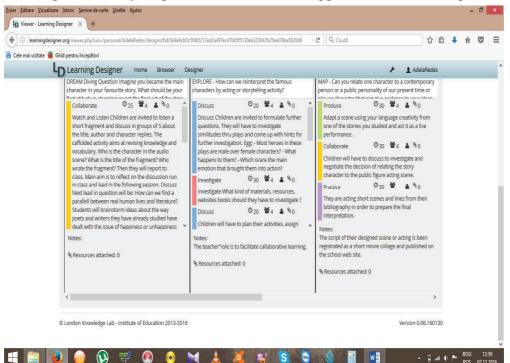
Beyond the difficulty of transferring theory to practice, we can also highlight that "many teachers noted that constraints to moving beyond pedagogy included lack of time and the need to cover the curriculum" (Cohen, Brody, & Sapon-Shevin, 2004, p. 63).

Due to the collaborative learning, the objectives and assessment have taken into account attitude towards learning and willingness to learn; setting objectives and planning activities; organised and targeted learning activities; fostering learning, reflection on learning activities and outcomes, and self-assessment (Development of Students' Key Competencies in Basic School (grades 5-8) and also aims to develop scientific, learning—to-learn and communication in the mother tongue competences). Education and Training 2020 Work programme Thematic Working Group 'Assessment of Key Competences' Literature review, Glossary and examples November, 2012)

These elements included knowledge, skills and attitudes related to "learning to learn competences". It is useful as a recommendation to attend ICT research (Innovative Teaching and Learning) as a powerful tool supporting a large range of 21st century skills, including all other Learning Design rubrics that help students collaborate in ways that have not been possible before, or communicate through new means of expression: interacting knowledge construction and real-world problem-solving and innovation.

This project on collaborative learning recorded best results both for children and teachers. The experimental group got familiarized with innovative collaborative techniques methods and strategies. The results of Show activity technique reveals improving personal competences and aimed at objectives of the group community (print-screen project learning designer). Children improved collective collaboration: collaborative learning at 27% percent, inquiry at 17, 07%; acquisition at 7, 32; production at 21,95%; discussions at 18,29%. The group asked the opinion and suggestions of other groups.

All group members actively contributed to the final product, the live scene presentation and on webinar. Children and teachers offered each other support and feedback. When someone in the group was having trouble, others spontaneously helped. Children have the opportunities to develop their



public speech skills, oratorical acting. When needed the group community asked for help, others helped them immediately. In the end, everyone seemed satisfied with their group's work. Group members exchanged and negotiated their ideas between each other, strategies, tools and/or resources to carry out the activity. The group defined the tasks and the role of each member early on. The group assisted and gave advice to others using online classroom and requested

comments to other groups before finishing the activity. Everyone accepted critical comments from others outside and the other group participated to this research.

Conclusions

Challenges to collaborative learning instead of the traditional one, increasing the classroom level are blended with the traditional and culture issues where the role of the teacher is focusing on students' learning and act as a facilitator; balances of taking decisions about learning with students, in ethically responsible ways; teachers control less, and students are involved more:

The assignment of content, with the goal of charging strong knowledge foundations is used to develop learning skills and learner self-awareness, and self-assessment without *unconnecting* learning strategies from content.

The learning processes and the aims for assessing consider that evaluation activities should also be used to promote learning and to develop self and peer-assessment skills.

The taking-tasking and learning awareness activities, that requires schools are useful on create learning environments that motivate students or children to accept the role in group learning and a constructive classroom climate.

Designing classrooms—laboratory online-lab, face-to-face interaction, extended examination of ideas, debate sessions, the hearing-out of multiple perspectives; re-creating the educational informal-formal environment, the development of an intellectual community -all these are easy to accomplish by providing collaborative learning.

Collaborative classrooms stimulate both students and teachers in the most authentic design of learning, the collaborative learning process models what means to question, learn and understand in concern with others. Learning collaboratively inquires responsibility, persistence and sensitivity, but the result can be a community of flourishing learners in which everyone is welcome to join, to participate and to grow.

References

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York, NY: Longman.

Anderson, R. S. (1998). Why talk about different ways to grade? The shift from traditional assessment to alternative assessment. New Directions for Teaching and Learning, 74(Summer), 5-16.

Bocoș, M.D. Jucan D. Fundamentele Pedagogiei. Teoria și Metodologia Curriculum-ului. Repere și Instrumente Didactice Pentru Formarea Profesorilor, Editura Paralela 45, 2010.

Bocos M-D, Instruirea interactivă, Editura Polirom, 2013

- Brookhart, S. M. (2013). How to create and use rubrics for formative assessment and grading. Alexandria, VA: ASCD.
- Bruffee, K. A. (1973). Collaborative learning: some practical models. College English, 34(5), 634-643.
- Chis V., Pedagogia curriculumlui bazat pe competente. Pedagogia invatarii in profunzime,Educatia 21, 2004, P.13-31.
- Chiş V., De la pedagogia pentru cunoștințe la pedagogia pentru competențe , Educația 21,

2005.

- Chiş V., Pedagogia curriculumlui bazat pe competențe. Pedagogia învățării în profunzime, Educația 21, 2004.
- Chis V., ,capitol, Reforma in educație. Proiecții în învățământul universitar, Cooperare și interdisciplinaritate în învățământul universitar, Presa Universitară Clujeană, Cluj-
- Napoca, Editor: Simona-Elena Bernat, Vasile Chis, 2002.
- Cohen, E. G., Brody, C. M., & Sapon-Shevin, M. (Eds.). (2004). Teaching cooperative learning: the challenge for teacher education . Albany, NY: State University of New York Press.
- Elizabeth F. Barkley, Claire H. MajorK. Patricia Cross, Collaborating Learning Tehniques, A Handbook For College Faculty, Second Edition, One Montgomery Street, San Francisco, 2014.
- Elizabeth F. Barkley, Claire H. MajorK. Patricia Cross, Learning Assessment Tehniques, A Handbook For College Faculty, Second Edition, One Montgomery Street, San Francisco, 2014.
- Evans, J. A., & Foster, J. G. (2011). Metaknowledge. Science, 331(11), 721-725. doi:10.1126/science.1201765 Gawande, A. (2010). The Checklist Manifesto: How to Get Things Right. London: Profile Books. Goodrich, H. (1996). Understanding rubrics. Educational Leadership, 54(4), 14-17.
- Gillies, R. M., & Ashman, A. F. (2003). An historical review of the use of groups to promote socialization and learning. In R. M. Gillies & A. F. Ashman (Eds.), Cooperative learning: the social and intellectual outcomes of learning in groups (1st ed., pp. 118). London, UK: outledgeFalmer.
- Gillies, R. M., Ashman, A. F., & Terwel, J. (Eds.). (2008). The teacher's role in implementing cooperative learning in the classroom (Vol. 7). New York, NY: Springer.
- Griffiths, S. (2003). Teach ing and learning in small groups. In H. Fry, S. Ketteridge & S. Marshall (Eds.), A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice
- (Taylor & Francis e -Library, 2005, 2nd ed., pp. 91-104). London: Kogan Page. Jaques, D., & Salmon, G. (2007). Learning in Groups: A handbook for face -to-face and online environments (4th ed.). Oxon, Canada: Routledge.

- Johnson, D. W., & Johnson, R. T. (1995). Social interdependence: Cooperative learning in education. In B. B.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). Cooperative Learning: Increasing College Faculty Instructional Productivity. (ASHE-ERIC Higher Education Report No. 4). Washington, DC: The George Washington University, School of Education and Human Development.
- Moseley, M., Eilliott, J., Gregson, M., Higgins, S. 2005. Thinking Skills Frameworks for Use in Education and Training. British Educational Research Journal 3, 367-390 NCCA (2009). Senior Cycle Key Skills Framework. Dublin: NCCA
- Rychen, D.S. and Salganik L.H. (2000), Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo) Background Paper Neuchâtel: DeSeCo Secretariat. Paris: OECD Programe "Development of Students'Key Competencies in Basic School (grades 5-8) and also aims to develop scientific, learning—to-learn and communication in the mother tongue competences. Education and Training 2020 Work programme Thematic Working Group 'Assessment of Key Competences' Literature review, Glossary and examples November, 2012
- Roman, A. F. (2008). Cooperative learning. The role of model's positive interaction in education, Analele Universității din Oradea, seria Psihologie-Pedagogie-Metodică, Tom XII, Editura Universității din Oradea
- Roman Alina, Implications of the Emotional Intelligence in he Development of Learning Throught cooperation, Proceedings of the International Symposium, Research and Education in an Inovation Era, Section I, Tradtion and Modernity in Humanistic Science, Aurel Vlaicu University, Arad, Romania, 16 18 november, 2006, p.365
- Tuckman, B. W. (1965). Developmental sequence in small groups. Psychological Bulletin, 63
- Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of Small-Group Development Revisited.
- Group & Organization Studies, 2 (4), 419-427.
- Tuckman, B. W., &Jensen, M. A. C. (2010). Stages of Small-Group Development Revisited. Group Facilitation: A Research & Applications Journal, 10. Westberg, J., & Jason, H. (1996).
- Fostering Learning in Small Groups: A Practical Guide. New York, NY: Springer Publishing Company.