

Potential and Evolving Social Intelligent Systems in a Social Responsibility Perspective in French Universities: Improving Young Unemployed People's Motivation by Training for Business Creation Integrating Emotions around Mediator Artifacts

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Abstract - In France, with the economic crisis and the huge rate of unemployment, the role of Universities has changed in the recent years with a new challenge of social responsibility. They try to promote the creation of new economic activities to attract new people, especially coming from disadvantaged areas in great town suburbs, particularly unemployed young people. We present the experiment of Creators of Activities University Degrees (DUCA) around cooperative devices or Creators' Groups (GC). These DUCA / GC correspond to an individual project, part of a global dynamics in a collective approach. In a perspective of helping disadvantaged people to rebuild their life in a project dynamics of creation of economic activity, information and communication issues are central. These DUCA / GC areas of interactions and cooperations constitute socio-technical devices progressively evolving to potential Social Intelligent Systems. We propose to analyze these cooperative devices through two Mediator Artifacts developed in the DUCA / GC areas of cooperations: the business plan of the activities' creators and the training serious game "Solutia". They help to better master the emotions and feelings of activities' creators to develop their self-confidence, their motivations, their entrepreneurship skills and their individual and collective knowledge. These areas of projects constituting potential and evolving Social Intelligent Systems correspond to a specific way of sustainable development to try to build "democratic solidarity" on territories.

Keywords – *intelligent systems; socio-technical devices; unemployed people; social responsibility; economic activities creation; entrepreneurship; mediator artifacts; disadvantaged areas.*

I. INTRODUCTION

In a period of social crisis and of huge unemployment, particularly for non-graduated young people in disadvantaged areas [1], Serge Paugam pointed the importance of "social links" [2] and of solidarity. These evolutions correspond to the need of repositioning the

Universities in a new perspective of Social Responsibility (RSU) but also other organizations with public service missions, such as Local Missions / *Missions Locales* (ML) or Centre for Information and Orientation / *Centres d'Information et d'Orientation* (CIO) in National Education Ministry.

According to Hervé Azoulay [3], "there are talents in the suburbs but they need to be discovered and developed in different manners". We must give confidence to potential activities' creators and enable their talents to flourish, and also to promote "innovation in everyday life" according to Norbert Alter [4] and especially social innovations.

The first Creators' Groups (GC) and Creators of Activities University Degrees (DUCA) have been created in 2000 by a partnership between the University Institute of Technology (IUT) of Melun-Sénart belonging to the University of Paris East Créteil (UPEC) and the Local Mission (*Mission Locale*) of Melun-Sénart. A Local Mission is an intervention space to help young people under 25 years of age. Each young person is given a personalized follow-up, to help him on employment, on training but also on housing or health problems.

The University of Paris East Marne-la-Vallée (UPEM), through its component IUT has managed since 2006 several groups of Creators of Activities University Degrees (DUCA) recently become TPE (Very Small Business) Entrepreneur, supported by training partnerships devices, the Creators' Groups (GC). These GC (15 in 2016) are federated in a national association: National Association of Creators' Groups (ANGC).

We first present the global context of the unemployment challenges in France, Social Responsibility of the Universities (RSU) and Social and Solidarity Economy (SSE), particularly for young people in disadvantaged areas. Then we explain our researcher's position and the methodology used. We show the specificity of the DUCA / GC devices, pointing particularly on their Information and Communication issues and the question of emotions and feelings to improve their motivation. We present two

emotions' Mediator Artifacts: first a training "serious game" (Solutia) and a second, the Business Plan used as the framework of the economic activity project. We explain how DUCA / GC devices may be considered as potential and evolving Social Intelligent Systems. Finally, we show the importance of the DUCA / GC in a Social Solidarity Economy perspective before giving some examples of success stories of activities' creations and mention some possibilities of evolution of the DUCA / GC.

II. UNEMPLOYMENT CHALLENGES, SOCIAL RESPONSIBILITY OF UNIVERSITIES IN A SOCIAL AND SOLIDARITY ECONOMY

The challenge of unemployment is particularly strong in France. At the end of November 2016, there were 6,238,400 people registered in the Unemployment Office (*Pôle Emploi*) in mainland France (without overseas areas), including 3,447,000 people without any activity. France also has about 8,000,000 people living below the poverty level. The situation is particularly worrying for young people. Nearly 2 million young people are unemployed, without a diploma or training and, in particular, 19% of young people under the age of 25: the "neets" (not in education, employment or training), according to the Anglo-Saxon expression [5].

The situation has worsened since 2008. For the Minister of Labor, Myriam El Khomri (DUCAs' Graduation Ceremony, Paris, December 12, 2016): "we cannot miss no skill or talent".

In this context, in the recent years, the role of University has changed. It is no longer just only to build and transfer knowledge, but also to welcome new people and promote their vocational integration, including the creation of new economic activities. We speak of Social Responsibility of Universities (RSU). There is also the new position of "entrepreneur student" [6], concerning all the students and not only those coming from disadvantaged areas or being unemployed.

Eric Dacheux defined Social and Solidarity Economy (SSE) as "seeking to develop links, rather than making profits" [7]. In the same seminar, Florine Garlot, highlighting the work of Jean-Louis Laville and Alain Yvergnaux (2009), stressed the difference between two types of solidarity: "philanthropic" solidarity and "democratic" solidarity. With the profound changes of capitalism over the last thirty years and in particular the financialization of the economy, Laville and Yvergnaux propose another project based on "democratic solidarity". While for them philanthropic solidarity corresponds to a liberal political project aimed at calming the tensions of a system by nature egalitarian, democratic solidarity is centered on emancipation and the reduction of inequalities [8].

Our approach to the RSU corresponds to this social and solidarity economy perspective, thus articulating the notions of link or interaction (reliance) to promote the sustainable development of territories through the interactions and solidarity of all the actors, and especially in disadvantaged areas (resilience).

III. RESEARCHER'S POSITION AND METHODOLOGY

The author of this paper manages DUCAs in the IUT / UPEM and is also member of GC Coordination Committees.

From a methodological perspective, the author of this article belongs to the French University's interdisciplinary field of Information and Communication Sciences, according to the approach proposed by Françoise Bernard [9] with the convergence of four aspects: meaning, link (relationships, interactions), knowledge and action. He positions in a research action perspective mixing theory and practice to build knowledge for action. His analysis corresponds to the research position described by Françoise Bernard as "engaging communication" [10].

Insisting on the primacy of action, Françoise Bernard proposed the paradigm of "engaging communication" to organize communication of societal action and utility, which is the case of the social and solidarity economy, as defined by Eric Dacheux. It is a question of apprehending the change in actions and the complex time of the various actors. Information corresponds to the time of knowledge, the urgency of action to the time of change. The articulation of the four major issues of action, link, knowledge and meaning, makes it possible to reconcile these different times to build a new civic responsibility. F. Bernard outlines the dimensions of "engaging position" and that of projects, which is the case for DUCA / GC.

According to Nicole D'Almeida [11], organizations move "between projects and stories." The projects correspond to two types of devices: first is the organizational one, and the second she calls "symbolic narrative" part where "stories" (symbolic devices) are essential. Organizations or organizational devices build their own imaginary stories. To take an example in a presentation's leaflet of Val de Marne Creators' Group: "Creators' Groups help to switch from dream to reality." They are based on two core values: "everyone is an asset for the territory", "everyone expressing the desire to create an activity is heard".

In this work, we met several concepts. The first concept met is that of "device" (in French, "*dispositif*"), that we consider, according to Michel Foucault [12], with all its socio-technical dimensions. For him, "What I'm trying to identify with that name, is first a decidedly mixed space, with speeches, institutions, architectural arrangements, regulatory decisions, laws, administrative measures, scientific statements, philosophical propositions, moral,

philanthropic, in short: the words, as well as the unspoken, are mere elements of the device. The device in itself is the network that can be established between all these elements. Secondly, that I would identify in the device, is precisely the nature of the relationship that may exist between these heterogeneous elements.”

In a socio-constructivist perspective, we also rely on the concept of “mediator artifact”: “the tools provided by the environment do not only play a role of mediator but also of artifact in that they organize (or reorganize) cognitive functioning” [13] with all the importance of project dynamics as especially developed by Jean-Pierre Boutinet and Gino Gramaccia [14] [15]. We also rely on the concepts of situations and interactions [16], defined by Manuel Zacklad as a logic of “cooperative transactions” [17].

Afterwards we analyze these DUCA / GC socio-technical devices as potential and evolving social Intelligent Systems [18] built by the cooperative knowledge of all their actors.

IV. THE DUCA – GC AS SOCIO-TECHNICAL DEVICES

In this section, we will show how DUCA / GC correspond to socio-technical devices as interactions’ areas with important Information and Communication Issues.

A. DUCA and GC as interactions’ areas

According to ANGC, “The Creators Groups seek autonomy and professional integration of unemployed people, including school leavers, based on their desires to undertake as a catalyst”. The main goal of the DUCA / GC devices is to restore confidence, especially for young school leavers by leveraging their creativity in a project approach from an individual project based on training (DUCA), developed in training and group work, but also with an individual coaching (GC).

The GCs (Creators’ Groups) aim to transform the desire for entrepreneurship into catalysts for professional integration through support and coaching based on entrepreneurship and project pedagogy. And this coaching is proposed without judging on the feasibility of the idea of the potential creator of activity or on the capacity to create or rescue an activity.

So this is an individual project, part of global dynamics, in a collective approach.

We have pointed the two key values of the DUCA / GC: “everyone is an asset for the territory”, “everyone wanting to develop an economic activity is heard”. These values are highlighted by the National Association of Creators’ Groups (ANGC).

The potential creator of activity is in the center of the DUCA / GC devices, initiator and co-creator of his project. Integration and autonomy are the aims of the coaching. The support or coaching correspond to a public

service approach and the GC services are offered free of charge [19].

Since 2006, UPEM / IUT proposed several DUCAs in partnership with different Creators Groups: Val de Marne Department (94), Val Maubuée (Torcy, 77) and, during three years, with the Paris 20th GC.

We will analyze how a new kind of training (DUCA) is based on cooperative processes and may be regarded as a “device” or an “organizational form” created by all the interactions between all the actors, to develop new opportunities for job seekers coming from disadvantaged areas, especially young school leavers. This process creates a new dynamics among all the actors, combining the individual dimension of each project with a collective dynamics.

A DUCA / GC device brings together partners including: 1) A federative structure (*Mission Locale*, Local Plan for Economic Insertion (PLIE), House of Employment (*Pôle Emploi*), other associations, etc.), 2) a University, often through an IUT, 3) a consultancy team in business creation (management shop or *boutique de gestion*, cooperative, industry and trade chambers, etc.).

B. Importance of Information and Communication Issues

Eric Dacheux, already mentioned [7], characterized Social and Solidarity Economy (SSE) as “seeking above all to build links”. This approach corresponds to the main goals of Communication Sciences, as stressed by both Françoise Bernard [10] and Daniel Bognoux [20], emphasizing the importance of the links and the relationship. It is the question of “living connected” or “reliance” that, for us, joins that of the “resilience” of territories in difficulty.

In a perspective of helping people to rebuild their life [21] in a project dynamics, information collect and communication issues are central. Their analysis will constitute a main part of our grid to consider awareness and management of emotions and feelings as levers of creating economic activities. And so their management included in these activities’ creation may help people in difficult situations to rebuild their life.

Firstly, candidates to DUCA / GC are searching in leaflets on business and crafts, books and numerous documents offered by the Local Missions and Centre for Information and Orientation (CIO), specialized websites, etc., information to better formalize their projects. They are helped in their information and documentation work by members of ML or of CIO.

The personal reconstruction of the learner / creator is based on an innovative process of creating an activity that is formalized in an oral mid-term and an end-of-year presentation. This process involves many exchanges and a strong research activity for information and documentation with the help of people resources belonging to Local Mission, CIO, or different local associations. It is driven by Mediator Artifact such as Business Plan of each student or meetings around a training “serious game”.

This paper corresponds to a complementarity of views. We have met, observed and interviewed: DUCA teachers, GC leaders, trainers, facilitators from Local Missions, members of *boutiques de gestion*, psychologists, and, of course, students-learners and potential creators of their economic activity.

We propose some ways to analyze emotions and feelings of these actors, especially of young people creating activities around two Mediator Artifacts: a training serious game (Solutia) and the business plan of each activity's creator. In a first step, these two Mediator Artifacts constitute for us socio-technical devices.

V. TWO EMOTIONS' MEDIATOR ARTIFACTS

DUCA / GC devices correspond to societal innovative areas to promote interactions. Two Mediator Artifacts may act to reveal emotions and feelings and so help to improve activities creators' skills and their creativity.

A. A training "Serious Game" (Solutia) as first Mediator Artifact to develop ludic interactions

The main goal of DUCA / GC is to help increase creativity spirit and skills of creators of potential economic activity and especially young people. The DUCA / GC training teams try to invent new ways to interest the potential activities' creators in being involved and so changing their life. One specific way consists in a training game: "Solutia". It is actually a form of "serious game", but not developed on Internet interactions but on real exchanges in face-to-face situations between some creators (five to eight) with the help (a form of coaching) of a ML member.

This game constitutes a Mediator Artifact to develop ludic interactions to improve interest for cooperation and to create a project dynamics. This training "serious game" may also help converge the representations and develop confidence by creating collective dynamics and some form of pride around a personal project which may be also that of a whole family and, sometimes, of a larger community.

First, this game has been thought and created by Marie Beauvais – Chevalier, member of ML of Marne-la-Vallée / Torcy, coordinator of the GC in Val Maubuée. Solutia's game corresponds to a sort of Monopoly and Game of the Goose (*Jeu de l'Oie*) for learning how to manage company's creation and its traps and opportunities.

In a second step, Solutia has been developed and marketed by a student of UPEM University with the creation of a new company through a new device "Students poles for Innovation, Transfer and Entrepreneurship" (PEPITE) [22].

This business creation by a student around Solutia's serious game illustrates the important evolution of the French Universities, and especially UPEM University. UPEM University tries to develop a new spirit of entrepreneurship through various devices and especially with times of exchanges and interactions between teachers and students

such as the "All Creative Day, *Tous Créatifs*" (this year on June 22th). It also corresponds to interactions between civil society and local actors and Universities members.

B. A second Mediator Artifact: the Business Plan of the creators' projects

We have also observed the emotions and feelings of the actors of DUCA / GC Devices around another Mediator Artifact, the Business Plan of each creator of potential economic activity. The business plan is the main framework of the entire process of monitoring the development of the economic activity of the potential creator. It is a crystallizer of interactions from the beginning of the process (emergence phase) to the final presentation of the project.

The emergence phase allows the potential activity creators to better define their ideas and formalize them. It includes four steps: 1) better knowing their potentiality as project's leaders, 2) better defining the main idea of activity to develop, 3) discover the environment of the project, 4) define the suitability of their personality to the project and its environment. After this phase, the future creator formalized a file, which is the basis for presentation and is defending before a jury for admission to the DUCA degree. The interview is always conducted sympathetically to give confidence to the future creator and help to validate his idea.

The training phase (DUCA) allows future creators to receive specific knowledge to develop skills necessary to manage any activity (company, association, etc.): management, information and communication, legal and tax information, sales management, market survey, project management, etc., and to check the feasibility of the proposed project, specifying the business plan (market survey, financing, cost calculations, etc.). The "case" is finalized and presented before a jury. Pedagogy emphasizes the collective dimension and the practical application of the teachings around creative projects.

VI. INTERACTIONS ANALYSIS AROUND MEDIATOR ARTIFACTS INTEGRATING EMOTIONAL DIMENSIONS

The two presented Mediator Artifacts enable us to observe the emotions and feelings expressed in particular by young potential entrepreneurs: a phase of interactions between them in a playful position (Solutia Game) and also with interactions with the teaching team: the Business Plan. Both Mediator Artifacts converge to help to build an individual project in a collective dynamics.

Finally, our findings highlight an analysis process with the transition from the initial and spontaneous emotions of the actors, especially young creators of economic activity, to more lasting feelings, attitudes and behaviors over a long period, in relation with their personality.

We promote a dynamic dimension of integration (integrative approach) of changing emotions and feelings in the situation analysis and interactional approach proposed by Alex Mucchielli (Situational and Interactionist Semiotics) [23] for economic activity creativity, apprehended in a grid

of informational and communicational integration of actors' views. Different contexts constituting a situation for the actors are considered: respective positions, goals, references or norms, interactions, values, etc. The set of meanings found provides access to the "global meaning" of the phenomenon, which is therefore the synthesis of the meanings taken in the different contexts and for the different actors.

For us, it is also the challenge of development of a dynamics (process) around control of emotions and feelings on a rather long term process.

Alain Caillé presented the quest for recognition as a new total social phenomenon in the second half of the XXth century, notably for minorities or some social groups, but also for populations of sensitive areas. For him, until the 1980s, the emphasis was rather on levels of remuneration, (wages), social protection and working conditions, in particular with the development of trade unions [24]. Recognition by others and the reconstruction of self-esteem are very linked according to Gerard Lefebvre [21].

The DUCA / GC devices are also a space for converging management of project approaches [14], [15], and quality approaches. We propose to consider this convergence through three types of processes that exists in any organization or project: the objective to compliance (control), the desire to implement changes and so the commitment to promote creativity and innovation [25]. For us, DUCA / GC devices constitute interesting areas of cooperation to observe this convergence. The challenge is to promote a culture of change and innovation in the French society based for example on validated and reproducible experiments. It can be first developed betting on the capacity for innovation and creativity in small structures that promote initiatives. But it is also a question of answering the reality of markets and needs of local consumers or funding institutions.

The emotional skills of young creators are the central element of an emotional intelligence, in our opinion, not sufficiently taken into account. The human body is both the mediator from which the individual can sensitize his affects and constitutes a communication support of them, according to Fabienne Martin-Juchat [26].

By helping to set the individual project of business creation in a collective dynamics, the two studied Mediator Artifacts may help to favor a first awareness among activity creators; they are never completely alone and there are levers, networks that they must know how to use to get the right information at the right time and in the right place (informational and communicational skills). This awareness may help activities' creators to restore their confidence and to overcome their shyness.

The serious game Solutia also promotes situational skills: it allows students to discover a number of problem situations they can find in their creative activity and so help to overpass them. It can give awareness of their personal evolution, especially of their new skills and some pride of their activity's project: importance of self-esteem, often built through the eyes of others, especially their friends and their families.

The goal of the Mediator Artifacts, particularly Solutia serious game is to (re) give confidence, to raise awareness that everyone has met difficulties in his entrepreneurship's pathway and that they can be overcome. It is good to know how to go beyond emotions such as fear of failure, withdrawal, frustration, anger, etc. Understanding and better managing emotions by relativizing them may help to recreate a positive dynamics of trust. It is also important to train the activities' creators to be aware of their emotions and feelings, so they are not paralyzed by them, and, therefore, to better manage them and to succeed in their creation of activity process.

VII. FROM SOCIO-TECHNICAL DEVICES TO POTENTIAL AND EVOLVING SOCIAL INTELLIGENT SYSTEMS

DUCA / GC constitute spaces for cooperation in order to develop an individual project in a collective process of building knowledge based on Mediator Artifacts fostering exchanges and cooperation among all their actors, notably creators of economic activity.

As a first step, we proposed to consider them as socio-technical devices based in particular on interactions around two Mediator Artifacts. In a second step, we propose to consider the DUCA / GC as potential and evolving Social Intelligent Systems by placing us notably in the constructivist approach (the social reality is "constructed" by the actors) of the complexity analysis proposed by Edgar Morin [27] and Jean-Louis Le Moigne [28]. Particularly, Jean-Louis Le Moigne proposes an approach to the elaboration of a General System, which gradually emerged from the 1950s with the cybernetic, structuralist and structural-functional approaches ([18]).

J.-L. Le Moigne stresses the importance of modeling: "modeling a complex system is modeling a system of actions". In the formalisms of the systemic modeling, he relies on Edgar Morin, who proposed the concept of organiz-action corresponding to principles of eco - auto - re - organization with information, communication and computational dimensions.

For J.-L. Le Moigne, it is an organizational or informed system: "the information forming the organization that forms it", with all the importance of documentation and information resources, as we have pointed out for the DUCA / GC [28].

From the communicational point of view, Alex Mucchielli proposed [29] a "Systemic and Communicational Approach of Organizations" (2002). He presents an Information and Communication Sciences approach based on the paradigm of complexity in relation with systemism and constructivism, referring to the works of the invisible college at Palo Alto, where "communication is always conceived as a participation in a communicative ensemble or a system of relations (the "orchestra" model). It is a matter of bringing to light the meaning of the different interactions in a global system, in order to create a collective sense of the relational system itself for all actors. It proposes

a method leading to model the relations. It begins with an observation of relations, and continues with an effort to diagram the exchanges (including implicit communications) of the actors and to finish with the description of the functioning of the whole system. The final analysis must reveal the emerging "values" of the system, which, implicitly, can be regarded as "leading the game", almost unknown to the actors.

He will confirm and extend these propositions a few years later in his "situational and interactional semiotic" approach (2010) already mentioned in an interactionist analysis of the DUCA / GC [23]. This perspective joins that of the Communication as Constitutive of Organizations proposed by Linda L. Putnam and Anne M. Nicotera [30], considering organizations as organizational systems as Edgar Morin.

After the informational and communicational dimensions of his modeling approach, J.-L. Le Moigne evokes a third "computational" dimension. In this perspective of computational analysis of players' relations in the case of game situations, such as for the Mediator Artifact Solutia game, we can refer for example to the works of Mossakowski and Mandziuk in the case of the bridge game [31].

At this stage of our analysis, we are at the first two levels of modeling information and communication situations around interactions between DUCA / GC actors in a perspective of social systemic approach in a shared knowledge building perspective.

DUCA / GC considered as potential social Intelligent Systems correspond also to an approach of building collective intelligence in specific situations. We are then in the perspective of management of collective intelligence (CI) proposed by Olivier Zara [32]. According to him, "Collective Intelligence is the intelligence of the link, of the relationship defined by some as a connective intelligence or "global brain"... The heart of the collective intelligence is the harmony in the links... These links induce the cooperation and collective intelligence would ultimately be the consequence of intellectual co-operation, their materialization. He refers to Pierre Lévy, for whom "the best thing that can be done with new technologies is not Artificial Intelligence (AI), but, on the contrary, Collective Intelligence ... Computers do not mimic humans, but help them to think and collectively evolve their ideas. CI helps people to think together, while AI seeks to substitute for humans to limit their mistakes".

All this from a perspective of social systemic that J.C. Lugan proposes to develop in a pragmatic approach "concerned to confront the available systemic tools with concrete social formations" [18], for us DUCA / GC.

VIII. THROUGH AN INDIVIDUAL DYNAMICS IN A COLLECTIVE APPROACH

To use a formula coming from an ANGC document: "To dare it is already to move forward". It is a question of helping to "overcome the preconceived ideas that prevent

change": "I have no money", "I am too young", "It is too complicated", "I have no idea", "I feel alone", "I have a disability", "I do not have a diploma", etc. [19].

We think that learning to better manage the emotions can become a collective goal to develop cooperation and improve skills. It is on this aspect that we propose to the other partners of the DUCA / GC to insist with a view of continuous improvement of existing devices.

Social sharing of emotions is also important for encouraging awareness of group membership [16]. This group is essential to promote the personal development of each potential creator. This integration of emotions and feelings can help to better integrate an individual project of creation of activities in a collective dynamics of exchange of experiences and feelings (Group of Creators) to better understand and support in times of doubt and (re) motivate them. We wish to analyze their mechanisms to best promote these periods of interactions and information sharing for improvement of their projects.

Our observations lead us to propose a broadening of perspectives of Situational and Interactionist Semiotics defined by Alex Mucchielli [23] with the integration of the experiences of the actors and their emotions and feelings according to Daniel Goleman [33], particularly for creators of activity.

Another approach to consider is the Sociology of Actor-Network (SAR) proposed by Michel Callon [34], even if the business plan and the serious game Solutia are not full technical devices, but rather social and managerial devices. The idea that the collective activity ("acting elements") can be considered as a "black box" ("*boîte noire*") seems to match our approach of the business plan as the idea of "hybrid reality composed of successive translations" and the fact that the SAR "has been designed to follow the collective in their making process", which is the case of DUCA / GC devices.

In the perspective developed by Aurélia Dumas and Fabienne Martin-Juchat [35], through situations of participatory observations or interviews with young creators of activities, in particular around the uses of the two mediating artifacts, we tried to understand their emotional culture, their emotional language and their mechanisms of emotional regulation. By privileging the vision of these actors, in a rather ethnographic approach, we considered the two mediating artifacts as "communicative objects".

We can then consider a dynamic relational semiotics approach to a certain length: global (approach by the complexity theory in a constructivist way), based on the search for meaning in the interactions' situations between all the actors (including socio-technical artifacts), and of course also including emotions, feelings, experiences of all the actors in a dynamic approach (convergence of the management of project approaches and the process approaches of quality management) to create a dynamic of change, creativity and innovation, mixing individual and collective dimensions.

IX. A SUCCESS TO BETTER SOCIALLY INTEGRATE PEOPLE BY CREATING NEW ECONOMIC ACTIVITIES FOR THE SUSTAINABLE DEVELOPMENT OF DISADVANTAGED TERRITORIES

A very recent study on Creators' Groups [36] clearly highlights the impact of GCs, corresponding to "an integration program through project pedagogy". DUCA / GC students are both better paid (29 % more than other young unemployed people) and can take back studies in better conditions and with motivation. By enabling young people to rebuild themselves, to regain their confidence and to think about a project, the DUCA / GC are thus two-fold integration mechanisms: both by activity (60% of DUCA graduates) and by training.

Since 2000, the GCs, mostly through Local Missions, have received over than 15,000 people, mainly young people, coached 7,500 people in the project emergence phase and more than 1,300 people in the training phase or DUCA [19]

For the University of Paris East Marne-la-Vallée (UPEM), since 2006, 305 activity creators and, especially, young people, have been trained in the IUT of UPEM and 157 graduated, that is to say more than 50%, which is considered as a very positive result by the Ile-de-France Regional Council (CRIF), the main public collectivity giving funds to the DUCA / GC devices.

More globally, nearly 500 people, especially young people, have been sensitized to business creation and reality of the economic constraints of companies. Nearly 35% of the graduated students have created their business or taken over an existing activity; others have been inserted as employees in existing companies (often trade or food activities). Activities creations successes particularly concern the services sector in very different aspects. First, we have food activities such as free gluten bakeries, food to all tastes and cuisines possible, particularly Afro-Asian. Secondly, we have clothes manufacturing companies corresponding to different countries (Japan and Asia fashion, North Africa, etc.) and shops of different types of clothes. We have also organic cleaning companies, communication companies to organize special events (marriage, etc.), production of video games, jewelry creations, home automation companies, etc. We have also more usual activities such as nurseries, gardening, public writers, different ways of home help, beauticians, hairdressers, sometimes with itinerant projects. But also, with the reform of school times (2013), we have animation's projects to provide stimulating activities or sports for children after school time, etc.

A great satisfaction during the graduation ceremonies for the DUCAs in December 2015 and 2016 was to see some graduated of previous years come to offer jobs to those who had just come into training.

DUCA / GC can also correspond to an intergenerational perspective that may be part of the Silver Economy (markets linked to ageing and well-ageing). Young retired volunteers could thus help young creators or young rescuers of activities to develop their activity: aids in management but also

according to the different types of jobs (baker, car repair, gardener, etc.) giving a sense of solidarity and transmission in the early years of the often difficult transition from an intense activity to the breaking, not always wanted, to retired new life. These retired people may act as supports or coaches for young and inexperienced creators of activities. This form of intergenerational solidarity on the territories also corresponds to the articulation of the challenges of "reliance" and "resilience".

X. CONCLUSION

Since 2006, DUCA / GC socio-technical devices developed in UPEM / IUT, in cooperation with federated partners in the DUCA / GC have progressively constituted potential and evolving Social Intelligent Systems. They have trained over than 500 students in the creation of activity, including a majority of young school leavers. The challenge is now finding additional funding to the specific aid the Regional Council of Ile-de-France. We hope in European subsidies.

In the cooperation areas developed around DUCA / GC devices, the position of "committed researcher" has really, for us, taken all its meaning and corresponds to a personal approach to the RSU, revisited as "societal responsibility of the researcher", in a perspective of "engaging communication" proposed by Françoise Bernard for societal responsibility [10]. We have gradually become convinced that the future can be built from micro actions on the territories and on daily innovative practices.

For us, beyond the figures and examples of activities successes creations in various sectors (gardening, personal computers, clothing, cleaning, food, restaurants, personal services, etc.), the more important part is to have renewed hope through a project dynamics to allow potential creators of economic activities, especially school young leavers, to take charge of their destiny, in taking the risk of action for hope to promote a new business vision, resolutely different from "destructive innovation" discussed by Luc Ferry [37], with the disasters of the financial and speculative capitalism. We insist on a first goal, that people dare to do the first step and also meeting the words of George Mallory starting to climb to Everest Mountain (1924): "Where there is a will, there is always a way." We also meet Stéphane Hessel and Edgar Morin who proposed new paths towards "the way of hope" in the same perspective of Economic Social and Solidarity where we try also to walk [38].

This approach focuses on the integration and management of emotions and feelings of all the actors of DUCA / GC devices, particularly those of the potential creators of economic activities. It also incorporates the concepts of "resilience" (ability to move again in a crisis situation), both with individual and collective aspects, of "sustainable development" of territories. Territories are then considered as built by a synergy of local projects, both individual and collective, all these projects building new links or interactions and solidarity, especially in disadvantaged areas [39] in order to create a collective

dynamics and give capacity for innovation and creativity [40]. For us, they constitute potential and evolving Social Intelligent Systems progressively built by all the knowledge and skills of all their actors and especially the creators of activity.

It is a question of trying to "catalyze" the energies to contribute to a new territorial dynamics, training being an essential element in helping to broaden territorial social capital by relying on projects of motivated young people. It is also in a certain manner an element of the perspective proposed by B. Carayon [41] of the French Economic Intelligence approach insisting on associating competitiveness of companies and social cohesion in a new territorial dynamics linking stakes of economic or competitive intelligence and territorial intelligence.

Potential and Evolving Social Intelligent Systems, DUCA / GC also correspond to new ways of "democratic solidarity" on territories, promoting new links between unemployed people with existing companies, local authorities or retired people acting as supports or coaches to invent new ways of local citizenship. They then contribute to the "relationship economy" proposed by Nicole D'Almeida in a communication perspective [42] and the "economies of conviviality and transactions" defined by Manuel Zacklad [17].

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