





New genius-entrepreneurs: Itinerary and trajectories of university educational excellence

Nuevos genios-emprendedores: Itinerario y trayectorias de excelencia educativa universitaria

-  Dr. Claudia Möller-Recondo is Assistant Professor and Director of the Social Entrepreneurship Laboratory of the University of Valladolid (Spain) (claudiamarcela.moller@uva.es) (<https://orcid.org/0000-0003-1951-504X>)
-  Dr. Juan-Pablo D'Amato is Assistant Professor and Bonding and Transparency Project Coordinator of the University of the Center of the Province of Buenos Aires (Argentina) (jpdamato@exa.unicen.edu.ar) (<https://orcid.org/0000-0002-0136-8830>)

ABSTRACT

The purpose of the present work is to rethink, in the university context, the concept of genius, related to the high intellectual abilities associated with intelligence; also, to connect the idea of entrepreneurial competences, such as leadership or social commitment. The hypothesis is that a university genius is defined by his high creative abilities and, in particular, entrepreneurial ones. From the methodological point of view, the recommendations of the National Association for Gifted Children were followed, and evidence collection was based on such practices, using the results obtained by two studies: the first one with professors and postgraduate students (from Argentina and Spain, from hard and soft sciences) who responded to a conceptual questionnaire, previously validated, in order to delineate common minimum denominators of geniuses. The other one comes from analyzing the results of an acceleration program of entrepreneurial competence with undergraduate students. Combining both data resulted in the need to think in an educational proposal (itinerary) with trajectories of excellence. One during the Degree level, with pilot training activities (in entrepreneurial competence), experimenting on a small scale; and the other in the Postgraduate level, encouraging them to be architects of their "routes", allowing them to self-employ and to become agents of socio-community change.

RESUMEN

El objetivo del presente trabajo es repensar, en el ámbito de la universidad, el concepto de genio en relación con las altas capacidades asociadas con la inteligencia y vincularlo con las englobadas en la competencia emprendedora, como el liderazgo o el compromiso social. Se fortalece la hipótesis de que un genio universitario es o puede serlo, por sus altas capacidades creativas y, concretamente, emprendedoras. Metodológicamente se siguieron las recomendaciones de la Asociación Norteamericana de Niños con Altas Capacidades, por lo que la recolección de las evidencias se basó en prácticas, utilizando los resultados obtenidos en los dos trabajos de campo realizados: Uno con profesores y alumnos de posgrado (de Argentina y España, de ciencias duras y blandas) que respondieron a un cuestionario conceptual, previamente validado, con el fin de delinear unos mínimos comunes denominadores. El otro estudio consistió en analizar los resultados de la implementación de un programa de aceleración de la competencia emprendedora con estudiantes universitarios de Grado. Del cruce de los datos resultó la necesidad de idear una intervención educativa (itinerario) con trayectorias de excelencia. Una en el Grado, con actuaciones formativas piloto (en la competencia emprendedora), experimentales, a pequeña escala y limitadas en el tiempo; y la otra en el Posgrado, siendo los propios estudiantes los arquitectos de sus «rutas», que a la vez que les permiten autoemplearse, les convierten en agentes de cambio socio-comunitario.

KEYWORDS | PALABRAS CLAVE

Genius, teaching-learning itineraries, university, creativity, talent, high intellectual abilities, social entrepreneurship, educational intervention.

Genios, itinerarios de enseñanza-aprendizaje, universidad, creatividad, talento, capacidades, emprendimiento social, intervención educativa.

1. Introduction

In 2014, the “Scientific Guide to High Capacities” warned us about the need to deeply review all research done on giftedness and high intellectual abilities (HIA) based on some old paradigms. This was linked to a lack of consensus among the scientific community about the definition of HIA, an enormous confusion about related concepts and very few works done by interdisciplinary teams. Furthermore, it seems that geniuses have not been the object of research lately. In light of this overall situation, this work proposes to create a conceptualization of the modern genius that lives in our universities. The idea is to identify them and to contribute to their development if they have already been diagnosed, or to “wake them up” if they have not. Then, these geniuses should be brought to a favorable educational ecosystem which adds to the traditional more or less complex contents about diverse topics, at least two of the fundamental standards identified by the National Association for Gifted Children (2019): the social and the leadership aspects. All of this should be included in, at least, one teaching-learning itinerary (with several trajectories), whose finishing line is entrepreneurship, and in particular, social entrepreneurship.

It is crucial to rethink the concept of genius: What do we know about this topic today? And how has it been approached? Here, an educational (not clinical) perspective and prospective are taken in order to assess the contributions that have been made about HIA, understood for their connection not only to cognitive intelligence, but also to other capacities, such as leadership, social skills and social awareness. It is interesting to think of the teaching-learning trajectories for genius university students who either already know they are geniuses when they get to the university (so-called diagnosed), or find this out when they are offered the chance to become entrepreneurs, as field studies show. This refers to a personal experience around Teacher Innovation Projects (PID, for its Spanish initials) carried out more than 5 years ago first, in the University of Extremadura (UEX), and then, in the University of Valladolid (UVa). The Social Education Undergraduate Program had the goal of building creative communities in the university context as well as around social entrepreneurship projects (Möller-Recondo, 2015). Hence, the situations that were derived went beyond the proposal of having innovative and creative ideas. It was observed that once students participated in a “micro-learning experience”, they could respond to the challenges of the Sustainable Development Goals (SDGs), by proposing different entrepreneurial projects.

Two additional situations were observed: on the one hand, students who seemed to respond to standard typologies, according to their IQ and academic performance, were able to better themselves. They could also be recognized by their peers and by an external jury who assessed their SDG proposals as “genius” due to the responses they could give to the challenges introduced. On the other hand, those students who worked on their entrepreneurial competence within the program showed higher engagement, creativity and commitment. At the same time, they discovered that they had unknown capacities, abilities and skills, and sometimes talents. The social aspect and their (exercised and delegated) leadership were definitely decisive all throughout the process.

1.1. Literature review

Students with HIA are intellectually above average, since they process information in a different way, with a high degree of creativity, task engagement and intrinsic motivation for learning. According to Tárrega et al. (2014), this fact entails the need to create a specific educational intervention that values their IQ, creativity and work. In any case, most authors link HIA to intellectual performance (López & Moya, 2011; Sastre-Riba & Castelló-Tarrida, 2017; Sastre-Riba et al., 2018) and identify the need to create a specific learning itinerary for them. López and Moya (2011) state that HIA or giftedness (another related concept) occur when there is a high intellectual performance (first order, $IQ > 155$; and second order, $IQ > 125$), creativity and a clear ease to learn. To them, Martín Gálvez et al. (2000) unite talent that refers rather to specific skills in certain areas or genius, which is one that has exceptional abilities in intelligence and creativity. There are also other concepts, which are, for example, related to age, such as earliness and prodigy. Some other national and international studies could also be reproduced, but they ultimately conclude what is hereby presented in summary. In any case, it is highlighted that one of the most advanced lines with regards to HIA is that of intelligence. This is maybe thanks to Gardner (1993) and his multiple intelligences, an interesting proposal back in his days, which has been reviewed nowadays by its author,

who recognized that he should have talked about capacities. Current research about intelligence and neuroscientific contributions about brain studies are transforming the current concepts and ideas about HIA and about the most appropriate action guidelines, as stressed by a study carried out by the Department of Education of the Basque Country Government (Aretxaga-Bediauneta, 2013.) Likewise, as Castelló-Tarrida (2001) highlights, “the single and static concept of intelligence has made way to a dynamic concept, which is not considered as a single trait, but as a constellation of irregular capacities which vary over life. The idea of the IQ as a measurement of intelligence, and as an indicator of academic, professional and social success, is open to doubt” (Martínez-i-Torres & Guirado-Serrat, 2012). Intelligence -be it multiple or not- could be another element to consider in the conceptualization of HIA, but not a decisive one. As Royo (Del-Barrio, 2018) stated, some scientific issues have been denied; and there are not seven brains but only one intelligence. Having more capacity for some tasks than for others is quite another thing.

Therefore, this work hereby understands the genius as that person with HIA related to intelligence and learning, skills, talents and creativity (Gardner, 1993; Martín-Gálvez et al., 2000; Torrego-Seijo, 2011), who has not only busted through something meaningful for society, but who can also create something and impact their environment; this is what matters. So, in order to be a genius, there is no need to have a high capacity related to a specific IQ. What currently matters are not what the person needs to have, but what the person can do with what they have. This refers to the creation of new educational paradigms that include teaching trajectories that go beyond the cognitive aspect. This is connected to a new challenge: How can we measure those capacities? Are there instruments available to do this? The National Association for Gifted Children (2019) recommends that evidence collection is based on practices, using the results obtained by students. This is the line the present work intends to follow. Within the scientific literature, there are distinct learning models and proposals. On the one hand, there are proposals for geniuses, and on the other hand for entrepreneurs. However, this work intends to pose a combined formula. Different educational proposals developed for people with HIA were studied (Van-Tassel-Baska, 2015; Olszewski-Kubilius et al., 2015; Sastre-Riba et al., 2018; National Association for Gifted Children, 2019), and in their analysis, two different approaches were identified: there are no multidisciplinary works from the previously articulated perspectives, and there are no specific works related to geniuses focusing more on their social dimension than on the intellectual one.

This work highlights the work of Van-Tassel-Baska (2016) which, even though it is targeted towards primary and secondary school students with HIA, it gives accurate clues on how to deal with the problem. It considers that the fundamental aspects that any program should take into account in order to teach students with HIA should revolve around differentiated practices in all subjects, resources, tools, assessments, etc. The foundation of these programs should be composed of a quality teaching staff whose skills and aptitudes should match the capacities of the students in the best way possible. All that should be promoted by a clear acceleration of the teaching-learning process. In this context, a specific university example could be the “Stanford Education Program for Gifted Youth”.

The “mega-model” proposed by Olszewski-Kubilius et al. (2015) identifies capacities, competences, expertise and eminence with an effort/practice which, thanks to the added value of the social aspect, for example, can make the person transcend eminence and become a genius. This trait is reached when, after all, something is made to help solve problems for the general world. On the other hand, the CAITAC model (Constructive, Self-regulated, Interactive and Technological) (Pérez-Sánchez & Beltrán-Llera, 2006) aims at taking advantage of the benefits of ICTs for the teaching of students with HIA. The model emphasizes the fact that these teaching tasks should be shared by several people. Thus, different points of view on the same task or content could help enrich one’s own perspective. The authors believe it is critical to understand and apply this learning model for the new geniuses, trying to maximize the potential of technologies on learning.

Some proposals of preferable practices, such as cooperative teaching models (Torrego-Seijo, 2011), or in the university context, those practices contained in the “Radar of educational innovation” and the “Educational Model TEC21” (2017; 2018), are not connected to HIA, but specifically refer to how the future of teaching and education should be in the university context. They also include recommendations of what needs to be done, such as investigating the relationship all this might have with motivation (Sastre-

Riba et al., 2019). Another issue is related to competences. A recent work analyzes the relationship between the “eagerness to achieve” curriculum competence and people with HIA in their incorporation to the work environment. Following the results of a survey completed by students, family members and professors, the generic profile of the talented student was outlined. This talented student would have project-solving skills that would position them preferably in the future labor market (García-Guardia et al., 2019.) This work concludes that paying attention to the differential qualities and aptitudes of students with HIA is crucial to implement an individual treatment, by building the adequate contexts for the development and strengthening of their skills.

On the other hand, none of the analyzed works mention entrepreneurship and its corresponding competence in terms of something to be taught to geniuses. They fail to mention any of their associated concepts, such as gifted, talented, eminent or intelligent. This may be because the competence related to entrepreneurship is more connected to the economic market, which does not consider archetypes, stereotypes or people’s profiles as much as it considers company results that are measurable in money and success. In this context, a genius would be that person who can, for example, build a unicorn company (Faverón-Patriau, 2018). In short, for people with HIA (emphasizing intellectual ability) individual treatments and cognitive enhancement are recommended, but no thought has been given to entrepreneurial contexts that combine the individual, of course, with integration into society.

Therefore, this work proposes the following: 1) To conceive the genius from a new perspective: one that does not redirect to a static measurement index which refers to one or more profiles connected to traditional HIA and their related concepts (Sastre-Riba & Castelló-Tarrida, 2017); 2) To depart from the statement which considers that every student is a potential genius; in order 3) To create an educational intervention proposal from the development of curriculum models with differentiated trajectories, based on learning and entrepreneurial practices; and 4) To help identify geniuses, as defined by their social contributions rather than by psychological measurements of profiled capacities. In summary, the aim is to identify genius university students who have been “raised” in teaching-learning ecosystems and who became geniuses thanks to what they were able to create, instead of to the traits they were born with. When these traits are measured, they result in a kind of bidi code that simply returns those people to society as geniuses, confronting them with a twofold problem. If they are standardized, they are limited; but, if their obvious differences are ignored, they are incapacitated. That is why, it is important to appeal to a methodology that gathers evidence based on practices and on the results achieved by the students.

2. Materials and methods

Following the recommendations of the “Pre-K to Grade 12 Gifted Programming Standards” (2019), evidence for this work has been based on the implementation of practices (Field Work: FW1 and 2) and on the assessment of results obtained by university students in entrepreneurial competence working scenarios. A conceptual and reflective survey was used. First, it was used to identify the minimum common denominators (MCD) of the concept of (modern) genius and their reality. And then, it was used to validate the hypothesis that considers that HIA should not only refer to cognition and intelligence, but rather the concept should either be broadened or reviewed, paying attention to other standards recommended.

2.1. Participants

Two samples were used, each belonging to a different field work (1 and 2), which converge at the end of this presentation. A sample of 200 people was designed (FW1), all connected to the work groups of two Spanish universities and one Argentinean university, with postgraduate students and professors. The main premise was that all people selected should belong to the so-called soft or hard sciences. This sample is geographically diverse (different provinces from Spain and Argentina), multidisciplinary (it is divided among Humanities, Sciences and Engineering -to use a common area name) and multilevel, without gender or age difference.

On the other hand, a sample applied to another field work (FW2) was collected. It was composed of 150 undergraduate students who participated in four university PIDs (throughout five years and in two different universities) aiming at building creative communities around social entrepreneurship projects.

The n=150 sample refers to the participants of an entrepreneurial competence development and micro-acceleration program which ended with the creation of social entrepreneurship proposals around the challenges posed by the SDGs.

2.2. Instruments

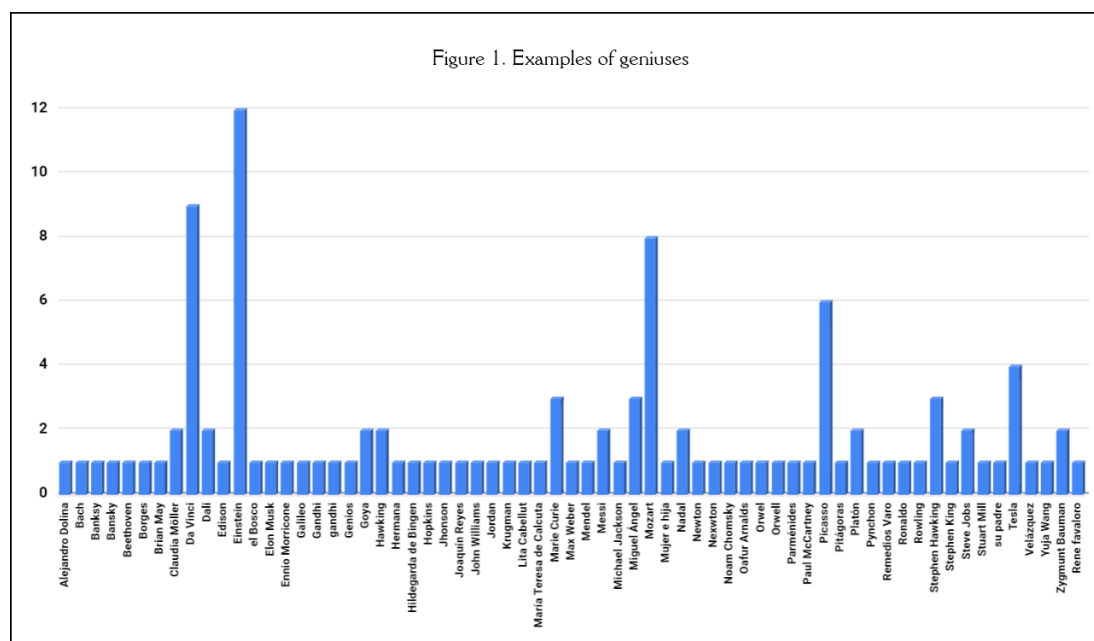
In order to be able to systematically address the creation of a comprehensive teaching assistance program for geniuses (i.e. to prepare a containment ecosystem) it is necessary to identify who those geniuses are, or could be, within the university, in today's educational context. Ultimately, this tool is the assessment instrument used throughout the proposal. Within the framework of FW1, a survey was built around two broad segments: the first referred to the conceptualization of what a genius is, and the second asked for examples. Moreover, an assessment rubric was provided to examine the entrepreneurial competence of those who completed the survey (the so-called background knowledge about the topic). All surveys were completed, and results were shared, using "Google Forms" templates that were later saved in the cloud in order to show the obtained results simply and clearly. As regards FW2 (that refers to micro-teaching and the results obtained by students), the instruments used were related to the agile methodologies needed to become an entrepreneur: Design Thinking, Project-based Learning, Challenge-based Learning, Events-based Learning and Workshop.

Finally, with all the data gathered and the philosophy applied to its analysis, it was clear that results needed to be assessed. From, and with those results, an educational intervention, broader than the ones used in FW2 (small-scale, time-limited pilot experimental actions), needed to be created. This proposal should result in the creation of an itinerary containing excellence trajectories with a high degree of customization, it should consider differentiation, without knowledge and practices integration. This itinerary should also let every individual shape their own learning and entrepreneurship path, and in that journey, be able to discover or rediscover (as appropriate) the genius that everyone has or may have inside.

3. Analysis and results

3.1. Determination of a genius' outstanding skills

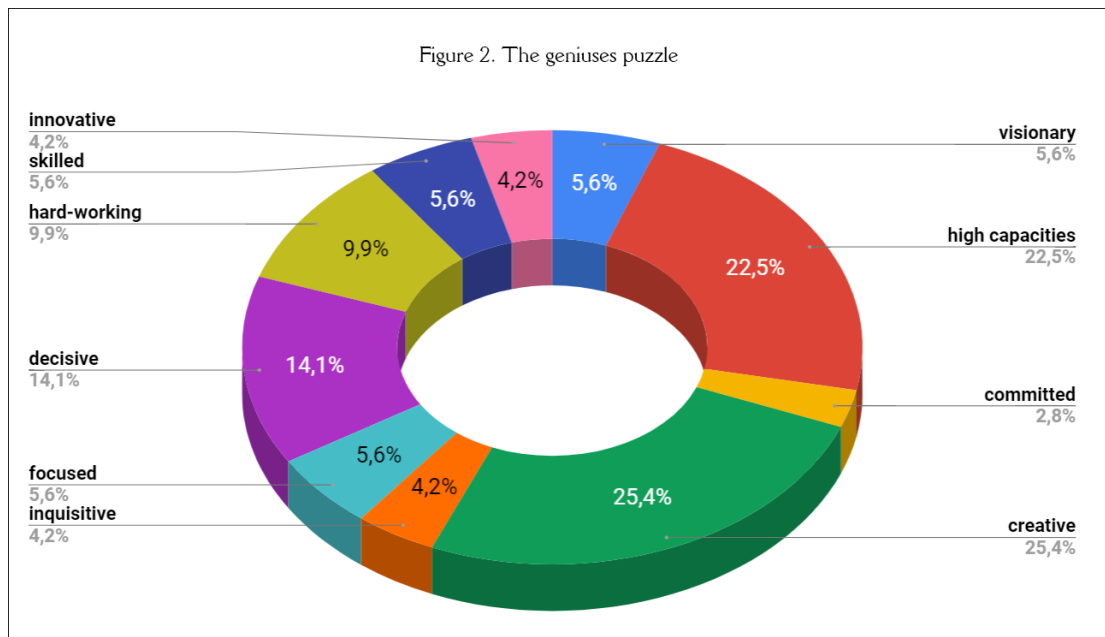
Based on the data derived from the second segment of the FW1 survey, with the examples of geniuses, a chart (Figure 1) was made, in which Einstein prevailed as prototypical.



As it could be observed, nowadays, there is no discussion about the modern concept of genius. This is partly shown in this prototypical prevalence, which accepts the historical, traditional meaning, and considers IQ as a decisive aspect of HIA, and thus of what a genius is. In any case, the answers given strengthen the hypothesis that a genius also has other HIA, where the social aspect plays a significant role. This is perfectly shown in the examples provided.

In turn, Figure 2 shows the results obtained from the first segment of the survey, which suggested that respondents provided a definition of a genius in order to identify the MCDs. According to the respondents, a genius was a puzzle made up of, in order of importance, creativity and HIA (among which the skills in a particular subject, i.e. traditional intelligence, -or the IQ- were highlighted.) Resolution and working capacity were considered less important, but were selected. Lastly, vision and ability, focus, curiosity and innovation appeared.

With the data obtained, this work does not intend to outline geniuses' profiles or taxonomies. As the scientific literature highlights, every case is unique, and it is not easy to classify a genius within one or more behavioral models. In fact, the challenge was to build, at least, one itinerary with several trajectories, where results allowed us to think and build as many behavioral models as geniuses and social projects existed. Actually, the intention was to find the puzzle parts to configure the genius, but not to diagnose them. The idea was to use those parts to value and assess teaching proposals in the university context.



The field study results partly match the proposal of Olszewski-Kubilius et al. (2015), which states the double necessity of rethinking those HIA only connected to the intellectual aspect, and building development trajectories to reach eminence. This eminence produces talent domains which can only appear after intense work, research and/or dedicated practice. Thus, based on these indicators, a map containing different teaching dimensions/trajectories is hereby proposed.

3.2. Layout of the teaching proposal

The idea of a puzzle is shared with the International Giftedness Society (Barbería, 2018), where HIA are considered, in addition to the intense neuronal activity related to tree thinking, as the components of the giftedness formula. It would be advisable to create, develop and/or strengthen said social skills, without losing sight of the brain's plasticity.

Thus, sooner or later, the equation would have to assume that social skills are a fundamental element. In this regard, the contributions of Furman (2016) encourage the development of itineraries integrated in

the framework of an ecosystem formed by challenge and exploration spaces. These are supported by a scaffold that helps organize what has been learned into ideas and thinking strategies, where technologies enhance the possibility of inventing, solving problems and dealing with solutions. Her model proposed to contextualize learning, participate in authentic practices and create reflection spaces in order to visualize thoughts; which could be combined with different practices (Van-Tassel-Baskar, 2016) and individualizing interventions (García-Guardia et al., 2019).

In relation to technology, attention should be placed on big data. There is an increasingly prevalent trend which claims that a real revolution will take place whenever we are able to know a person so well that teaching is adapted to their actual education level, their learning pace and their way of absorbing information (Harari, 2016).

Another practice worth mentioning in this work involves Harvard, where work is increasingly being done with the case study method as well as with the mentoring and sponsorship system among their students under the premise of innovating, risking, inspiring and transforming. In Spain, Pompeu Fabra University has implemented a system of open courses around a university access program where students can take courses from different undergraduate programs, and the role of the tutor-mentor gains importance. There are also experiences with global bachelor's degrees without borders which implement new courses of studies, as in the proposals of the Interamerican Open University. At the other end, there are self-educated experiences around success cases, such as the Silicon Valley model, where merit seems to reside in being -or having been- a university deserter.

That said, from the university point of view, the real challenge seems to be adapting, evolving and creating a new ecosystem for the so-called new geniuses to feel valued, either because they know they are geniuses, or because their own environment has let them be aware of it. In this framework, the "Educational Model TEC21" (2018) presents four components:

- 1) Challenge-Based Learning (which combines experience, cognition and behavior);
- 2) Flexibility (a curriculum model of trajectories to explore, decide and become specialized: global, diverse and multicultural learning community, entrepreneurial challenge with a human sense);
- 3) Memorable university experiences: leadership and entrepreneurial spirit, implementation of new ideas to transform the reality generating cultural value.
- 4) Inspirational, updated, connected and innovative professors, who are IT users and play the role of advisor, consultant, mentor, challenge designer and university professor. All this is complemented by a learning program based on challenges, competences and learning modules.

Along this same line, the "Reporter Deliberate Innovation, Lifetime Education" (2018) sets the premises for university education in 2040 based on 1) Interpersonal education (cognitive skills -problem solving and creativity, interpersonal skills -communication and leadership, and intra-personal skills -adaptability and discipline), experiential learning, critical thinking, multicultural environments and research; 2) Generation of new products or services; 3) Counseling + training with learning databases and Artificial Intelligence assistants which support students + professional networks dedicated to students; 4) Personalized educational experiences + mentors and coaches; and 5) Decentralization with the creation of hybrid spaces, real and virtual portals for students.

Most of these ideas are shared by the "Radar of educational innovation" (2017), which is the result of a research carried out over the last pedagogical and technological lines of the western world. This work highlights five pedagogical trends, in general prospective studies and for all knowledge areas: Challenge-Based Learning, Competence-Based Education, Flexible Learning, Gamification and Project-Based Learning.

3.3. Itinerary and trajectories proposal in the new entrepreneurial scenarios

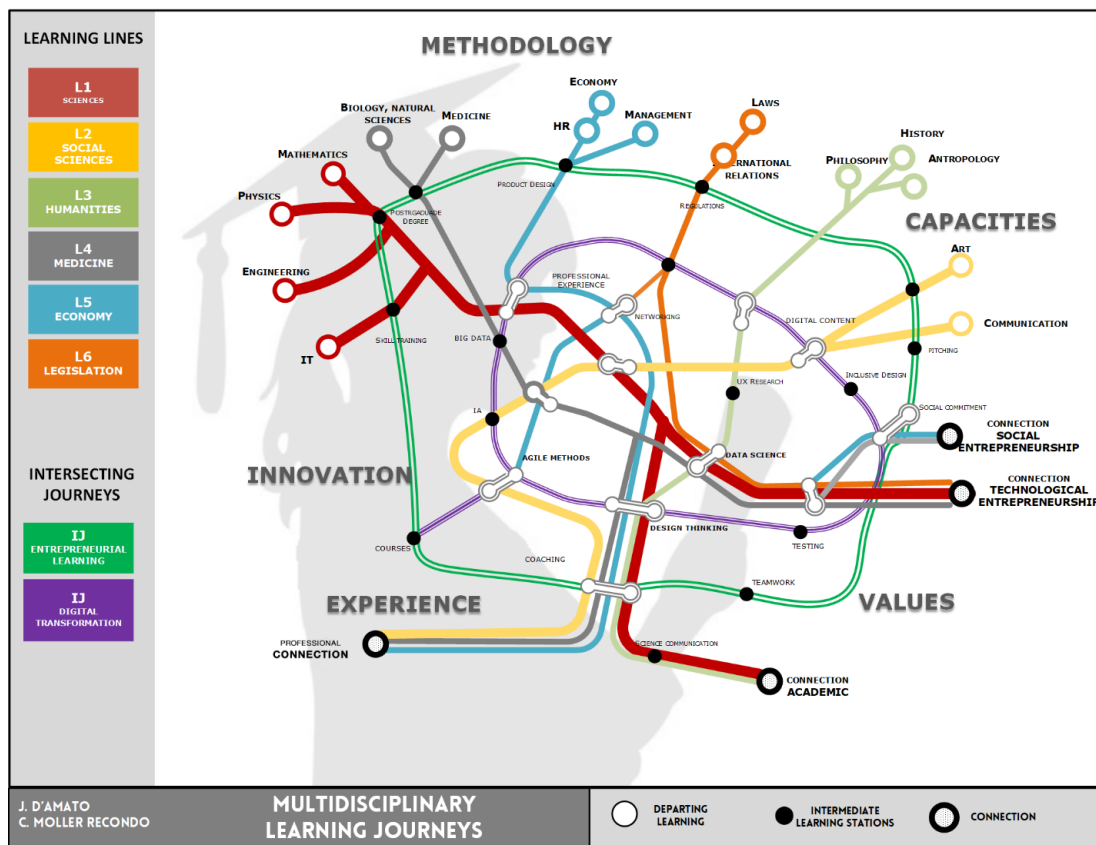
All above mentioned analyses emphasize the relationship with technological trends, which expose that adaptive learning models will prevail in social networks and collaborative environments, mobile, big data, learning analytics and open and massive online courses. These analyses conclude that increasingly personalized (and, at the same time, increasingly social) learning processes will arise. Therefore, by combining the strategies identified in the different reports with the elements derived from FW2, a learning

map or “itinerary” has been designed, outlining all requirements needed to become (if it has not happened yet) an “entrepreneurial genius”. This itinerary, with its different paths, was intended to represent the idea that a real genius is that person who can make a permanent change in their life: to become an entrepreneur, and to do it socially.

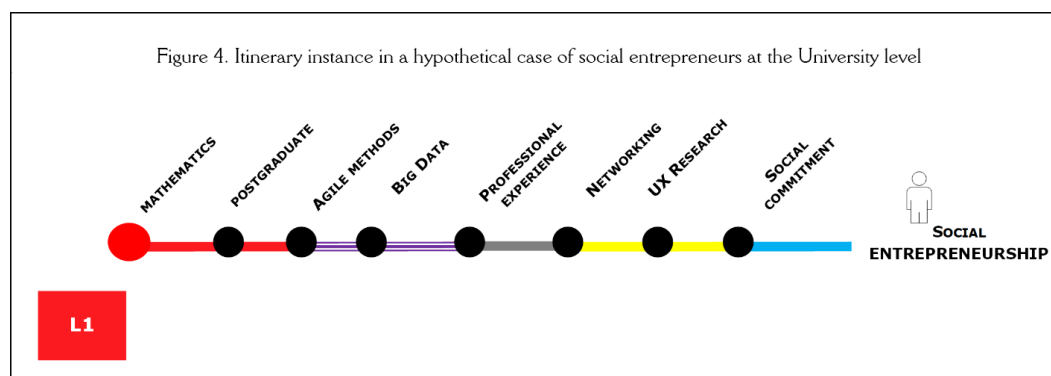
These different dimensions have been summarized in a map similar to a metro line map (Figure 3), displaying the multiple possible combinations, depending on the starting point. So, the path begins on a central and nodal line (that everyone must always take): STREAM (Science, Technology, Robotics, Engineering, Arts & Mathematics). Probably, the student has already taken one of these courses of studies; if that is the case, the student will be able to advance faster by doing a microlearning on each of these sciences. Afterwards, the student should complete this learning with small knowledge pills related to other disciplines: History, Philosophy, Anthropology and Sociology.

From this moment on, the student, assisted by mentors, professors, coaches and tutors... should perform a self-assessment. The student should also carry out a peer assessment with their counseling team in order to complete their training in social skills and in the acquisition of agile tools and methodologies. All this should be linked to their experience within the entrepreneurial environment in real, virtual and multicultural university campuses, which validate their projects through “learning journeys” and immersion experiences related to the business and entrepreneurial world. It is always possible to combine “stations”, or to revisit the ones already passed through. It is also possible to “skip” some non-decisive or unnecessary learning stations which already belong to the student’s curriculum. In any journey, it is possible to make connections with/trips to any one of the outlined fields: academic, professional or entrepreneurial (in its two aspects).

Figure 3. Itinerary and learning journeys



In order to illustrate what has been said, we can use the example of a young mathematician that creates a (mathematical) model that helps to optimize water management. Certainly, in order to materialize his theory into a product/application/social network, the feasibility of his idea needs to be assessed. This assessment should be performed from a technical point of view (for which the scientific system already has certain rules based on validated scientific demonstrations), as well as for practical and conceptual confirmation. In this context, the mathematical entrepreneur needs to make a disciplinary outline which allows him to understand how to implement his product (micro-learning: agile methods, big data), by testing his idea in real environments outside the University (micro-learning: professional experience, networking, ux research), with a social -not only economic- purpose. Figure 4 represents this journey.



3.4. First success cases

It is ideal that this work's proposal is carried out in the context of a social entrepreneurship lab, due to its experimental nature. In Spain, there are only three university proposals for implementation: Huelva, Granada and Valladolid. However, only this last one fosters the social entrepreneurship "stricto sensu", with a learning and entrepreneurial competence acceleration plan and a series of proposals developed by students. These proposals aim at identifying a social need or problem, and proposing a creative and innovative solution (not necessarily technological) to it (Möller-Recondo, 2020).

Lately, work is being done in parallel with idea-booster experiences, such as learning journeys with unconventional application practices. FW2 (Cáceres and Valladolid) presents the results of development and entrepreneurial competence acceleration programs: 4 years, 2 state universities, one course from the Social Education undergraduate program, 150 students involved, 42 creative communities and several challenges visualized, which show the concerns of students: mental health, pollution, art culture, and above all, inclusion.

On the other hand, a multidisciplinary learning program, which lasts one year, has been offered in Argentina (Tandil) with the same objectives, for the creation of projects based on the "User centered design" method. This program covers STEAMS knowledge, such as technology and art design, leading it to the creation of social and inclusive projects. From its beginning in 2017, 120 students have participated with different experiences, such as the design of user interfaces for visually impaired people (UNICEN, 2019).

In anonymous surveys about student satisfaction, 98,7% of students indicated that they felt motivated at the end of the theoretical lessons about social entrepreneurship, entrepreneurial culture and social inclusion (micro-learning.) They highlighted the importance of agile methodology implementation in order to regain motivation, develop creativity and be able to have a strong entrepreneurial attitude. This attitude revealed talents and capacities most of them did not know they had.

4. Discussion and conclusions

Probably, the lack of reflection on genius (beyond HIA) has caught the concept in the past history, and consequently, at least two different situations have been generated that should be resolved. Those students with specific different capacities have been excluded from the educational system -or have been

included as different- and at the same time, the university ecosystem has been unable to identify them, and thus, wasted their potential. Hence, the concept of genius should be reconsidered, and the construction of stereotypes, profiles and taxonomies should be avoided.

The new genius is that person who can, in the first place, undertake their own teaching-learning journey “by taking several metro lines”, and can create, manage, develop and/or enhance capacities, skills, tangible and intangible aspects, knowledge and competences, assisted by mentors, tutors, counselors and professors. This person should learn to feel emotional and be able to prepare their own trajectories, by moving around in hybrid environments (real, virtual and multicultural.) This person should have a core STREAM education in the competences they do not naturally have, but that should be complemented with the study of other sciences, such as Sociology and Anthropology (in order to see society closely and from a distance). They should also learn about Philosophy, since that will be the tool to differentiate them from robots; and about History, since they will need to know about the past in order to look for ways to solve the same problems the world has nowadays. All this, together with new technologies, should allow them to drive themselves to the future in order to lead the way from the present.

The challenge is now for the university community to be able to develop an adaptive method to detect the needs unnoticed by society. Those needs should then be turned into challenges, be analyzed, dissolved, solved and given back to that same society in the form of inclusion and for the common good. Said method should be sufficiently flexible and agile so that it can integrate everything that responds to the changing needs of the environment. It should also be attractive to current students and also to those who wish to rethink their professional profile.

It is proposed that all this process is framed within a social entrepreneurship format in the context of sustainable development. This process should be led by those who are geniuses by birth. It should also be led by those who become geniuses, because they find out (and find themselves in) the motivation created by the feeling of being part of projects that help them show their talents, as well as foresee a working future and, in that way, create a social community.

Funding Agency

This research has been supported by the University of Valladolid (Scientific Park, Social Entrepreneurship Lab, School of Education and Social Work and Department of Philosophy) and the University of the Center of the Province of Buenos Aires (PLADEMA Research Institute, School of Exact Sciences) and the National Council of Scientific and Technical Research (CONICET-Argentina).

References

- Aretxaga-Bediauneta, L. (2013). *Orientaciones educativas. Alumnado con altas capacidades intelectuales*. Servicio Central de Publicaciones del Gobierno Vasco. <https://bit.ly/2VWJppmq>
- Barbería, J.L. (2018). Superdotados, el puzzle de las altas capacidades. <https://bit.ly/39N30sn>
- Castelló-Tarrida, A. (2001). *Inteligencias. Una integración multidisciplinar*. Masson.
- Commission on Creating the Next in Education (Ed.) (2018). *Deliberate innovation, lifetime education*. Institute of Technology Georgia. <https://b.gatech.edu/2xkAlwc>
- Consejo Superior de Expertos en Altas Capacidades (Ed.) (2014). *Guía científica de las altas capacidades. Consejo Superior de Expertos en Altas Capacidades*. Consejo Superior de Expertos en Altas Capacidades. <https://bit.ly/2J5cL9D>
- Del-Barrio, A. (2009). Alberto Royo “Los nuevos gurús educativos no son profesores”. <http://bit.ly/2QOmNlw>
- Faverón-Patriau, O. (2018). *El poder en el siglo XXI. Las startup y las empresas unicornio*. Amazon.
- Furman, M. (2016). *Educación mentes curiosas: La formación del pensamiento científico y tecnológico en la infancia*. Fundación Santillana. <https://doi.org/10.25115/ecp.v10i20.1015>
- García-Guardia, M., Ayestarán-Crespo, R., López-Gómez, J., & Tovar-Vicente, M. (2019). Educating the gifted student: Eagerness to achieve as a curricular competence. [Educar y formar al alumno talentoso: El afán de logro como competencia curricular]. *Comunicar*, 60, 19-28. <https://doi.org/10.3916/C60-2019-02>
- Gardner, H. (1993). *Las inteligencias múltiples. La teoría en la práctica*. Paidós. <https://bit.ly/2QUMX4n>
- Harari, Y. (2016). *Homo Deus. Breve historia del mañana*. Debate. <https://doi.org/10.17104/9783406704024>
- López, A., & Moya, A. (2011). Conceptos generales del alumno con altas capacidades. In Torrego-Seijo, J. (Ed.), *Alumnos con altas capacidades y aprendizaje cooperativo. Un modelo de respuesta educativa* (pp. 13-33). Fundación SM. <https://bit.ly/2VWJrYF4>
- Martín-Gálvez, J., & González-González, M.T. (2000). *Alumnos precoces, superdotados y de altas capacidades*. Ministerio de Educación y Cultura, Secretaría General de Educación y Formación Profesional, Centro de Investigación y Documentación Educativa. <https://bit.ly/3ae4f41>
- Martínez-I-Torres, M., & Guirado-Serrat, A. (2012). *Altas capacidades intelectuales. Pautas de actuación, orientación, intervención y evaluación en el período escolar*. Graó.

- Möller-Recondo, C. (2015). Comunidades creativas en torno a un proyecto de gestión cultural, en el ámbito universitario, con alumnos y alumnas del Grado de Educación Social de la Universidad de Extremadura. *Culturas. Revista de Gestión Cultural*, 2, 21-21. <https://doi.org/10.4995/cs.2015.3759>
- Möller-Recondo, C. (2020). *Innovación docente e innovación en ciencias sociales, económicas y jurídicas*. Dykinson. <https://bit.ly/2Jr57GA>
- National Association for Gifted Children (Ed.) (2019). *Pre-K to Grade 12 Gifted Programming Standards*. NAGC. <https://bit.ly/2wFJiEd>
- Olszewski-Kubilius, P., Subotnik, R., & Worrell, F. (2015). Re-pensando las altas capacidades: Una aproximación evolutiva. *Revista de Educación*, 368, 40-65. <https://doi.org/10.4438/1988-592X-RE-2015-368-297>
- Pérez-Sánchez, L., & Beltrán-Llera, J. (2006). Dos décadas de 'inteligencias múltiples': Implicaciones para la psicología de la educación. *Papeles del Psicólogo*, 27(3), 147-164. <https://bit.ly/2Jb1Hrv>
- Riba, S.S., & Tarrida, A.C. (2017). Fiabilidad y estabilidad en el diagnóstico de la alta capacidad intelectual. *Revista de Neurología*, 64(1), 51. <https://doi.org/10.33588/rn.64s01.2017028>
- Sastre-Riba, S., Fonseca-Pedrero, E., & Ortuño-Sierra, J. (2019). From high intellectual ability to genius: Profiles of perfectionism. [Desde la alta capacidad intelectual hacia el genio: Perfiles de perfeccionismo]. *Comunicar*, 60, 9-17. <https://doi.org/10.3916/C60-2019-01>
- Sastre-Riba, S., Pérez-Sánchez, L.F., & Villaverde, A.B. (2018). Programs and practices for identifying and nurturing high intellectual abilities in Spain. *Gifted Child Today*, 41(2), 63-74. <https://doi.org/10.1177/1076217517750703>
- Tárraga, R., Sanz-Cervera, P., Pastor, G., & Fernández, M. (2014). Herramientas TIC para la intervención educativa en estudiantes con altas capacidades. Un estudio de caso. *Revista Didáctica, Innovación y Multimedia (DIM)*, 30, 1-18. <https://bit.ly/2xhfqKA>
- Tecnológico de Monterrey (Ed.) (2017). *Radar de Innovación educativa*. Instituto Tecnológico de Estudios Superiores de Monterrey. <https://bit.ly/3blmYL3>
- Tecnológico de Monterrey (Ed.) (2018). *Modelo Educativo TEC21*. Instituto Tecnológico de Estudios Superiores de Monterrey. <https://bit.ly/2Uw9XHJ>
- Universidad del Centro de la Provincia de Buenos Aires (Ed.) (2019). Ciclo de formación en diseño inclusivo de experiencias de usuario. <https://bit.ly/2IKxk34>
- Van-Tassel-Baska, J. (2016). *Programa y plan de estudios para los alumnos con altas capacidades. ¿Qué aspectos son imprescindibles?* Máster en Neuropsicología de la Alta Capacidad Intelectual. <https://bit.ly/3dhn1cy>