



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**  
ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

Vol XIII, número 1, jan-jun, 2021, pág. 360-379.

## **THE ATENEA-ULL PROGRAMME: A PROPOSAL TO INCREASE THE MOTIVATION OF UNDERGRADUATES**

Triana Aguirre Delgado  
Manuela Rodríguez-Dorta  
María José Dorta Hernández  
África Borges del Rosal

### **Abstract**

The educational needs that students with high intellectual abilities have, makes relevant to design special interventions for them. In Primary and Secondary School is quite frequent to find different educational strategies. However, when the students reach the university level, there are not sources of this type. At the University of La Laguna, during the 2018-19 academic year, the first edition of a pioneering program was carried out, aimed at high intellectual students. The aim of the program is to increase the motivation of the students and to offer new contents. The total of participants is 113 students belonging to several careers like: mathematics, physics, chemistry, psychology. Two types of actions have been carried out: five plenary conferences, as well as 60 specific activities. The outputs of the program and a first approach to evaluation through the satisfaction of students and professors are presented here.

*Keywords:* high ability, programs, undergraduates students, university, enrichment.

### **Resumen**

Las necesidades educativas que tienen los estudiantes con altas capacidades intelectuales, hacen relevante diseñar intervenciones especiales para ellos. En la Educación Primaria y Secundaria es bastante frecuente encontrar diferentes estrategias educativas. Sin embargo, cuando los estudiantes alcanzan el nivel universitario, no hay programas de este tipo. En la Universidad de La Laguna, durante el curso académico 2018-19, se llevó a cabo la primera edición de un programa pionero, dirigido a estudiantes universitarios con altas capacidades intelectuales. El objetivo del programa es aumentar la motivación de los estudiantes y ofrecer nuevos contenidos. El total de participantes es de 113 estudiantes pertenecientes a varias carreras como: matemáticas, física, química, psicología. Se realizan dos tipos de acciones: cinco conferencias plenarias, así como 60 actividades específicas. Se presentan aquí los resultados de un primer acercamiento a la evaluación del programa a través de la satisfacción de los estudiantes y profesores.

*Palabras clave:* alta capacidad, programas, estudiantes universitarios, universidad, enriquecimiento.

### **Resumo**

As necessidades educacionais dos estudantes com elevadas capacidades intelectuais tornam relevante a concepção de intervenções especiais para eles. No Ensino Primário e Secundário é bastante comum encontrar diferentes estratégias educativas. Contudo,



## Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

quando os estudantes atingem o nível universitário, não existem tais programas. Na Universidade de La Laguna, durante o ano lectivo de 2018-19, foi realizada a primeira edição de um programa pioneiro, destinado a estudantes universitários com elevadas capacidades intelectuais. O objectivo do programa é aumentar a motivação dos estudantes e oferecer novos conteúdos. O número total de participantes é de 113 estudantes pertencentes a várias carreiras tais como: matemática, física, química, psicologia. São realizados dois tipos de acções: cinco conferências plenárias, assim como 60 actividades específicas. Os resultados de uma primeira abordagem da avaliação do programa através da satisfação dos estudantes e professores são aqui apresentados.

*Palavras-chave:* alta capacidade, programas, estudantes universitários, universidade, enriquecimento.

Students with high intellectual abilities have a faster learning rate and higher cognitive development than their peers of normal intellectual abilities (Reis & Renzulli 2010; Sastre-Riba & Viana-Sanz, 2016; Sastre-Riba & Ortiz, 2018; Sayler, 2009). This means that they have educational needs that require an adequate response for the development of their potential (Gómez, Díaz, Luque & Moliner, 2008). Spanish legislation considers this student body under the label of students with specific educational support needs (Organic Law 2/2006, of 3 May, on Education). This regulation points out the intraschool educational response through specific programmes, such as acceleration, enrichment, and clustering (Comes Nolla, Díaz Pareja, Luque de la Rosa & Tudela, 2009; Hernández Torrano & Gutiérrez Sanchez, 2014). However, sometimes these measures are not sufficient to provide all the support these students require, which leads to the development of outside-of-school programmes that work on aspects of a socioaffective and cognitive nature: PENTA UC (Arancibia, Lissi & Narea, 2008), GuiaMe-AC-UMA (Universidad de Málaga, 2017), COMPARTE-ULL (Shares with the ULL, Borges, Rodríguez-Dorta, Aguirre, Dorta & Noda, 2018), Programa Adopte un Talento (PAUTA, Adopt a Talent Program, De la Torre, Del Valle, Carpinteyro & Mijangos, 2017), the Programa Integral para Altas Capacidades (PIPAC, Integral Program for the Comprehensive Development of High Ability Children, Rodriguez-Naveiras, Díaz, Borges, Rodríguez & Valadez,



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

2015) and Programa Estrella (Star Programme, Pérez, López, Del Valle & Ricote, 2008).

On the other hand, the above-mentioned programmes are aimed at primary and secondary school students, not at university students. The literature shows examples of honour courses (Fulks & Rutland, 2002), specialised courses aimed at academically talented students, promoting critical thinking and challenge (Crockett, 2002) mainly from the perspective of grouping and enrichment (Scager, Akkerman, Pilot, & Wubbels, 2014) or through acceleration (McClarty, 2015), offered by universities in America and Europe.

In Spanish universities, attention to this group is less frequent, finding only a few specific programs such as the one carried out at the European University of Madrid for students with academic talent (Benito and Benito, 2011). Another example is the Cicerone Program, at the University of Malaga, where intellectual abilities students who are already studying at university are guiding new students with higher abilities (Castro, 2019, personal communication).

Furthermore, endemic problems in Spanish universities (e.g., an excessive number of students per classroom or limited resources) do not make it easy to offer a program for undergraduates, which, on the other hand, is difficult to detect, unless only talent is considered academic. Therefore, the realization of an educational response that can cover all university students with high capacities is a challenge and requires the use of creativity.

The University of La Laguna offers two programmes to its high capacity primary and secondary students: the PIPAC (Rodríguez-Naveiras, et al., 2015), a programme of a socio-affective nature, which is carried out this year in its 17th edition, and COMPARTE -ULL (Borges et al., 2018), a



## **Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

programme to encourage scientific vocations, which is currently being implemented in its third edition. Following the university's commitment to the high ability students, last year, the programme ATENEA-ULL (ATENEA University of La Laguna) was created for high ability undergraduate students. The programme is being developed under the direction of the university's vice chancellor of students, the Program of Attention to Students with Specific Needs of Educational Support (PAED), the School of Doctorate and Postgraduate Studies of the ULL, the Group of Applied Research in Behavioral Sciences (GIACCo) and the Association of High Capacities of the Canary Islands (COMPARTE).

ATENEA-ULL is a pioneering programme that is developed from the perspective of enrichment to give specific attention to university students with high intellectual abilities. This programme aims to increase student motivation, interest in academic subjects and open new areas of interest to students through different activities carried out by university teachers: plenary conferences aimed at all students in the programme, offering an overview of various topics, given the broad interests expressed by this group; specific activities aimed at students of a specific grade, of various kind or open to all students of the program, which offer the possibility of knowing aspects of research and professional reality in a specific area of knowledge and / or others that , in general, these are not addressed in the ordinary classes; research initiation activities that give students the opportunity to start research through integration into research groups led by the professors participating in the programme. In addition, this offers an approach to the expert professors of the university and that among them they can share opinions, ideas and interests, thus creating a social network of intergenerational knowledge.

The objective of the present work is to carry out a first approach to the evaluation of the program, checking the level of satisfaction of teachers and



## **Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

students participating in the different plenary conferences and specific activities carried out at ATENEA-ULL.

### **Method**

#### ***Participants***

The participants in this programme have been 113 volunteer undergraduates from all branches of knowledge. All the students had an intellectual capacity equal to or greater than CI 120. They are found in greater numbers in the following degrees: Physics and Astrophysics (27); Medicine (17); Biology, Environmental Sciences, Pharmacy, and Nursing (15); Technical Architecture, Industrial and Automatic Electronic Engineering, Mechanical Engineering, and Nautical and Maritime Transport (10), and Computer Engineering (10). The teaching staff belongs to all areas of knowledge, with greater numbers coming from the areas of Sciences (21), Health Sciences (18), and Social Sciences (20). The average age was 20.6 years, and most of the students were males (60).

The different activities were provided by 83 volunteer university teachers from all areas of knowledge, most of them professors (20) and lecturers (37).

#### ***Instruments***

The programme has been systematically evaluated by the lecturers, professors, and participating students.

After attending the activities and conferences, the students responded to an online questionnaire through Google Forms that consisted of a first part



## **Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

seeking general data and a second part evaluating their satisfaction with the specific conferences or activities they attended. The survey was comprised of items using a Likert-type response scale (1, none; 2, a little; 3, quite; and 4, a lot). These were also grouped into three blocks: one referring to the content of the activity or conference, another to the teachers and presenters, and another to the technical means. Finally, a general evaluation of the activity was collected through an open question.

After carrying out their activity or conference, the lecturers and professors responded online through Google Forms to an ad hoc self-evaluation questionnaire, through which general data were collected about the specific conference or activity carried out. The questionnaire used items with a Likert-type response scale (1, nothing; 2, little; 3, quite; and 4, a lot). These items were grouped in three blocks: one referred to aspects of the specific activity or conference, another to the participants, and another to the resources. In addition, the survey included a last part made up of a closed question about whether they would repeat the activity or conference in future editions of the programme and an open question that collected their observations about the activity or conference.

### ***Procedure***

The programme has been developed in different phases:

#### ***Selection of Participants***

The first quarter of the academic year was dedicated to selecting the participants, both students and teachers.

Regarding the teaching staff, during the last quarter of the 2017–2018 academic year, they were informed in a generalised way about the programme that was going to be put into practice, and their participation was invited by e-mail and in a meeting convened by the vice rectorate of students, at which the guidelines of the programme were explained.



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**  
ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

The selection of the student body was more complex. At the beginning of the 2018–2019 school year, the students were informed, also by means of massive group e-mail, of the launch of the ATHENEA-ULL Mentoring Programme. Students could access the program voluntarily if they met any of the following conditions: a) they will have an evaluation in this regard made by the Area Guidance Teams and a report issued by the Ministry of Education of the Canary Islands Government (Order of July 22, 2005) stating the completion of two intelligence tests, such as WISC-IV (Wechsler, 2007) and BADYG-E1 (Yuste, 2012), obtaining in both tests and in the six macroprocesses that are evaluated (Logical Reasoning, Verbal Reasoning, Mathematical Reasoning, Perceptual Management, Memory Management and Spatial Aptitude) percentiles equal to or greater than 75 for giftedness, percentiles equal to or greater than 95 in any or several of the six macroprocesses for Talents, equal or higher 85 percentiles in the Logical Reasoning, Memory Management and Verbal Reasoning macroprocesses for Academic Talent, or 80th or greater percentiles in the Logical Reasoning, Perceptual Management and Spatial Aptitude macroprocesses for Artistic Talent, b) of a qualified and collegiate professional, obtaining in the intelligence tests, two an IQ equal to or greater than 120; c) who had achieved an IQ equal to or greater than 120 in the evaluation made in that same course by the International Association of International Giftedness MENSA; d) that it be submitted to the evaluation, by means of the non-verbal intelligence test Factor g-R (Catell, Catell and Weiss, 2017), by the program's organizing team, obtaining an IQ of 120 or higher.

This selection in the first quarter of the 2018–2019 academic year resulted in a participant group comprised of 83 participating professors and 113 students from all fields of knowledge at the University of La Laguna.

Professors and students were grouped by degrees or areas of knowledge, giving rise to thirteen groups: 1) Art and Humanities, 2) Biology, Environmental Sciences and Pharmacy, 3) Physics and Astrophysics, 4)



## **Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

Mathematics, 5) Physics, 6) Speech Therapy and Psychology, 7) Medicine and Nursing, 8) Business Administration and Management, Accounting and Finance and Economics, 9) Social and Cultural Anthropology, Sociology, Social Work, Journalism and Geography, 10) Law and Labor Relations, 11) Early Childhood Education, Primary Education and Pedagogy, 12) Technical Architecture, Industrial and Automatic Electronic Engineering, Mechanical Engineering, Navigation and Maritime Transport, Civil Engineering and Agricultural and Rural Engineering, and 13) Computer Engineering.

### *Activities Carried Out*

After being selected, the students attended a meeting in January to learn more about the specific activities that were going to make up the programme.

The activities are divided into four types:

***Informative and divulging activities.*** The programme began with a workshop lasting 4 hours. In response to a request the participants made, the programme team explained what high intellectual capacities means, followed by a dynamic activity aimed at the students' getting to know their classmates.

These activities were concluded at the end of the course, when, coinciding with the IV International Conference on Intervention Overview in High Intellectual Abilities, two round tables were held focusing on specific contents: the development and assessment of the ATENEA-ULL Programme and the state and situation of students with high abilities in Europe. The programme team awarded 30 grants to students and another 30 to teachers to attend this congress.

***Plenary conferences.*** The conferences offer a general overview of various topics, given the wide range of this group's interests. These last approximately two hours, are taught by expert teachers who participate in the program, consist





## Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

of an exposition by the teacher of the contents corresponding to the subject that is addressed and, then, a debate with the students.

**Specific activities.** These activities last approximately two hours, are carried out with a small group of students, are practical in nature and provide students an opportunity to learn about aspects of research and the professional reality of their area of knowledge and others, topics that are not usually addressed in regular classes.

**Initiation to research.** The professors who want, offer a line of research and direct it to the students of a specific area or several areas. Interested students contact the corresponding professor and then organize themselves to carry out work meetings in which the professors guide the students in the steps to follow to develop and work on the research.

The teachers present their proposal for a conference or specific activity through a form, indicating the subject, the general objective, the student profile to which it is directed, the limit of places, the date on which they can give it and the place where it will be given.

For each plenary conference and each specific activity there is a registration form. Students register for the conferences and activities that are of interest to them and that are aimed at their academic profile. Students must attend at least two plenary conferences and four specific activities.

## Results

### *Plenary Conferences*

Five plenary conferences have been held since February 2019, one per month. These conferences were on various topics, such as the brain, scientific



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

dissemination, dredging, the economy, and the situation of students with high ability in Mexico.

Three of the speakers answered the self-evaluation of the conferences, valuing the aspects collected in the questionnaire as quite or very satisfactory (Table 1).

In addition, two of the speakers made observations. One of the observations congratulated the programme and another referred to the few students who attended.

**Table 1.** Self-Evaluation of Conference Speakers.

Items	Number of speakers			
	Disagree	Agree	Strongly Agree	
<b>Conference</b>	1. I succeed in transmitting scheduled knowledge,	-	2	1
	2. I succeed in achieving the goals proposed,	-	2	1
	3. I felt comfortable during the conference,	-	-	3
<b>Participants</b>	4. Participants showed interest in the conference,	-	1	2
<b>Resources</b>	5. The hall assigned was suitable for the conference.	1	1	1
	6. The technical support was satisfactory.	-	-	3
	7. The allotted time was accurate.	-	3	-

Table 2 shows the student body's evaluation of the conference, presenting the average scores of each item per lecture. Most of the students valued all of the items on the questionnaire as quite or very satisfactory, with average scores between 2.68 and 3.97. Regarding what they found in general at the conference, most of the comments were favourable.



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

**Table 2.** Evaluation of students at the Conferences.

Items	Average score				
	1st Conf.	2nd Conf.	3rd Conf.	4th Conf.	
<b>Subject Matter</b>	1. The Subject Matter was interesting	3.59	3.16	3.25	3.5
	2. The conference was engaging	3.59	3.32	3.38	3.5
	3. I gained knowledge on the subject	3.19	2.74	3.25	3
	4. I would like to deepen in the Conference subect.	3.28	2.79	2.88	3.5
<b>Speaker Lecturer</b>	5. The Speaker was an expert in him or her subject	3.97	3.74	3.88	3.5
	6. The Speaker provided a clear presentation.	3.66	3.78	3.5	3.5
<b>Technical Support</b>	7. The Hall assigned was suitable for the Conference	3.5	3.58	3.75	3
	8. The technical support was satisfactory.	3.5	3.63	3.75	3.5
	9. The allotted time was accurate	3.34	2.68	3.88	3.5

***Specific Activities***

A total of 68 activities were offered, and 60 activities took place between February 25 and May 10. Most of the activities were carried out by one teacher, nine by two, and one by three. The subject matter of these activities is very diverse as there are teachers from different areas of knowledge and different grades.



## Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

The results of the self-evaluation of the teachers who gave the activities, show that, again, most of them value all the items as quite or very adequate, being the items better valued on 1, 3 and 4 (table 3).

When asked if they would repeat the programme in future editions, most teachers answered yes (98.2%). The observations made were mainly aimed at improving the activities to increase the students' motivation, interest, and satisfaction.

**Table 3.** Teacher Self-Evaluation of Specific Activities.

Items		%		
		Disagree	Agree	Strongly Agree
Activities	1. I succeeded in transmitting scheduled knowledge.	1.58	49.21	49.21
	2. I succeeded in achieving the goals proposed.	4.77	50.79	44.44
	3. I felt comfortable during the conference.	-	23.81	76.19
Participants	4. Participants showed interest in the conference.	1.6	36.5	61.9
Technical Resources	5. The hall assigned was suitable for the conference.	3.17	30.16	66.67
	6. The technical support was satisfactory.	4.77	33.33	61.9
	7. The allotted time was accurate.	12.7	44.44	42.86

Finally, the results of the evaluation of the specific activities carried out by the student assistants show an average score above 2 on a scale of 1 to 4 in all areas of knowledge regarding content, teachers, and technical means (Table 4).



**Table 4.** Student Evaluation of Specific Activities.

<b>Field of Knowledge Activity</b>	<b>Average Score</b>	<b>Professor Lecturer</b>	<b>Technical Support</b>
<b>Humanities</b>	2.9	3.02	2.97
<b>Formal and Natural Sciences</b>	3.41	3.73	3.53
<b>Health and Medicine</b>	3.72	3.88	3.59
<b>Social Sciences</b>	3.45	3.82	3.84
<b>Applied Sciences</b>	3.46	3.76	3.36

The best evaluated activities were those in the areas of Science and Health Sciences. Regarding what the students thought of the activity, most of their observations were favourable, except for some that were more critical or pointed to an alternative way of carrying out some of the activities.

### **Discussion**

Students with high intellectual abilities require a specific educational response (Organic Law 2/2006, of 3 May, on Education). This response is scarce at the university stage, with only a few programs that focus on students with high academic performance (Benito and Benito, 2011; Crockett, 2002; Fulks & Rutland, 2002; McClarty, 2015); Scager, Akkerman, Pilot, & Wubbels, 2014).

Given the lack of response to the specific educational needs of students with high intellectual abilities at the university level and the importance of promoting talent for the development of society, developing programmes such as the ATENEA-ULL. This programme is developed from the perspective of enrichment, providing university students with high intellectual abilities a greater knowledge and deepening in aspects of their area of knowledge and others, and opening new areas of interest.



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**  
ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

In this first edition, the programme has proven to be successful, as evidenced by the high level of the students, lecturers, and professors' satisfaction.

In addition, the programme has achieved its developers' goal of expanding the window of opportunity for students with high intellectual abilities at the University of La Laguna as it has carried out a wide range of activities, providing the possibility of access to each branch of knowledge.

However, it cannot be ignored that carrying out a programme with these characteristics undoubtedly involves a great organizational effort. One of the aspects that has been complicated has been the organization of the work groups, because it has been the case of having a large group in some instances (for example, Physics, 27 students) or a very small or unique group in others (one student in Fine Arts, two in History). For this reason, 13 groups were established, some of which were for a single degree (Physics, Mathematics, Biology, Medicine, and Psychology) and others that encompassed related degrees.

Participation has been broad based on the part of the teaching staff, who have also been very committed to the programme. The students' involvement has been diverse, being small in many activities (one or two students). This, far from being a difficulty, is a characteristic that favours more personalised attention and a more direct relationship due to students' particular interests.

Other difficulties encountered in the development of specific activities throughout the programme have been the high concentration of activities in a short time, complicating student attendance, coinciding with exam periods,



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

having low response rates on evaluations, and having activities cancelled due to students' nonregistration or nonattendance.

In view of the second edition of the programme ATENEA-ULL, the management of the programme proposes different improvements to cover the mentioned limitations. The activities will be better distributed over time, carrying them out in two periods, from October to December 2019 and from February to April 2020. This proposal prevents the activities from coinciding with review periods. The agenda of activities will be provided in advance to teachers and students, as will be the attendance lists for teachers. Finally, the programme team will work to raise participants' awareness of the importance of assessment for proper development of the programme. Undoubtedly, the program must continue to undergo a systematic evaluation to verify both its effectiveness and its efficiency, as well as to know if its development is being adequate.

In addition, for future editions, the program management plans to include contests to offer the opportunity to visit business and research centers and learn about their operation; and provide information and guidance to the participating students of ATENEA-ULL about the opportunities they have to access and benefit from the ERASMUS Program.

In conclusion, ATENEA-ULL responds to students with high intellectual abilities at the university stage from an innovative perspective, giving value and adequate attention to their potential within the university's educational community.



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

**References**

- Arancibia, V., Lissi, M.R. & Narea, M. (2008). Impact in the school system of a strategy for identifying and selecting academically talented students: the experience of program PENTA UC. *High Ability Studies*, 19 (1), 53-65. <https://doi.org/10.1080/13598130801980331>
- Benito, S. y Benito, A. (2011). Implantación de un programa de alto rendimiento en la universidad: estudio y análisis de resultados en la Facultad de Ciencias Sociales. *Revista Iberoamericana de Educación / Revista Ibero-americana de Educação*, 55(5), 1-17. <http://oa.upm.es/11394/>
- Borges, A. Rodríguez-Dorta, M., Aguirre, T. Dorta, M. J. & Noda, F. J. (2018) Evaluación de la Primera Edición del Programa de Mentorías Comparte con la Universidad de La Laguna (ULL). *TALINCREA*, 5, 15-18. <http://www.talincrea.cucs.udg.mx/sites/default/files/Número%20completo.pdf>
- Castelló, A. (1995). Estrategias de enriquecimiento del currículo para alumnos superdotados. *Aula de innovación educativa*, 45, 19-26.
- Cattell, R. B., Cattell, A. y Weiss, R. (2017). *Factor g-R: test de inteligencia no verbal-revisado*. Madri: TEA.
- Comes Nolla, G., Díaz Pareja, E.M., Luque de la Rosa, A., & Tudela, J.M. (2009). Análisis de la legislación Española sobre la educación del alumnado con Altas Capacidades. *Escuela Abierta*, 12, 9-31. <https://dialnet.unirioja.es/servlet/articulo?codigo=3277694>





**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

Crockett, L. (2002) Fundamental issues in honors teaching: Data, information, knowledge, and wisdom on the Wired Campus. En Ch. L. Fuiks y Larry, C. (Eds) *Teaching and learning in honors. National Collegiate Honors Council Monograph Series*, (p.p. 21-32).  
<https://files.eric.ed.gov/fulltext/ED566727.pdf>

De la Torre, G., Del Valle, L., Carpinteyro, S. & Mijangos, A. (2017). Programa Adopte un Talento: un vínculo entre la comunidad científica y los niños. *Revista Digital Universitaria (RDU)*, 18 (7).  
<http://dx.doi.org/10.22201/codeic.16076079e.2017.v18n7.a5>

Fulks Cheryl L. & Rutland L. W. (2002). A Review of Pedagogy In Honors Courses. En Ch. L. Fuiks y Larry, C. (Eds) *Teaching and learning in honors. National Collegiate Honors Council Monograph Series*, (p.p. 93-102). <https://files.eric.ed.gov/fulltext/ED566727.pdf>

Gómez, G., Díaz, E., Luque, A. & Moliner, O. (2008). La evaluación psicopedagógica del alumnado con altas capacidades intelectuales. *Revista Educación Inclusiva*, 1, 103-117.  
<https://www.revistaeducacioninclusiva.es/index.php/REI/article/view/23>

Hernández Torrano, D. & Gutiérrez Sánchez, M. (2014). El estudio de la alta capacidad Intelectual en España: análisis de la situación actual. *Revista de Educación*, 364, abril-junio 2014, 251-272. DOI: 10.4438/1988-592X-RE-2014-364-261

*Ley Orgánica 2/2006, de 3 de mayo, de Educación*. Boletín Oficial del Estado, núm. 106, de 4 de mayo de 2006, pp. 17158 a 17207.  
<https://www.boe.es/boe/dias/2006/05/04/pdfs/A17158-17207.pdf>



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

McClarty, K. S. (2015). Life in the fast lane: effects of early grade acceleration on high school and college outcomes. *Gifted Child Quarterly*, 59(1) 3–13. <https://doi.org/10.1177/0016986214559595>

*Orden de 22 de Julio de 2005, por la que se regula la atención educativa al alumnado con altas capacidades intelectuales.* Boletín Oficial de Canarias, núm. 149, de 1 de agosto de 2005, pp. 14340 a 14350. <http://www.gobiernodecanarias.org/boc/2005/149/boc-2005-149-001.pdf>

Pacheco, F. y Tejeiro, R. (2006). Respuestas educativas en el aula a los alumnos de alta capacidad. *Eúphoros*, 13, 211-236.

Pérez, L., López, E.T., Del Valle, L. & Ricote, E. (2008). Más allá del currículum: programas de enriquecimiento extraescolar. La experiencia del Programa Estrella. *Faísca*, 13 (15), 4-29. <https://revistas.ucm.es/index.php/FAIS/article/view/FAIS0808110004A/7696>

Reis, S.M., and J.S. Renzulli. (2010). Is there still a need for gifted education? An examination of current research. *Learning and Individual Difference*, 20, 308-317. <https://doi.org/10.1016/j.lindif.2009.10.012>

Rodríguez- Naveiras, E., Díaz, M., Borges, A., Rodríguez, M. & Valadez, D. (2015). *Programa Integral para Altas Capacidades: "Descubriéndonos". Una guía práctica de aplicación.* México: Manual Moderno.

Sastre-Riba, S. & Ortiz, T. (2018). Neurofuncionalidad ejecutiva: estudio comparativo en las altas capacidades. *Revista de Neurología*, 66(1), 51-56. DOI: <https://doi.org/10.33588/rn.66S01.2018026>



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

Sastre-Riba, S. & Viana-Sanz, L. (2016). Funciones ejecutivas y capacidad intelectual. *Revista de Neurología*, 62(1), 65-71. DOI: <https://doi.org/10.33588/rn.62S01.2016025>

Sayler, M.F. (2009). Gifted and thriving: A deeper understanding of the meaning of GT. In L. Shavinina (ed) *The international handbook on giftedness* (p.p 215–230). Amsterdam: Springer Science & Business Media.

Scager, Akkerman, S. F., Pilot, A., & Wubbels, T. (2014). Challenging high-ability students. *Studies in Higher Education*, 39(4), 659–679, <http://dx.doi.org/10.1080/03075079.2012.743117>

Universidad de Málaga (11 de marzo de 2017). *La UMA organiza el programa 'GuíaMe' para alumnos con altas capacidades intelectuales*. <https://www.uma.es/sala-de-prensa/noticias/la-uma-organiza-el-programa-guiame-para-alumnos-con-altas-capacidades-intelectuales/>

Wechsler, D. (2007). *WISC-IV: Escala de Inteligencia de Wechsler para Niños-IV (2ª ed.)*. Madrid: TEA.

Yuste, C. (2012). *BADYG-EI: Manual técnico*. Madrid: CEPE.

**Recebido:12/08/2020. Aceito:19/11/2020**



**Revista AMazônica, LAPESAM/GMPEPPE/UFAM/CNPq**

ISSN 1983-3415 (versão impressa) - eISSN 2558 – 1441 (Versão digital)

**Autoras:**

**Triana Aguirre Delgado** - Personal Investigador en Formación de la Universidad de La Laguna. Trabajadora Social, Máster en Mediación Familiar y Sociocomunitaria, Máster en intervención Familiar, 4º curso de Doctorado en Psicología. Coordinadora del Programa Integral para Altas Capacidades. University of La Laguna, Spain

E-mail: [taguirre@ull.edu.es](mailto:taguirre@ull.edu.es)

**Manuela Rodríguez-Dorta** - Miembro del Grupo de Investigación Aplicada en Ciencias del Comportamiento (GIACCO) de la Universidad de La Laguna. Miembro de la Red Internacional de Investigación, Intervención y Evaluación en Altas Capacidades Intelectuales (REINEVA). Administradora de la revista Talinorea, Talento, inteligencia y creatividad. Psicóloga, Máster en Psicología de la Educación y Doctora en Psicología. Universidad de La Laguna. University of La Laguna, Spain

E-mail: [m.rodriguez.dorta83@gmail.com](mailto:m.rodriguez.dorta83@gmail.com)

**María José Dorta Hernández** - Secretaria del Aula Cultural de Altas Capacidades y Talentos de la Universidad de La Laguna y Secretaria de la Asociación de Altas Capacidades Intelectuales de Canarias: COMPARTE. Responsable de la implementación y desarrollo del Programa de Mentorías para Alumnado de Educación Primaria y Secundaria con Altas Capacidades Intelectuales “Comparte con la ULL”. Colaboradora en la implementación y desarrollo del Programa de Mentorías para Alumnado Universitario con Altas Capacidades “Atenea-ULL”. Miembro del Grupo de Investigación Aplicada en Ciencias del Comportamiento (GIACCO) de la Universidad de La Laguna - University of La Laguna, Spain

E-mail: [mjdorta@ull.edu.es](mailto:mjdorta@ull.edu.es)

**África Borges del Rosal** - Catedrática de Metodología de las Ciencias del Comportamiento Departamento de Psicología Clínica, Psicobiología y Metodología Facultad de Psicología - University of La Laguna, Spain - 38205 La Laguna - Santa Cruz de Tenerife - Spain

E-mail: [aborges@ull.edu.es](mailto:aborges@ull.edu.es)