MANUAL FOR IDENTIFICATION OF GIFTED LEARNERS AT AN EARLY STAGE

Erasmus+

EUREKA

MANUAL FOR IDENTIFICATION OF GIFTED LEARNERS AT AN EARLY STAGE

Project Title: The European Engagement in Kids Achievement Project
Project no.: 2016-1-UK01-KA201-024278

Identification of Gifted and Talented Children

Product of The Erasmus+ EUREKA project

Contributors: Martina Němcová (KPPP Zlín) Miroslav Orel (KPPP Zlín), John McLoughlin (GRETB) Alan Mongey (GRETB), Brian Martin (Titan Partnership UK), Dr Eleni Kanira (BCU), Sarah Bonser (BCU), Prof Carol Aubrey (BCU), Dr Dan McKee (King Edward VI ASTON), Despoina Kourpa (EA), Dr Agapi Vavouraki (EA)

Editors: Stephanos Cherouvis (EA) & Martina Němcová (KPPP Zlín)

ISBN: 978-960-636-002-2

The EUREKA project no.: 2016-1-UK01-KA201-024278 was supported by the EC's ERASMUS plus programme. This publication reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

CONTENTS

INTRODUCTION

The EUREKA Project contributes to addressing the EU 2020 targets of reducing the rates of early school leaving below 10%. In particular, it addresses two of the 2009 ET 2020 EU objectives to address challenges in education and training systems by 2020:

1. Improving the quality and efficiency of education and training; and
2. Promoting equity, social cohesion, and active citizenship.

EUREKA supports teachers in early identification of the most able students and in developing individual and special educational plans for them. There is a need to ensure high quality teaching, to provide adequate initial teacher education, continuous professional development for teachers and trainee teachers and other educational specialists. Schools and other education institutions should be ready to create an atmosphere of acceptance and recognition of most able children from any background in any country. This includes knowledge and skills in early identification of the gifted child, supporting that child through an appropriate curriculum and involving parents/family in the process of his/her education.

This document is a detailed manual for the identification of most able students, which can be used across national boundaries. It is created through the exchange of practices from all partners and builds on the work of the Talented Child project, as well as the two training courses based on the exchange of practice of partners for teachers and other associated professionals.

This document targets teachers, educational psychologists and other stakeholders involved in the education of children, such as guidance specialists/teaching assistants and counsellors. In addition, it is also relevant to the work carried out by school leaders and managers beyond the partner countries.

This partnership aims to build on this and develop further taking into account national developments and the input from new partners in areas of Europe and addressing some gaps in that project around the involvement of Higher Education and Staff training and resource production such as an identification manual.

1. IDENTIFICATION APPROACHES IN FOUR EUROPEAN EDUCATIONAL SETTINGS

1.1 Identification of Gifted and Talented in the United Kingdom

The Department for Education and Her Majesty's Government Inspection Regime in the UK define the more able in terms of those whose progress significantly exceeds age related expectations. However, The National Association for Able Children in Education (NACE) looks beyond actual progress to include those who may be underachieving or whose skills and knowledge may extend beyond the school's measures of progress and curriculum. Exceptionally able pupils are those who have the capacity to achieve or perform at the very highest levels.

Identification is recognised as a complex matter and it is recommended that this is a whole school issue which should be discussed and agreed by all staff. It is important to encompass a range of methods which looks beyond test results and teacher assessment. The key issue is what opportunities are schools providing for children / students to reveal their abilities? The process is ongoing.

The Department for Education encourages schools in identifying more able students to focus on:

- Learners aged 11 – 19 who meet the published eligibility criteria for the top 5% nationally
- Learners aged 4 – 19 who are more able relative to their peers in their own year group and school/college
- A range of abilities including talent in the arts and sport
- Ability rather than achievement, so that underachievers are amongst those identified

All institutions are free to determine the size of their gifted and talented populations, but should be able to justify this in terms of improved standards for all learners identified. Since ability is evenly distributed throughout the population, a school's or college's gifted and talented population should be broadly representative of the whole learner population in terms of gender, ethnic and socio-economic background. Every maintained school in England is required to report on the progress and attainment of its more able cohort. It is an element of the whole school data information system. The cohort should be reviewed and updated regularly especially in schools with high mobility and at key transition points.

The guidance booklet produced some time ago highlights the following:

- There is no single perfect instrument for identification – institutions are advised to use a 'best fit' model that draws on a range of evidence including qualitative and quantitative elements.

- Identification and provision are inseparable, because identification includes spotting potential through participation in learning opportunities; and envisages a continuous cyclical process of identification and review rather than a one-off process.

1.1.1 KING EDWARD VI ASTON

1. Contributor Details
Name: Dr Dan McKee
Country: UK
Position and role of contributor: Head of Department (Philosophy and RE) and Teaching and Learning Coordinator with responsibility for Able and Inspired
Institution: King Edward VI Aston
Educational level: Primary/Secondary/ Special: Secondary
Email address/Website: d.mckee@keaston.bham.sch.uk www.keaston.bham.sch.uk
Awareness/Knowledge of the field (Practitioner, High): Able & Inspired Co-ordinator at Aston since 2017
About Me I have been the Subject Leader for RE and Philosophy at Aston since 2012 and my department has been deeply involved in developing Able provision at Aston; experimenting in the past with early entry GCSE (years 8 and 9) and early AS (years 10 and 11) and innovating exciting enrichment courses with a focus on more able students. Currently our department is at the end of a five year process to revamp the entire curriculum, taking an almost "mastery" approach to the teaching of Philosophy and RE at the school. I am also Co-ordinator of the Student Council as well as organiser of Debating at Aston. Since 2017 I have been the Teaching and Learning Co-ordinator with responsibility for Able and Inspired students.

2. Overview of Identification practice
Title of identification method: Identification of Able and Inspired Students at King Edward VI Aston
Key words: Able, Inspired, Passion, Beyond, Outstanding
Time/Duration: Initial identification is made by class teachers of all groups by the end of the first term for YEAR 7 and boys new to the school in YEAR 12. For all other year groups, where identifications have already been made, A&I lists are reviewed at least annually in the second half of the summer term but this is a dynamic and flexible list which can be amended at any point throughout the school year.
Short introduction: Recognising that due to our selective entry all students within the school, for the majority of core subjects they have studied since primary school, meet the common definition of "able" (namely – coming in the top 10% of a cohort), we generally identify all students as "able", but also differentiate those who go even further; being not only able, but inspired in particular subjects. Any student, in any subject, identified by their subject teacher as meeting **at least three of the following four criteria** is considered "Able and Inspired": 1. **Going beyond the curriculum:** A student's learning is often going beyond what is taught within the classroom scheme of work/exam specification, with evidence of independent exploration and research. 2. **Outstanding Achievement:** A student is attaining highly within the subject in HTAs, CATs and external and internal summative exams, with the recognition that this high attainment need not necessarily be consistent and sustained across all assessment tasks. (It should also be noted, that as only three of the four criteria are needed for identification, it is possible an A&I student may struggle in assessed attainment despite their ability and inspiration in the three other areas, and that outstanding achievement is not necessary for a student to be identified as A&I if they meet the other three criteria.) 3. **Passionate about the subject**: There is evidence of interest and enjoyment in the subject that shows a real love of the subject, presenting independent and self-directed learning or enquiry beyond the instructions and

requirements of class or home work. (This could simply be eagerness to discuss key issues with their class teacher outside of lessons, attendance at a relevant club or masterclass, interest in related extra-curricular trips or enrichment, etc.)

4. **Outstanding contribution:** The student regularly contributes excellent ideas/work/discussions/questions, etc. in class.

Target groups: All year groups are identified in this way.

Literature review (Bibliography, Videos, Links, Other Projects): See KEASTON contribution to the **EUREKA Intervention Resource Manual**.

3. School/Education Context
Resources / Environment Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget
We are a multi-ethnic, selective school for boys, being one of the eight schools in Birmingham that make up the King Edward VI Foundation. The school has been part of the Aston community since 1883 and has strong links with many local schools and organisations primarily through the work of the school's Sports Partnership. Selection has led to our ethos of "everyone is able" and new distinction of "able and inspired". An assumption of general ability requires a challenging curriculum in all subjects at all times, but catering for Able and Inspired students means thinking beyond the classroom to enrichment opportunities across and beyond the curriculum. We have limited physical space (a growing school population and a school little expanded from its 1883 original footprint) and the same resource/budget issues as every school in the UK following years of public sector austerity, but offer as much as we can to nurture and support our A&I students within this context. We are also fairly unique in our "alternative Thursdays" structure, where school closes for pupils after lunch every second Thursday. While staff have meetings during this time, a programme of enrichment opportunities are run and the Thursday afternoon time period allows for lots of creative space for students

6. Feedback/Reflection
My role as Teaching and Learning Coordinator with a responsibility for Able and Inspired is to oversee all the identification data coming in on a subject level and cross reference and coordinate it on a whole-school level. For example, a current A&I audit is being done by all subject departments at the moment. This will show me what is going on in departments to provide for Able students, but that information will then inform what we need to offer on a whole school level to provide for these students beyond the individual subject areas. Likewise, CPD delivered in Able and inspired will then translate into experiments within individual teacher' planning. For instance, this term began with an INSET on stretch and challenge for Y7-9 students and all teachers took a pledge to try at least one new thing to cater for our more able KS3 students this term. The key factor for success is whole staff buy-in. Staff needs to all agree with the A&I agenda of the school, and be consistent with levels of challenge and support across the whole school. Cracks in which a lack of challenge or support may emerge could impact the culture we are trying to create and lead to coasting, or simply refusal to work so hard in some subjects but not others.

1.1.2 UNIVERSITY OF WARWICK

1. Contributor Details
Name Carol Aubrey
Country: England
Position and role of contributor: Emeritus Professor
Institution: University of Warwick (formerly Visiting Professor at BCU)
Educational level: Primary/Secondary/ Special: Educational psychology training to work with children zero to 19 years
Email address/Website: c.a.aubrey@warwick.ac.uk
Awareness/Knowledge of the field: High - Educational psychology practitioner knowledge

About Me:

I trained and worked as a primary-school teacher and educational psychologist before spending many years teaching and leading post-graduate teacher training at University College Cardiff and University of Durham. Over time, my work gradually focused more closely on research and, for many years, I was Director of Research at Institute of Education, University of Warwick.

2. Overview of Identification practice
Title of identification method: Dynamic assessment
Key words: Cognitive Abilities Test, classroom-based assessment, non-verbal reasoning
Time/Duration: Ongoing through school/pre-school career: 3-5 years; 5-7 years; 7-11 years; 12-14 years; 14-16 years and 16-19 years. Informal observation and discussion (diagnostic assessment); continuous formative classroom-based assessment, oral and written; summative at the end of the school year and at the end of each key stage (identified above). In addition, individual schools will use a variety of psychometric. tests of verbal and non-verbal reasoning, such as the Cognitive Abilities Test (CAT) (GL Assessment publications).
Short introduction: In sum, there are quantitative approaches such as CATs, standard assessment tasks (SATs) at the end of key stages, examination results and class tests) and qualitative approaches that tap particular characteristics (e.g. curiosity, creativity, problem-solving) and/or particular talents (for instance, music, sport, drama, art and design) at all times informed by parents'/caregivers' and children's views. All schools are inspected regularly by the Office for Standards in Education (OFSTED) with the expectation that all pupils from the least to the most able will progress. The teaching standards require all teachers (and student teachers) to: "Set high expectations which inspire, motivate and challenge pupil… (that) set goals that stretch and challenge pupils of all backgrounds, abilities and dispositions". Over time, terminology has been:

- Varied and changing
- Often ‘gifted and talented’
- Recently, ‘most able’ (Office for Standards in Education, 2015)
- ‘Highly able’ (Sutton Trust, 2012; 2015)
- ‘High learning potential’ (Potential Plus)
- ‘Teaching must be adapted to respond to the strengths and needs of all pupils, including those of high ability’(DfE, 2011) .
- Those who excel across many academic areas are termed ‘able’ or show particular talents
- Those who demonstrate outstanding performance and accomplishment, usually in one area such as sport, music, dance, drama, fine art (Syed, 2010; 2017; Gladwell, 2008)
- It is generally accepted that top performers practise for around 1,000 hours per year, the minimum time necessary for acquisition of experience of expertise in any complex task (Syed, 2010; 2017).

Target groups: All year groups will be identified in the same way

Literature review (Bibliography, Videos, Links, Other Projects): Links can be made to video extracts from the BCU seminar of 19-23 March, 2018 with examples of whole-school practice and the role of specialists and external consultants who support parents and schools with more able and talented students.

Main topic:

To explore identification:

- Dynamic/interactive assessment which offers an alternative process assessment (Lev Vygotsky in 1920s; Reuven Feuerstein in 1950s) instead of static normative assessment or measurement of ‘intelligence’
- Dynamic assessment reflects more accurately an individual’s learning capacity
- It offers specific and accurate intervention processes rather than general recommendations.
- The principle is: no divide between assessment and intervention
- Less attention to static behaviour
- Identifying temporary/removable barriers to learning
- Focusing on changeable behaviours
- So accurate description of behaviour can help promote development.

Such approaches using curricular or psychometric materials are popular with educational psychologists and favoured by schools.

Secondary topic:

A major challenge is to identify students who are not achieving from disadvantaged circumstances:

- When scores on standardised achievement tests are low and do not accord well with other information
- This may be associated with marked cultural differences between those individuals and the majority or dominant culture of schooling (e.g. recent immigrants, social class/poverty differences)

The question becomes one of how does this person learn in new situations; how can learning be improved?

3. School/Education Context

Resources / Environment
Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget

Features of good classroom practice are:

- Higher order thinking skills (*Bloom's taxonomy*: knowledge, comprehension, application, analysis, synthesis and evaluation)
- Development of expertise
- Exploration of alternative views
- Questioning to encourage creativity
- Problem-solving and enquiry
- Connection of learning – 'big picture'
- Independent learning

Lesson objectives for the most able include:

- Added breadth (enrichment through a broader range of texts and tasks)
- Added depth(extension through more detail and complexity)
- Accelerated pace of learning (jump steps)
- Open-ended tasks to stimulate unusual responses
- Encouraging research and experiment, reflection and self-evaluation
- Restricting time or word limit.

According to Ofsted (2013; 2015) there are particular challenges for English schools:

- Many of the most able students who attend non-selective secondary schools fail to achieve potential compared with students in selective and independent schools in England
- More than a quarter of higher-achievers at the end of primary school fail to maintain progress through secondary school
- Talents of these students need to be harnessed for the next generation of business, political and intellectual leaders

Ofsted (2013; 2015) has suggested reasons for under-achievement:

- Poor 'transition arrangements' between some primary and secondary schools
- Students being insufficiently challenged
- Effectiveness (or ineffectiveness) of mixed-ability teaching to ensure most able make best possible progress
- Failure to work with families to nurture ambition and give practical help with university applications.

Ofsted has stated that school leaders need to take urgent action to ensure the most able leave school with the right qualifications to succeed at the best universities. Three key areas of under-performance noted were:

Difference in outcomes between:

- Schools where most able students make up very small proportion of school's population and schools where the proportions are higher
- Disadvantaged most able students and their 'better off' peers
- The most able girls and the most able boys.

6. Feedback/Reflection

This account has attempted to step back from showcasing school-level achievements to take account of some of the particular challenges and responsibilities English teachers have faced towards both the least and most able in a context where the composition of the school population is:

- 2.8 percent of state pupils have SEND with an educational, health and care plan, more than one-half of them remain in mainstream classes and another 11.6 per cent will be receiving SEN support in class
- 24 per cent of state pupils are from ethnic minority groups (in primary schools 26.5 and in secondary schools 22.2 percent)
- 30 percent of pupils live in poverty, highest level since 2010.

In such circumstances, educational psychologists believe that:

- It is not true that a young person's intelligence cannot be changed
- It can increase substantially when circumstances are favourable and 'measured scores' can be changed through special training practice
- IQ measurement has led to unrealistic expectations of what mental testing can achieve
- Where predictive of educational success, it is because IQ correlates with other factors (family background, culture, social class).

It is important that expectations remain high for all and that we should not ignore the importance of quality and quantity of coaching and practice. Talent whether sporting or artistic endeavour tends to be associated with dedication and emerges from practice (lived and learned). 'Expert knowledge' cannot be taught in the classroom (Syed, 2010; 2017)

1.2 Identification of Gifted and Talented in the Republic of Ireland

In Ireland, there are about 40,000 children classed as "exceptionally gifted", or among the top 5% of the most intelligent young people. Dublin City University, which runs the Centre for Talented Youth Ireland (CTYI), in Dublin and its various centres around the country, "provides enrichment courses for students with high academic ability. The Centre also offers university style courses for students of all ages and abilities. CTY Ireland aims to allow all talented students to reach their potential both academically and socially by providing relevant and interesting challenges based on ability and interest rather than age."

In addition, the Drumcondra assessment, a diagnostic assessment designed to provide second level teachers with high quality, accurate information on the aptitudes and achievements of their pupils ia also a popular assessment tool in the country.

1.2.1 COLÁISTE BHAILE CHLÁIR

1. Contributor Details
Name: Alan Mongey
Country: Ireland
Position and role of contributor: School Principal
Institution: Coláiste Bhaile Chláir
Educational level: Primary/Secondary/ Special: Secondary School
Email address/Website: info.claregalway@gretb.ie Follow @ClaregalwayColl on Twitter Visit Claregalway Coll on Facebook Web Address www.colaistebhailechlair.com
Awareness/Knowledge of the field: High
About us Coláiste Bhaile Chláir is a coeducational, multi-denominational school based in Claregalway, Co Galway. The school caters for students within the local community, under the patronage of Galway and Roscommon Education and Training Board (GRETB).  Our school crest is a core part of our identity and represents key elements of the local community which we serve. There are nine leaves in the tree - representing The Nine Arches of Claregalway. The blue waves represent the Clare river. Our School vision: Together we will achieve which encompasses: Together with students, parents, school staff and the community we will empower students to achieve personal excellence.

Our School Mission: We care, develop, praise and believe which encompasses: We are committed to creating a caring environment, to fostering respect for self, for others and our community. We aim to help each member of the school community to develop fully, to praise student's achievements and to provide students with the skills that they need to meet life's challenges with confidence and belief through empowerment and personal responsibility

CBC first opened its doors to students in September 2013. We are committed to the highest standards of teaching and learning, and in all instances will place the student at the centre of everything that happens in our school. We have high hopes and great expectations of all our students - we aim to teach students to be life-long learners and to be guided by our core values. We have an immense variety of subject choice which include STEM, Spanish, Italian, German, Metalwork, Music, Woodwork, and additional extracurricular activities which cater to all needs, football, hurling, soccer, badminton, handball, table tennis, Science Club, Maths Club, Chess Club, Athletics, Basketball to mention just a few. We also provide Big Brother programmes to aid our new first year students. June 2018 will see our very first cohort of Leaving Certificate students sit their state examinations.

2. Overview of Identification practice
Title of identification method: Drumcondra Testing
Key words: Cognitive Ability Testing
Time/Duration: 1 – 2 hours duration
Short introduction: The Drumcondra assessment is a diagnostic assessment designed to provide second level teachers with high quality, accurate information on the aptitudes and achievements of their pupils. Almost all tests have been specifically developed for an Irish population, and draw on the relevant Irish school curricula. The Drumcondra testing draw on 40 years of experience in test development, and provide research-based, reliable information to schools. The DRT is a group-administered test of cognitive skills, divided into two subtests, Verbal Reasoning and Numerical Ability. Verbal Reasoning assesses the ability of students to understand, think and reason in and with words. Four types of items

contribute to the Verbal Reasoning subtest: Synonyms, Classifications, Analogies and Antonyms. Numerical Ability requires the student to reason with numbers and to manipulate numerical relationships, and is assessed using four types of items: Operations with Numbers, Relations among Numbers, Sequential Ordering, and Numerical Abstractions.

The DRT was standardised on nationally representative samples of over 6,000 students enrolled in the target grades in Irish primary and post-primary schools in 2016. The DRT is now intended mainly for delivery on the ERC's computer-based testing platform, and five parallel Forms of the test are available on that platform. However, one Form is also available on paper. It is possible to compare results from the digital and paper versions, meaning that schools can opt to test using a mixture of digital and paper tests, should they choose.
The paper version of the test takes approximately 1½ hours to administer (overall administration time for the digital version is slightly shorter). The paper test must be administered using machine-scorable answer sheets which are subsequently scored at the Educational Research Centre.

The administration of the DRT can be carried out by any qualified teacher, supported by advice from a suitably qualified person with training in the administration and interpretation of psychological tests (e.g., psychologist, guidance counsellor, etc). Interpretation of test results should also draw on the advice of suitably qualified persons.

Coláiste Bhaile Chláir is a school that delivers an enriched curriculum to mixed ability classes. The school provides a broad range of stimulating and challenging activities both within and outside the classroom.

Identification procedures used by the school include:

1. Observation of class-work, responses, questions, creativity, homework etc.
2. Observation of social interactions with peers and adults.
3. Observation in school-yard, pitches etc., when involved in extra-curricular activities
4. Tests, or other assessments (e.g. School passport from primary school, Drumcondra Reasoning Test, NEPS)
5. Information from parents/ guardians.
6. Information from teachers in the School is a vital component of identification. It is important therefore, that Exceptionally Able children can develop and demonstrate their potential through their participation in class and in extra-curricular aktivity.

Literature review (Bibliography, Videos, Links, Other Projects): www.erc.ie/test-sales/ability-and-aptitude-tests/drumcondra-reasoning-test-drt
Main topic: Identification of gifted and talented students
Secondary topic: Identification and implementation of AL assessment for learning to cater for Gifted and Talented students

3. School/Education Context
Resources / Environment Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget
Coláiste Baile Chláir is situated on the outer perimeter of Galway city in a small village called Claregalway. It opened its doors in 2013 with a new building consisting of a variety of facilities. These facilities include Home Economic Rooms, Science Labs, Music Rooms, Computer Room, Mediation Room, Pastoral Care Rooms, Metal Work Rooms, Construction and Woodwork rooms, Technology Rooms, Language Labs, which also includes an Autism Unit. We are also working towards creating a state of the art library, which is currently under construction. We also have wheelchair assessable tables, ramps, equipment, and elevator in all our buildings. Carrying out the Drumcondra assessment requires the use of headphones and log-in details, all of which are readily accessible in the school. Results are instant allowing for immediate analysis. It is cost effective as the assessment is done on the student's own device.

6. Feedback/Reflection
Staff are alert to gifted pupils and differentiate in the delivery of their material, allowing all pupils to attain their potential. Thus, gifted pupils are challenged academically whilst learning within their class group. The Assessment for Learning (AfL) approach is recommended for all pupils in Coláiste Bhaile Chláir and is particularly pertinent for Exceptionally Able pupils as it "emphasises the child's active role in their own learning, in that the teacher and child agree what the outcomes of the learning should be and the criteria for judging to what extent the outcome has been achieved. This level of involvement in shaping their own learning can heighten children's awareness of themselves as learners and encourage them to take more personal responsibility for, and pride in, their learning."

Teachers encourage pupils to be 'self-regulated learners', ask pupils to revisit completed work (with an eye on improvement or development) and support pupils in building portfolios/copy-books that show genuine progress.

The school has liaised with the Centre for Talented Youth in Dublin City University and parents are aware of their recommendations regarding Exceptionally Able children and the facilities available in DCU. Students are encouraged to apply to the CTY programme and have been selected to attend courses.
https://www4.dcu.ie/sites/default/files/ctyi/lr_07600_1.pdf

To meet the needs of Exceptionally Able children, the School promotes use of a variety of strategies including differentiation, learning centres, flexible groupings, competitions, clubs and projects. Extension activities, that are more demanding of their abilities, or enrichment activities that provide new and different ways of working will be provided during class or as home-work /project-work.
Opportunities for Exceptionally Able pupils to work together may be provided, particularly in the context of competitions, Project work and extra-curricular activities.

There will be opportunities for performance, or to display talents during the school year, for example during Maths Week, Science Week, Seachtain na Gaeilge, BT Young Scientist, Scifest, Mathletes, Music performances, School Musical, Form corridor displays, debating ad public speaking, Enterprise project, Chess Club, Student Committee, Green School flag Active School flag, GAISCE, TRAD programmes, National Squads Soccer, Gymnastics (Amended timetables to suit training), Basketball, Handball, STEM (Science, technology, engineering and maths) short course, we will also provide prizes for motivation such as Scolaire na Míosa, End of Year Prizes,Referrals to CTY, Application to Symphonic waves and Postcards - Cartaí Phoist.

The school provides an extensive range of curricular and extra-curricular activities suited to the needs of Exceptionally Able children. These include: STEM, Computing, Coding, Microsoft Certification.

1.3 Identification of Gifted and Talented in the Czech Republic

According to the Czech legislation, the main body with competence in diagnosis exceptional ability, giftedness and talent. The process of diagnosis has several steps and leads to certification of the exceptional ability, giftedness or talent.

1. PRE-DIAGNOSIS (NOMINATION): Nomination is usually done by a parent, a teacher or other adults from the child´s background. In case of pre-diagnosis the usual methods of identification are applied, e.g. observation, interview. Results of the observation can be recorded in a so-called nomination scale which are statements about signs of giftedness. The nominating person then assess the level of abilities on the scale.

2. PSYCHOLOGICAL DIAGNOSIS (CONFIRMATION). Diagnosis of exceptional giftedness is made by Pedagogical and Psychological Counselling Centres. The first phase of the examination is diagnosis the IQ and profile of cognitive abilities which is made by a psychologist. The following phases are initiated only if the IQ score is 130 or more. Complex examination consists of anamnesis (family and personal); IQ and profile of cognitive abilities; creativity; personality; social and communication skills; numeracy; reading and writing; other knowledge; learning and cognitive style; cognitive functions (perception, concentration and memory), laterality and writing skills; motivation and interests, vocational orientation; exceptional performance or activities at school and out of school (e.g. portfolio).

3. PEDAGOGICAL DIAGNOSIS. Pedagogical diagnosis is divided into two phases – initial and checking (continuous). Initial pedagogical diagnosis is made prior to creating the individual education plan and is essential for resultant amendments to the education process of the child. These amendments relate to the curricula content and teaching methods and effect the individual education plan which is obligatorily created by the school if the child´s exceptional giftedness is certified by the pedagogical and psychological counselling centres. This phase of pedagogical diagnosis focuses on getting as many facts necessary for the individual education plan as possible. The most used methods of pedagogical diagnosis are observation, interview and analysis of the child´s products. The special educationist who makes this type of diagnosis shall cooperate with parents of the child as they can provide further information on the child´s interests, his/her development, habits or leisure time activities. Checking (continuous) pedagogical diagnosis is initiated for continuous evaluation of the individual education plan and its amendments.

The key role in the process of diagnosis involves the child´s background – teachers, parents or others have to notice the child’s potential. The second step is evaluation made

by professionals in Pedagogical and Psychological Counselling Centres or Special Pedagogical Centres – when diagnosis the twice-exceptional child, e.g. with ASD.

Strategy for the Support of Giftedness Development and the Care of Gifted Children and Youth for the years 2014 – 2020 (hereafter referred to as Giftedness Strategy) was set by the Ministry of Education, Youth and Sports in 2014. This Strategy contains formation, function, and activities of particular components of the proposed system. The main aim is to assure maximum development and full use of the potential of all children, pupils, and students. The Giftedness Strategy initiates a process for expert upskilling in the field of work with gifted children, pupils, and students. This process includes the training in identification, development and use of giftedness for the following groups of professionals:

- (future) teachers,
- (future) psychologists,
- (future) special educators.

The Giftedness Strategy provides a scheme of tasks in legislation and school documentation which needs to be adapted to create better conditions for both the pupils and the teachers when developing giftedness.

The Giftedness Strategy assumes the formation and provision of necessary coordination both in the field of activities directly linked with the care of giftedness and with the information, methodical a strategic field. It creates the basis for the establishment of **National Network of Giftedness Support**. The National Network, with a guarantee and support of the Ministry of Education, Youth and Sports, ensures systematic and high-quality offer of possibilities to giftedness development. This is covered by regional capacities and resources.

The Regional Network consists of all types of schools (pre-primary, primary, secondary, and universities), pedagogical centres and NGO´s which work or intend to work with gifted and talented individuals. Experts from various fields are also a part of the network as well as a representative of regional authorities in education and regional coordinators of the network.

1. Contributor Details
Name: Krajská pedagogicko-psychologická poradna a Zařízení pro DVPP Zlín (Regional Pedagogical and Psychological Counselling Centre and In-service Teacher Training Provider in Zlín)

Country: Czech Republic
Position and role of contributor: school guidance facility that delivers counselling and guidance concerning education and development of children´s potential (including diagnosis of giftedness and talent).
Institution: public guidance centre with regional scope
Educational level: Primary/Secondary/ Special: **from pre-primary to secondary level including special schools**
Email address/Website: poradna@poradnazl.cz www.poradnazl.cz
Awareness/Knowledge of the field: High
About us: Krajská pedagogicko-psychologická poradna a Zařízení pro další vzdělávání pedagogických pracovníků Zlín (KPPP) is a school guidance facility that delivers counselling and guidance concerning education and development of children´s potential (including careers counselling) to children and their parents. KPPP carries out a wide range of tasks not only in the diagnosis of educational needs, but also in providing supporting pedagogical-psychological and special pedagogical services during the educational process and in careers guidance. The educational and psychological counselling determines the extent to which pupils are educationally and psychologically prepared for school, identifies the special educational needs of pupils, provides guidance services for pupils at risk of school failure or with problems in their personal and social development, identifies talent and giftedness, provides guidance, support and consultation for schools relating to exceptionally gifted pupils, and ensures the prevention of socially pathological phenomena in schools. KPPP Zlín are also a guidance and training centre for teachers and have a long experience in the creation of in-service training programmes for teachers and other school staff. KPPP, according to the Czech legislation, is the only institution that makes diagnosis of exceptionally able, gifted and talented children. Our links with schools, universities and other education establishments and professions and the

multidisciplinary nature of our work enabled us to prepare and to lead Erasmus+ Strategic Partnership “Talented Children” which brought together three partners from three countries in order to explore ways of identification and teaching able, gifted and talented children. The Talented Children project led to widening the partnership and further research in the topic through the follow-up project “EUREKA”.

2. Overview of Identification Practice
Title of identification method: Nomination (pre-diagnosis)
Key words: giftedness, talent, identification, method, recognition
Time/Duration: continuous
Short introduction: The initial identification shall be made by schools or families. Teachers are the frontline professionals in any educational programmes, therefore, their skills in nomination of the gifted and talented children are essential. For this reason, it is necessary for these teachers to know the gifted and talented characteristics in order to recommend those children to the psychological and pedagogical diagnostics. According to the Czech legislation, each school is obliged to create conditions for the pre-diagnosis of gifted and talented children. The Czech School Inspectorate made a research in 2008 that showed serious failings in the nomination of gifted and talented children. Only 36 % of visited schools declared a clear process for identification of gifted pupils. The best results were found in arts schools and secondary general schools. The Primary Arts School in Kroměříž (Základní umělecká škola Kroměříž) say the following: Teachers work systematically on nomination since the day one of the child´s attendance. The most common method is observation both in the individual and in the group lessons. Our school teachers follow the school educational programme which sets learning outcomes and time plan for each field of study. When teachers see that some pupil makes a significant progress or is ahead of the plan, this is considered an important characteristic of a talent. Each pupil receives an individual plan, which covers one school year. Most of those plans for example merge the

classes´ content of the current and the following school year. Pupils are engaged into their educational plan through a possibility to participate in its development.

The Secondary School in Kroměříž (Gymnázium Kroměříž) confirms that observation is the most used technique. They add that nomination is a long term process which involves not only the school staff but also parents and peers of the student. Sometimes, the students self identify themselves as gifted. Another indicator of giftedness may be student´s success in various knowledge contest or students olympiads.

Literature review (Bibliography, Videos, Links, Other Projects):

KPPP a ZDVPP Zlín, 2016. *Recognition and Teaching Gifted and Talented Children – Good Practice for Europe*. Zlín. ISBN 978-80-906400-0-9

ČŠI, 2008. *Can the Schools Work with Gifted Pupils? Thematic Report*. [online]. Praha: ČŠI. [cit. 2013-10-28].
Available on: http://www.csicr.cz/cz/Rodice/Na-co-se-casto-ptate/Umi-skoly-pracovat-s-nadanymi-zaky-.

Talented Children www.talentedchildrenproject.eu

Main topic: Identification of gifted and talented students

3. School/Education Context

Resources / Environment
Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget

The nomination requires **teachers who are skilled in the process**. They need to know the main characteristics of exceptional ability, giftedness or talent. In-service **teacher training** in this topic is essential.

Nomination needs **teachers' time to observe the student**, **effective communication** with other teachers in the school and **close cooperation with the KPPP's staff**.

Links to other institutions working in the respective area, universities, academies and science centres is a way how ensure a high quality and engaging educational programmes for children who are gifted.

4. Feedback/Reflection
Able, gifted and talented children are very specific both in the academic and the emotional sphere. Their needs cover cognitive, social and emotional factors and they should be respected. In case the abilities are not recognized at the early stage of their schooling, the child might be at risk of loss of motivation, isolation and drop-out. The in-service teacher training should cover all aspects of the topic - characteristics as well as potential problems of able, gifted and talented children, and also the ways of parents´/carers´ involvement in the process of identification. Establishing an external supervisory and professional support service for schools would be helpful. This would enable schools and teachers to get new information and knowledge in recognition of able, gifted and talented children regularly and continuously. An external supervisory and guidance body would provide teachers with support in the field of recognition and teaching those children. Schools should be supported in close cooperation on regional, national and international levels. These school partnerships should consist of job shadowing, workshops, seminars, study visits and other actions leading to information exchange and sharing of good practice examples.

1.4 Identification of Gifted and Talented in Greece

Despite the fact that Greece has recognised the necessity for Differentiated Instruction & Learning according to the Salamanca principles (1992), there is very little progress towards a holistic approach to teacher training that incorporates elements of early detection and referral. As a result, Greece is also said to suffer from the cross-culturally observed phenomenon that sees as much as one in two G&T children never fulfilling their potential or even abandoning their academic endeavours altogether (Meletea, 2004).
Prior to the 90's, there were a number of Model Public Schools that attracted talented students through examination and draw. Over the years and especially since 1982, these were rebranded as Model and Experimental Schools to avoid accusations of elitism.

The 90's saw the creation of two new types of schools, the Athletic and Music Secondary Schools, designed to address the needs of talented students in sports and music.

In 2002, the Ministry of Education initiated the Flexible Learning Zone that encouraged the introduction of collaborative learning methods, interdisciplinary approaches and

encouraged teachers to address, among other issues, the particular learning needs of G & T students.

March 2003 saw the introduction of the Interdisciplinary Unified Framework of Programme Studies and the New Curriculum that made specific references to talented students that require a diversified access to knowledge

New legislation was introduced in 2003 (Law 3194/2003) recognising Gifted & Talented Students as a particular student group. This was also followed by the creation of Art Schools for students with particular artistic inclinations. Both Music and Art State Schools offer places to interested students and families under a process of examination immediately after the completion of primary education.

And again in 2008, Law 3699/2008 on Special Education makes particular reference to "the special educational needs of students with increased cognitive abilities and talents that greatly exceed particular age milestones", recognising that public schools ought to address the needs of this specific learning group.

Apart from the process of examination for entrance into the Music and Art Schools, there is little work and expertise among teachers in the field of early detection of talented students. There are Regional Centers for the Detection of Special Talents and Needs, but there is huge controversy and lack of standardization surrounding their operation and teachers find it extremely difficult to engage in a meaningful referral process.

A common theme in the Greek education system is that talented students are those with a solid academic performance. In addition, there has also been a widespread conviction, especially among parents, that all students, G & T and mainstream need to be nurtured in an educational system that offers the exact same opportunities and approach to all and that any deviation would lead to exclusiveness (Matsagouras 2008). This typical fallacy confuses sameness with equality. An apparent antinomy is also manifested in the fact that Greek adults and parents are extremely fond of children that exhibit special skills and talents in sport, the arts, STEM, etc.

All stakeholders agree that despite certain initiatives and planning by the central government there is no reliable system that identifies G&T children in Greece. The prolonged economic crisis and lack of available funds have intensified this negative outlook on the field.

1. Contributor Details
Name Stephanos Cherouvis
Country: Greece
Position and role of contributor: Senior Researcher
Institution: Ellinogermaniki Agogi
Educational level: Primary/Secondary/ Special: Preschool-Primary-Secondary
Email address/Website: stecherouvis@ea.gr
Awareness/Knowledge of the field: Medium
About Me A research position at EA's R&D department involved in national and international (Horizon2020 & Erasmus+) projects in education, Responsible Research & Innovation (public engagement, open access, gender, ethics, science education), eLearning, open schooling, humanities, change management. Currently involved in The Ark of Inquiry (www.arkofinquiry.eu), The Enquiring Classroom (www.enquiring-project.eu), Open Schools for Open Societies (www.openschools.eu), Creations (creations-project.eu). Contributing to T/L community building, content design, piloting, implementation, school networking, assessment tools, sustainability and teacher training.

2. Overview of Identification practice
Title of identification method: Assessing particular skills and inclinations through a range of activities and projects
Key words: Testing, project-based assessment
Time/Duration: Ongoing throughout school with particular emphasis in primary and early secondary. Informal observation and discussion; project-based assessment, oral and written; summative at the end of the school year and at the end of each key stage.

Short introduction:

Project and activities are designed with an emphasis in students being carefully involved in educational scenarios that are designed to detect particular talents and special interests.

Teachers, in cooperation with the school's Counselling and Research & Development Departments (as well as external evaluators and experts in particular subjects) evaluate student progress in the various project-based activities and tasks and offer accurate assessment on the student's abilities to both the school authorities and the parents.

A typical path concerns student involvement in such projects and their subsequent selection as particularly able students who are then further supported in participating in international student events and contests such as the Mathematics Olympiad, the F1 in Schools Competition, WRO, as well as student debates, exhibitions, etc.

The role of the counselling department in the school is crucial here. The aim is to locate exceptional children. With the support of teachers and year heads, we look into aspects of cognitive, social and emotional development. For EA, it is important to observe the development of their abilities qualitatively, because some of these may pass unnoticed through the routine learning procedure. Creativity is an example here. It is our aim to support the original thinking and the various and often creative ways by which children demonstrate knowledge acquisition and use.

Target groups: All year groups will be identified in the same way

Literature review (Bibliography, Videos, Links, Other Projects):

European & international projects @ EA. (n.d.). Retrieved May 20, 2018, from www.ea.gr/ea/main.asp?id=602&proID=20150408959 57&lag=en

Main topic:

To explore identification in the classroom using a variety of projects and initiatives. A list of projects can be found here

There is an emphasis in STEM, but the school has adopted a strategy to support a shift towards STEAM.

Secondary topic:

To address the issue of inclusive participation, irrespective of particular inclinations. Indeed, aside from focusing on identifying abilities of particular students through their involvement in these very many projects, the approach offers the opportunity to all the school's students to actively participate, engage and learn. The fact that our school is involved in over 34 European projects in education with an emphasis in trying and implementing innovative approaches, content, material, etc., ensures that no child will be left without a team, a subject, an idea to work with!

3. School/Education Context

Resources / Environment
Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget

As the approach relies heavily on the particularities of individual projects, resources and budget vary accordingly. For example, most STEM projects require access to a computer lab. More specialised endeavours such as the projects Schools Study Earthquakes and PLATON require material to build things such as handmade seismometers (or even acquire basic seismometers).

Projects usually involve weekly engagement/runs for a period of an entire academic year, offering plenty of opportunities to assess involvement, interest, particular abilities, etc.

6. Feedback/Reflection

The advantage of working within various projects is also evident in the fact that they (the projects) offer ways to obtain feedback that may include indicators on student involvement, interest and change of attitudes towards particular subjects, approaches, methodologies, etc.

Here is one strong example in the Ark of Inquiry project:
http://www.arkofinquiry.eu/resources
The Ark of Inquiry project aimed at raising awareness of pupils to Responsible Research and Innovation (RRI) by promoting an interest in science through inquiry learning. The overall aim of the Ark of Inquiry project has been to create a "new science classroom", one which would provide more challenging, authentic and higher-order learning experiences and more opportunities for pupils to participate in

scientific practices and tasks, using the discourse of science and working with scientific representations and tools.
A type of assessment may be found here:
https://sisu.ut.ee/sites/default/files/ark/files/summative_assessement.pdf

SUMMARY

The Eureka Project has shown that across the partner countries no two countries are alike. Even within countries, approaches vary considerably in relation to the identification of More Able students. In fact, terminology can even be different from one school to another.

What the project has succeeded in doing is highlighting some highly effective and innovative practice and acting as an impetus for the implementation of this and other actions within partner institutions.

It is recommended that The Eureka website is used in conjunction with this manual www.eurekaproject.eu. This includes a comprehensive Resource Directory, as well as case studies including video's which can be used alongside the manual. Overall, the document could be an excellent reference point for teachers in the wider European context and contributes to the ongoing debate on the future of talented and inclusive education. All those involved in the production of this EUREKA Identification Manual will continue to monitor developments in the field. Contributions to the debate may be followed in the open online EUREKA community in the ODS portal (http://portal.opendiscoveryspace.eu/en/community/eureka-european-engagement-kids-achievement-project-847157).

The UK

The situation in the UK is dominated by an education system having a procedure, which allows for the streaming of students at age of 11 into different schools in some parts of the country. Teachers also feel that much good work and funding to address the topic of giftedness through state education has been lost in the economic recession. Nevertheless, there are guidelines, leadership and inspection regimes in place which provide a focus on the issue. In our case-study, we introduce readers to the topic of Able and Inspired in a high achieving and forward thinking grammar school. We also provide guidelines on various good practices. The main challenge in the UK appears to be that school leaders need to take urgent action to ensure the most able leave school with the right qualifications to succeed at the best possible settings, as this is not happening consistently.

Ireland

Unlike the UK no policies exist in Ireland but there are certain excellent guidelines and practice in place which assist schools considerably. In this document, we introduce manual users to a school, which assesses pupils through a variety of approaches, including testing and its interpretation.

To meet the needs of Exceptionally Able children, the school promotes a variety of strategies, including differentiation, learning centres, flexible groupings, competitions, clubs and projects. Extension activities, that are more demanding of their abilities, or enrichment activities that provide new and different ways of working will be provided during class or as home-work /project-work.

The Czech Republic

The Czech Republic in terms of policy and infrastructure appears to be ahead of partners. Undoubtedly, KPPP Zlín, the Eureka partner is an organisation of excellence which may not be mirrored across the whole of the country.

The Strategy for the Support of Giftedness Development and the Care of Gifted Children and Youth for the years 2014 – 2020 was established by the Ministry of Education, Youth and Sports in 2014. This Strategy contains the formation, function and activities of the proposed system. The main aim is to assure the maximum development and full use of the potential of all children, pupils, and students.

In the Czech Republic, the process of diagnosis has several steps and leads to the certification of the exceptional ability, giftedness or talent.

KPPP Zlin our case study, according to the Czech legislation, is the only institution regionally which can make the diagnosis of exceptionally able, gifted and talented children. KPPP carries out a wide range of tasks not only in the diagnosis of educational needs, but also in providing supporting pedagogical-psychological and special pedagogical services during the educational process and in careers guidance.

According to Czech legislation, each school is obliged to create conditions for the pre-diagnosis of gifted and talented children. The Czech School Inspectorate however undertook research in 2008 which showed serious failings in the nomination of gifted and talented children. Only 36 % of visited schools had a process in place. The most common method is observation both in the individual and the group lessons.

Greece

Despite the fact that Greece has recognised the necessity for Differentiated Instruction & Learning according to the Salamanca principles (1992), there is verylittle progress towards a holistic approach to teacher training that incorporates elements of early detection and referral. Apart from the process of examination for entrance into the Music and Art Schools, there is little work and expertise among teachers in the field of early detection of talented students. The economic crisis that hit the country in 2010 has resulted in massive cutbacks affecting all aspects of education

In our chosen case-study, Ellinogermaniki Agogi, teachers aim to identify student abilities in cooperation with the school's Counselling and Research & Development Departments (as well as external evaluators and experts in particular subjects) through designated project-based activities. Such processes may lead to a pupil's subsequent selection as a particularly able student, who are then further supported in participating in international student events and contests such as the Mathematics Olympiad, the F1 in Schools Competition, WRO, as well as student debates, exhibitions, etc. The school is involved in a huge range of European projects and provides a wide range of opportunities to students.

Conclusion

We present a range of approaches, which all have merits. The rigour of policy in the Czech Republic and the UK combined with strong leadership has much value. The use of a respected tool as is the case in Ireland combined with a range of national initiatives and projects has much to offer. The situation in Greece sees schools such as Ellinogermaniki Agogi use their own initiative and teaching excellence to endeavour to impact on the issue despite the lack of a central drive or policy.

BIBLIOGRAPHY

Bartholomew, D. (2004) *Measuring Intelligence: Facts and Fallacies.* Cambridge: Cambridge University Press.

ČŠI, 2008. *Can the Schools Work with Gifted Pupils? Thematic Report*. [online]. Praha: ČŠI. [cit. 2013-10-28]. Available on: http://www.csicr.cz/cz/Rodice/Na-co-se-casto-ptate/Umi-skoly-pracovat-s-nadanymi-zaky-.

Department for Education (DfE) (2011) *Developing Quality Tuition: Effective Practice in Schools. Academically More Able.* London: DfE.

European & international projects @ EA. (n.d.). Retrieved May 20, 2018, from https://www.ea.gr/ea/main.asp?id=602&proID=2015040895957&lag=en

Gladwell, M. (2009) *Outliers: The Story of Success.* London: Penguin.

GL Assessment (2012) *CAT 4. Cognitive Abilities Test, Fourth Edition*. London: GL Assessment

KPPP a ZDVPP Zlín (2016). *Recognition and Teaching Gifted and Talented Children – Good Practice for Europe.* Zlín. ISBN 978-80-906400-0-9

Ματσαγγούρας Η. (επιμ.) (2008). Εκπαιδεύοντας παιδιά υψηλών ικανοτήτων μάθησης: Διαφοροποιημένη συνεκπαίδευση. Αθήνα: Gutenberg.

Meletea, E. T. (2004). «Humanize Technology: Interactive Multicultural Educational Network and Global Curriculum development for Gifted Talented Students», The 9th Conference of the European Council for High Ability: "Educational Technology for Gifted Education: From Information Age to Knowledge Era". (ECHA - 09 - 13 September 2004, Pamplona, Navarra (Spain).

New Drumcondra Reasoning Test (DRT). (n.d.). Retrieved from http://www.erc.ie/test-sales/ability-and-aptitude-tests/drumcondra-reasoning-test-drt/

Office for Standards in education (Ofsted) (2013) *The Most Able Students: Are They Doing as Well as They Should in Our Non-Selective Secondary Schools.* London: Her Majesty's Stationery Office (HMSO).

Ofsted (2015) *The Most Able Students: An Update on Progress since 2013.* London: HMSO

Smithers, S. and Robinson P. (2012) *Educating the Highly Able.* London: Sutton Trust.

Sutton Trust (2017) *Developing Teachers: Improving Professional Development for Teachers. Summary of What Makes Great Teachers.* London: Sutton Trust.

Syed, M. (2010) *Bounce: The Myth of Talent and the Power of Practice.* London: Fourth Estate.

Syed, M. (2017) *The Quest for Sporting Perfection.* London: John Murray.

ANNEX: THE EUREKA IDENTIFICATION MANUAL TEMPLATE

1. Contributor Details
Name
Country:
Position and role of contributor (Select value for position e.g. teacher/parent/academic/expert/other
Institution:
Educational level: Primary/Secondary/ Special:
Email address/Website:
Awareness/Knowledge of the field (Practitioner, High, Medium, Low)
About Me – Free text field

2. Overview of Identification practice
Title of identification method:
Key words:
Time/Duration:
Short introduction: (Free text field):

Target groups:
Literature review (Bibliography, Videos, Links, Other Projects):
Main topic:
Secondary topic:

3. School/Education Context

Resources / Environment

Teacher (Time), School (Equipment, Rooms, ICT-Access), Budget

In completing your answer, please consider the following:
Describe the educational context and student composition. Was the school or its classes streamed or differentiated for different 'grades' of pupils in any way? Which specific resources were necessary for your assessment? Were physical spaces and resources accessible? This includes buildings, facilities, toilets, kitchens or any other architectural spaces. Were all forms of communication and ICT hardware accessible?

Text box (free text)

6. Feedback/Reflection

When commenting on feedback and reflection on your identification method, please take into consideration the following questions: In what way is feedback collected and inputted into the learning cycle?
How was reflection on this method shared?
What were the critical success factors?
What were the key lessons learned from the implementation of this practice?

Text Box (free text)

ISBN: 978-960-636-002-2