

PAPER DETAILS

TITLE: Evaluation models for gifted education programs: a critical examination and comparative study

AUTHORS: Maruska zeljeznov Senicar, Polonca Serrano, Mojca Gabrijelcic

PAGES: 37-52

ORIGINAL PDF URL: <https://dergipark.org.tr/tr/download/article-file/3889421>



Research Article

Evaluation models for gifted education programs: a critical examination and comparative study

Maruška Željeznov Seničar¹, Polonca Serrano² and Mojca Kukanja Gabrijelčič^{3*}

University of Primorska, Faculty of Education, Slovenia

Article Info

Received: 27 April 2024

Accepted: 26 June 2024

Online: 30 June 2024

Keywords

Comparative study

Critical review

Education models for gifted

Evaluation models

Gifted education programs

2149-1410/ © 2024 the JGEDC.

Published by Genc Bilge (Young

Wise) Pub. Ltd. This is an open

access article under the

CC BY-NC-ND license



Abstract

The purpose of this paper is to assess the quality of the planning and implementation of the evaluations of programs for gifted students, the findings obtained, and their validity. We conducted a thorough investigation and an international comparative analysis of foreign content starting points in the field of evaluation of programs of gifted education programs, in which we have presented modern didactic mechanisms that strive to renew the evaluation of program implementation, based on the tendency to improve the situation in the case of implementation of programs, for the gifted students. The literature search identified 713 documents (program evaluation), of which 485 were substantively relevant (evaluation of gifted programs). In the meta-analysis, the descriptive method was supplemented by a content analysis of the gifted programs. The evaluation found that coordinators are dissatisfied with the approach to identifying gifted students and that they have difficulty interpreting policy requirements and respond very pragmatically, and that the implementation of curriculum adaptations is poor. Based on the research findings, four suggestions were made: (i) increase the use of differentiated instruction and personalized learning, (ii) clearly define expectations for instruction for gifted children and align these expectations with the roles and responsibilities of gifted coordinators, teachers, and principals; (iv) develop and implement a plan for clear and regular communication with parents and students.

To cite this article:

Seničar, M. Ž., Serrano, P., & Gabrijelčič, M.K. (2024). Evaluation models for gifted education programs: a critical examination and comparative study. *Journal of Gifted Education and Creativity*, 11(2), 37-52. DOI: <https://doi.org/10.5281/zenodo.12546178>

Introduction

Controversy and debate about evaluation in the field of education, the use of methods, the role of evaluation and the basic principles that should guide evaluation are a constant in the field of gifted education. Evaluation of programs for gifted students has been addressed by different experts, in different time periods, and in the spirit of the paradigm they represent. The results of evaluations of programs for gifted students must be interpreted in the context of each country's school system and with a high degree of criticality when transferring data from one school system to another. At the national level, there are differences in curriculum models, school offerings, and teacher qualifications (formal or informal) for working with gifted students. Especially when evaluating programs, it is necessary to evaluate from a holistic perspective, namely (i) at the conceptual level (state or city school legislation), (ii) at the individual school level (school curriculum model), and (iii) at the individual level (individualized programs for gifted students) (Neumesiter & Burney, 2012). The conceptual and substantive starting points for program evaluation vary.

¹ PhD student, University of Primorska, Faculty of Education, Koper, Slovenia. E-mail: maruska.zeljeznov.senicar@pef.upr.si ORCID: 0000-0001-5276-8263

² Assistant Professor, Alma Mater Europea – ECM, Maribor, Slovenia. E-mail: polonca.pangrcic@almamater.si ORCID: 0000-0002-5240-7748

³ Corresponding Author: Associate Professor, University of Primorska, Faculty of Education, Koper, Slovenia. E-mail: mojca.k.gabrijelcic@pef.upr.si ORCID: 0000-0003-0682-613X

Evaluations of programs for gifted students aim for both formative and summative assessment. Carter and Hamilton (1985) emphasize formative evaluation, which includes process-oriented evaluation and outcome-oriented evaluation. In process-oriented evaluation, which is qualitative in nature, they suggest an analysis of the following elements of a program for gifted students: Definition of giftedness, philosophy, identification process and procedures, program goals, student goals, curriculum, school personnel, financial investment, and program evaluation process (Carter and Hamilton 1985). The process-oriented approach aims to evaluate the program content and analyze the factors that influence the quality of the program. The product-oriented evaluation determines whether the program is achieving the results for which it was designed (*ibid.*). According to Carter and Hamilton (1985), program evaluation is one of the most important elements in determining the quality of a gifted education program. Landrum et al. (2001) argue that programs and services for gifted students should be evaluated every five years. In this meta-evaluation, we assess the quality of the planning and implementation of the evaluations, the findings obtained and their validity.

Evaluation in Education

Evaluation is an integral part of the educational process. It serves to improve teaching and learning and is a reflective link between the purpose of the educational program and its reality in practice (Kahan 2008, p. 12). Quality can be a part of the assessment of education, which involves a value judgment about the subject matter of the assessment. School policies ensure the quality of schools in different ways, depending on different aspects and needs. In the area of evaluation of educational programs in schools, there are different types of evaluations depending on the type, level, and elements of evaluation.

Evaluation in school systems can be external and internal. Central components of external evaluation in schools are tasks related to education and management, student performance and legality of operations. In Europe, there are two purposes of external evaluation. The first is an assessment based on risk analysis and is used for schools that are not achieving the expected results. The second purpose is to increase the visibility of schools that carry out high quality activities and achieve results. Internal evaluation of schools exists in most European education systems, but there are differences in the involvement of different actors. In the context of internal evaluation of schools, Mcbeath and McGlynn (2006) highlight three areas: student learning, school culture and leadership. Shewbridge et al. (2014) link internal evaluation to formative evaluation and define four aspects of evaluation: the effectiveness of school structures and processes, the implementation of national education policies and regulations, the quality of learning outcomes and the ability of schools to improve.

Process evaluation of an educational program can assess the context, input, process, or products of the program (Stufflebeam 1973; 2014). According to Kirckpatrick's (1994) model, there are four levels of educational program process: responsive evaluation (participant satisfaction with the program), learning evaluation (change in attitude, assessment of knowledge and skills), behavioral evaluation (change in participant behavior), and outcome evaluation (long-term consequences and participant productivity).

Responsive evaluation is explicitly based on the way people naturally evaluate: they observe and react (Stake 2010). It allows for a comparison between program objectives and actual outcomes, is interactive, and allows for a recursive evaluation process based on the results of the previous evaluation. For this reason, it can be an appropriate model for curriculum and educational program development.

Stake (2010) defines the following tasks of the evaluator in responsive evaluation: (1) obtaining information about the perspectives and intentions of those involved in the evaluation; (2) focusing on the discussion and analysis of documents that determine the utility of the program; (3) observing the program and obtaining information about its implementation; (4) exploring the actual state of the program and the dilemma of stakeholders; (5) identifying content and problems that would lend themselves to evaluation; (6) selecting means and methods for obtaining data; (7) implementing the evaluation protocol; (7) organizing the information by problems and methods of presentation; (8) preparing a report for the program's various stakeholders (Glatthorn 1987, pp. 275–276).

The fourth generation of evaluation was developed as a critical reflection on existing evaluations (Guba & Lincoln 1989) and is a constructivist negotiation process between different stakeholders. Evaluation is based on the assumption that reality is constructed through the interaction between the observer (evaluator) and the observed (participant) (Guba & Lincoln 1989). Such evaluation helps to reach a consensus about reality or to recognize differences between different stakeholders. It is also instructive because it allows stakeholders to incorporate the perspectives of others into their own views, and empowering because the entire process is based on the negotiation of the different perspectives of those involved in the evaluation (Huebner & Betts 1999, p. 342).

Theoretical Models of Evaluations

In the field of evaluation theory, there are different approaches and therefore also different definitions of evaluations. One of the most general definitions is that evaluation is the systematic assessment of objects in a way that measures them and assigns a value to them (Joint Committee on Standards for Educational Evaluation 1994, p. 3). An expanded definition of value-based evaluation is a systematic assessment of the merit, worth, fairness, feasibility, safety, importance, and appropriateness of the object of evaluation (Stufflebeam and Coryn, 2014). The evaluation of honesty refers to the public interest, where the evaluation is expected to assess the evaluators' sincerity, integrity, and ethical behavior (Stufflebeam and Coryn, 2014, p. 12). The feasibility criterion assesses the implementation of the program and its effectiveness in terms of the use of time and resources. The importance criterion determines the impact, significance and visibility of a particular program, and the fairness criterion assesses whether the program offers equal opportunities to all participants. In addition to the above general definitions of evaluation, Stufflebeam and Coryn (2014, p. 14) define the operational definition of evaluation as follows: "Evaluation is the systematic process of identifying, obtaining, reporting, and applying descriptive and judgmental information about the value, utility, fairness, feasibility, safety, relevance, and appropriateness of the object of evaluation."

Silky and Reading (1992) developed A Forth Generation Evaluation Model for Gifted Education Programs (REDSIL model) in terms of the fourth generation of evaluations. The method consists of three phases. The first refers to the identification of critical content in the implementation of programs for gifted students, the second to the collection of data on the critical questions posed in the first phase, and the third to data analysis, validation, and report writing (Silky and Reading, 1992, pp. 68-69).

In terms of the orientation of evaluations, Alkin and Christie (2012) define three orientations. The first orientation is conditioned by the research method, which emphasizes experimental and quasi-experimental forms of evaluations (Shadish et al., 2002). This group includes, for example, theory-oriented evaluation (Chen and Rossi, 1983), experimental evaluation (Cook and Campbell 1979), and goal-oriented evaluation (Tyler, 1942). The second direction of evaluations focuses on usability, and the results allow decisions to be made about the program. These include the CIPP model (Stufflebeam, Madaus & Scriven, 2000), application-oriented evaluation (Patton, 2008), development-oriented evaluation (Patton, 2011), empowerment evaluation (Fetterman, 2003) and participatory evaluation (Bradley Cousins, 2003). Thirdly, the third type of evaluation refers to the assessment of the object of evaluation and aims to make a value judgment about the object to be evaluated. This group includes: non-targeted evaluation (Scriven 1991), responsive evaluation (Abma and Stake, 2002), fourth generation evaluations (Guba and Lincoln 1989). Through in-depth research and an international comparative analysis of foreign content that serves as a starting point for evaluating programs for gifted students, we can begin to improve national programs for gifted education.

Problem of the Study

Evaluation of gifted education programs is the process by which we assess the effectiveness and impact of these programs on participants and determine success in achieving their goals. It is important because it is used for quality assurance, program improvement, determining effectiveness, optimizing resources, and ensuring accountability and transparency. Therefore, evaluation of gifted education programs is essential to ensure their quality, effectiveness and sustainable benefits for participants and society as a whole.

Method

Research Model

We conducted a qualitative review - a systematic literature review of evaluations of gifted education programs and a meta-analysis. A search of electronic databases was conducted using predefined search terms to identify relevant studies. A descriptive research method was used. In the comparative analysis, the descriptive method was supplemented by a content analysis of the gifted programs. We followed the following basic phases: 1. Formulation of the problem/research question; 2. Bibliographic search and selection of studies (in indexed databases); 3. Coding of the studies; 4. Qualitative analysis and interpretation.

The process of data collection and analysis followed the guidelines for systematic reviews previously developed in the field of educational research. To achieve the objectives of the study and to ensure the scientific quality of the reviewed papers, peer-reviewed articles (in the Co-operative Online Bibliographic System & Services, ERIC and Google Scholar) were appropriately selected and reviewed. We also scanned the reference lists in the selected publications to find other relevant papers. The criteria for inclusion of studies in this review were as follows: (1) the paper had to focus on the evaluation of gifted education programs, (2) the paper had to be written in English, and (3) the paper had to be publicly published. We placed no restrictions on study design or year of publication. Considering the inclusion criteria, we analyzed the content of 80 published evaluations of programs for gifted students around the world.

COBISS and ERIC were the primary research databases used to search for studies published from 1972 onwards. The literature search identified 713 documents (program evaluation), of which 485 were substantively relevant (evaluation of gifted programs). Using meta-analyses published after 1972, 80 evaluations of gifted education programs that met the core dimensions of evaluation programs were selected.

The final selection included a total of 80 evaluations: (Avery, VanTassel Baska & O'Neill, 1997; Avery and VanTassel Baska, 2001; Baker & Schacter 1996; Barnett, 1984; Baum, Hébert, & Renzulli, 1999; Berlin, 2009; Borland, 1989; Bui, Craig, & Imberman, 2011; Betts, 2004; Callahan, 1986; Callahan, 1993; Callahan, 1996; Callahan, 2004; Callahan, 2006; Callahan & Caldwell, 1986; Callahan & Caldwell, 1995; Callahan et al, 2014; Carter & Hamilton, 1985; Christian, 2008; Colangelo et al, 2004; Cotabish & Robinson, 2012; Doina, 1997; Freeman, Raffan & Warwick, 2010; Gavin et al, 2009; Gubbins & Renzulli, 1996; Gifted service program evaluation report: executive summary, 2017; Gubbins et al, 2007; Han, 2007; Hebert, 1993; Hosseinkhanzadeh et al, 2013; Hunsaker & Callahan, 1993; Jolly & Matthews, 2012; Kao, 2012; Kim, 2016; Ki-so Han, 2007; Koshy & Pinheiro-Torres, 2013; Kulieke, 1986; Landrum, Callahan & Shaklee, 2001; Little et al, 2007; Lubinski, Webb, Morelock, & Benbow 2001; Lubinski, Benbow, Webb & Bleske-Rechek, 2006; Lundsteen, 1987; Marland, 1972; McCoach & Siegle, 2007; Matthews and Kitchen, 2007; Moon, Britton & Trinter, 2012; Mönks, 1992; NAGC, 2010; Neumeister & Burney, 2012; Ozcan and Kenan Kayadelen, 2015; Park et al., 2007; Polyzopoulou et al, 2014; Purcell et al, 2002; Reid, 2004; Reis et al, 1995; Reis & Renzulli, 2003; Reis et al, 2007; Renzulli, 1977; Renzulli, 2016; Renzulli & Smith, 1979; Riba et al. 2018; Robinson, Cotabish, O'Tuel & Wood 2005; Rogers, 1991; Rogers, 2007; Rogus, 2007; Sternberg & Davidson, 2005; Tomilson, Bland & Moon, 1993; Tomilson & Callahan, 1994; Tomilson et al, 1994; VanTassel-Baska, 2003; 2004; 2006; VanTassel Baska & Brown, 2007; VanTassel Baska & Feng, 2004; VanTassel-Baska, Willis & Meyer, 1989; Westberg, 1999; Wiggins, 1996).

Meta-evaluation criteria

The scales described by various authors for assessing the dimensions of evaluation programs consider 9 dimensions, namely (1) approaches to gifted education program design and evaluation (2) elements of gifted education programs (3) types of gifted education program evaluations (4) Key elements of gifted education program evaluations (5) Differentiation of learning and individualization in working with the gifted (6) Research in the field of gifted education program evaluation (7) Effectiveness of gifted education programs (8) Consideration of the values and (9) Perspectives of the gifted in program design.

By analyzing the professional and scholarly literature and other relevant sources in the field of gifted education programs, we aimed to achieve the following objectives, which we grouped into four research categories:

- Improve our understanding of the effectiveness of gifted education programs and determine which approaches to gifted education program design and evaluation are most systematic and optimal for teaching such a group of students
- Use meta-evaluation to identify which approaches (types) of evaluation for the gifted are most commonly used in the resources under consideration (or evaluation)
- Identify which program evaluations aim to identify the different values and perspectives of participants
- Use meta-evaluation to examine whether the identification process is effective and how it can be used to identify all students in need of advanced curriculum or instruction.

Results and Discussion

Approaches and elements in the design of gifted education programs and their evaluation

In the 1990s, Tomilson and Callahan (1994) created guidelines for evaluating programs for gifted students, which they presented in four phases: Planning the evaluation, designing the method for collecting and analyzing data, conducting the evaluation, and processing the results, and developing suggestions. Their paper includes essential questions for effective evaluation of programs for gifted students.

The most systematic approach to program design, and therefore evaluation, has been developed by the NAGC (2010), which defines the standards and conditions for the implementation of programs for gifted students in the United States of America. According to NAGC (2010), two types of evaluation should be conducted, namely (i) evaluation at the organizational level and (ii) at the program element level. At the program element level, data triangulation of the following program elements should be conducted: (1) program design, (2) the process of identifying gifted students, (3) curriculum and instruction, (4) affective dimensions, (5) teacher professional development, and (6) program effectiveness.

In evaluating the design of programs for gifted students, the school philosophy and explanation of how the individual school district addresses the needs of gifted students, the definition of giftedness (where the definition of giftedness depends on the local community and includes only those activities that the school or school district can provide or implement), the goals and purpose of the program for gifted students (including specific goals for the student, (including specific goals for the student that result from the student's participation in the program), services offered to gifted students for each grade, management of responsibility for developing and monitoring the implementation of the program, roles and responsibilities of key individuals and groups for the gifted student program, the decisions of decision makers reviewing the program, its role and timing, and professional development for teachers (ibid.). The provision of activities for gifted students must meet the individual educational needs of the gifted students. It is the responsibility of the school or its representative (coordinator) to coordinate the implementation of the provision for students and local communities, provide the provision, manage the analysis of student performance, provide training opportunities and deal with parents' dilemmas. It is the teacher's responsibility to follow the curriculum with differentiation in the classroom, monitor student performance, provide continuing education and professional development.

In the area of gifted education program design, the NAGC (2010) recommends the following evaluation questions: Does the program comply with legislation, concepts, guidelines, and the definition of gifted students? Is the implementation of the program linked to staff accountability? Are the roles of key personnel clearly defined? Is the program designed to meet the needs of gifted students? Does the program include components that are defined as the most effective in gifted education?

In evaluating the process for identifying gifted students, the key question is whether the identification process is effective and whether we can use it to identify all students who need an advanced learning program or instruction. Evaluation of curriculum and instruction includes an assessment of whether the curriculum and instruction are appropriately differentiated to meet the educational needs of gifted students. To ensure this goal, it is important to plan the curriculum and instruction as well as an appropriate learning environment, such as personal and social responsibility, multicultural competencies, and technical communication skills. This raises questions such as: is the individualized

program at a higher level than the regular curriculum, how is the curriculum differentiated or how is instruction differentiated for gifted students, is the curriculum written for gifted students and for individual areas, are the learning goals for gifted students clearly written and measurable, does the written curriculum have a clear method of acceleration, are teaching and learning experiences defined at a higher level, is there a clear definition of learning communication, collaboration, research, critical thinking, and problem solving, whether gifted students are actively involved in building their knowledge, whether the pace of learning is appropriate for a gifted student, whether students have the opportunity to choose to develop in a personalized area, or whether assessment is coordinated with learning objectives, whether there is assessment of prior knowledge as a key to creating an individualized plan, or whether assessment of a gifted student at the end of the school year is also a way to determine his or her growth and development.

The affective dimension is an important dimension for the student's personal development. The crucial question is whether the program for gifted students also satisfies their affective needs, i.e. their social and emotional needs, their social and psychological health, and their inner motivation. Thus, according to the NAGC standards (2010), the individualized program provides for affective characteristics, areas for the gifted student's psychological health, the development of work habits and incentives for achievement motivation, the area of guidance in the areas of: stress, responsibility, and perfectionism.

The professional development and training of teachers and parents is one of the most important prerequisites for quality work with gifted students (Standard 6, NAGC, 2010). Key questions relate to whether teachers are licensed to implement the program, how much teachers work directly with gifted students, and how teacher training and parent consultation occur.

Program effectiveness refers to whether an individualized plan for gifted students actually meets the educational needs of the gifted student (Standard 2, NAGC, 2010). Effectiveness is evaluation by analyzing the results of the program, providing opportunities for feedback, and guiding future learning decisions. Criteria for evaluating program effectiveness include the coherence of the program (the components of the program are interrelated, such as identification-needs-goals-forms and activities), the satisfaction of the gifted student's cognitive and emotional needs, and the perceptions of program participants. The following questions are important to determine effectiveness: Are all gifted students included? Is the program consistent and continuous? Are the elements of the program coherent and connected? Is there flexibility for individualized needs? Are there records of students' cognitive and affective growth? Callahan and Caldwell (1986) identify key elements of evaluation to generalize findings: (1) documentation of program needs; (2) case documentation of a specific program; (3) program sustainability document; (4) program implementation document; (5) identification of program strengths and weaknesses; (6) program review; (7) an examination of program outcomes and impacts; and (8) a description of the program for interested members of the public.

VanTassel Baska (2006) points out elements of the program that should not be subject to disposition in the area of gifted education. These elements are: identification, differentiated curriculum, program design, instruction, materials, assessment protocols, staff development, and parent involvement. Among the teaching strategies, he emphasizes problem-based learning and questioning techniques. In addition to the school's premises, cooperation between school and home is also important, as this is one of the most important factors in promoting the development of students' talents and gifts.

Types of evaluations and key elements for evaluating programs for gifted students

In 2004, Callahan noted that the field of evaluation of programs for gifted students lacks research, evaluation models, and longitudinal studies that answer the key questions of how students will differ, what they will know, what they will do, what benefits they will have at the end of the program. The answers to these questions will indicate whether the gifted education program is effective and achieving the goals for which it was established (Callahan, 2004).

Callahan (2004) defines program evaluation through four categories of evaluations of programs for gifted students. The first category defines theoretical and practical guidelines that provide recommendations for evaluating programs for gifted students in general or for evaluating specific elements of the program (e.g., training teachers to work with

gifted students). For example, Callahan (1996; 2004) suggests involving key stakeholders in the program planning process, targeting evaluation questions to those important to them, making data collection systematic and working toward a collaborative relationship between the evaluator and the user, and including student outcomes in the evaluation plan. Kulieke (1986) provided an example of using the evaluation process as a valid tool for assessing the needs of gifted students.

The second category includes evaluations of specific programs. VanTassel-Baska, Willis, and Meyer (1989) summarize evaluations of the effectiveness of specific programs for gifted students. Avery, VanTassel-Baska, and Oneill (1997) describe an evaluation of suburban programs for gifted students. Landrum (2001) creatively argued for the use of alternative data sources to evaluate the effectiveness of implementing a new program model and self-monitoring subjects over time. Kulieke (1986) looked at the evaluation of teachers' professional development, where observation of the teacher at work is important in addition to the teacher's opinion. Avery, VanTassel Baska et al. (1997) conducted an evaluation of a program for gifted student using a classroom behavior questionnaire that focused on assessing whether curriculum and instruction were differentiated.

The third category focuses on program evaluation. Backer, Schater (1996) and Wiggins (1996) offer new ideas for assessing gifted students using expert testimony. The fourth category is evaluation research, which Callahan (2004) argues is inadequate. Callahan (2004, p. 14) emphasizes the need to address all stakeholders and use summative evaluation questions that form the basis for program decision making. Models that combine both quantitative and qualitative approaches include: the naturalistic approach (Barnette 1984) and the ethnography-based research model as one possible model (Lundsteen 1987). Callahan (2004) sees the essence of developing evaluations in formulating the right questions, which must be relevant, useful, and important. According to Callahan (2004), relevance refers to answers about the components, activities, objectives, and structure of programs. The goal of evaluation questions is not to generalize, but to determine the specificity of an individual program or the effectiveness and impact of a particular system for identifying an appropriate program for a gifted student. Individualized programs for gifted students are based on individual characteristics based on goals derived from the child's interests and abilities (Smith 1979). For this reason, Callahan (2004) states that it is not appropriate to set behavioral goals for such programs. Individualized programs deal with unique content and goals, and therefore it is difficult to establish performance standards by which we can measure the success of the program. In addition, individualized programs vary from school to school and are not based on standards for quality program design. Many goals in individualized programs are very complex and difficult to define (e.g., creativity, critical thinking) and there are no empirical studies that would provide norms and guidelines for determining success. Assessment is complicated by individual goals and objectives as well as holistic and long-term goals.

A review of relevant research in the area of evaluation of programs for gifted students

The overview of research in the field of gifted education programs is defined in terms of three paradigms of evaluation, namely: (1) evaluations of gifted education programs that aim to determine program effectiveness and impact, (2) evaluations of gifted education programs that aim to identify the different values and perspectives of participants, (3) evaluations of gifted education programs that aim to obtain useful data for program improvement.

Most examples of evaluation of programs for gifted students can be found in the American school system. One of the first models for evaluating programs for gifted students was the Diagnostic Evaluation Scale for Differentiated Education for Gifted Students developed in 1975 (Renzulli 1975). The initiative for the development of the evaluation model came from the Marland Report of 1972. The evaluation model included: (a) an introduction to the basics of evaluation protocols; (b) a set of measurement scales for determining the quality of programs; (c) different forms of data collection; (d) a manual for evaluators; (e) a description of methods for writing a report (Callahan, 1986). In 1990, the American National Research Center for Giftedness and Talent was founded with the goal of evaluating models for gifted students and their effectiveness (Hunsaker and Callahan, 1993, p. 191). On this basis, Hunsaker and Callahan (1993) evaluated 70 programs for gifted students based on 10 variables: (1) type of evaluation; (2) evaluation model; (3) type of evaluator; (4) data collection methodology; (5) data analysis techniques; (6) data sources; (7) target audience; (8)

report format; (9) evaluation dilemmas; and (10) usefulness of the information obtained. The evaluation revealed that most of the evaluations were summative and focused mainly on the dilemmas of the administrators who handled the data from the questionnaires. In 2009, Fleischer and Christie conducted an evaluation of 1,140 evaluators of gifted education programs and found that evaluators: (a) swear by formative evaluation more than summative evaluation; (b) engage with all stakeholders, not just coordinators; and (c) use both quantitative and qualitative methods in evaluation.

An alternative approach to evaluating programs for gifted students is William and Mary's eclectic evaluation model (VanTassel-Baska, 2003), which is not as widely used in practice and includes six different evaluation approaches: (a) CIPP model; (b) case studies; (c) utilization-focused; (d) knowledge-focused; (e) client-centered; and (f) accreditation/certification approach (VanTassel-Baska and Feng, 2004).

Evaluations of programs for gifted students aimed at determining the effectiveness and impact of programs on gifted students

Rogers (2007) states that the most effective programs for gifted students are those that achieve multidimensional impact, such as daily challenges for students, opportunities for independent learning, acceleration, peer work, time differentiation, pacing, and content organization. For example, evaluation of curriculum and instruction includes a review of the individualized program for gifted student, the curriculum, a classroom observation, and a questionnaire. An evaluation of the impact and effectiveness of programs for gifted students with learning difficulties found that the inclusion of dually gifted students in a gifted education program resulted in improvements in their behavior, self-regulation, and self-esteem (Baum 1988). Involving low-achieving gifted students in independent learning programs with the help of a tutor has also led to higher achievement (Baum et al. 1999). Including students with Williamson syndrome in programs to develop musical talents has affected their performance in mathematics and their understanding of mathematical concepts, as well as their motivation to develop musical concepts (Reis et al. 2003).

Participation of gifted students in gifted development programs has also shown long-term effects on gifted students. Herbert (1993) found that gifted programs had a positive effect on students' interest and educational plans after high school.

Herbert et al. (1995) pointed out the negative effects of student participation in gifted and talented programs, namely on academic development in the areas of reading, mathematics, and attitude toward school, as well as a positive effect on four components of non-academic self-concept: physique, appearance, and relationship with peers and parents.

Lubinski et al. (2001) tracked students who had been identified as gifted in adolescence and found that 50% of them achieved a doctorate. Evaluation of participation in the enrichment program also showed that they maintained interest in their field of interest and creative production after high school (Westberg 1999). Lubinski et al (2006) followed 380 students for 20 years who had been identified as gifted before the age of 13 (mainly in the area of cognitive ability) and found that they performed well relative to social prestige and reported high levels of career and life satisfaction. A longitudinal study (Park et al. 2007) also followed 2,409 intellectually gifted students for more than 25 years and showed that various abilities identified before the age of thirteen, such as achievement in literacy and science and technology, continued to have an impact in adulthood.

Various evaluations also determined the influence of the curriculum and the group composition of the students on the performance of gifted students. Reis et al. (2007) found that students who participated in the SEM-R enrichment program had higher academic achievement in reading fluency and reading behaviors than students who did not participate in the enrichment program. Rogers (1991) found that grouping gifted and talented students for instruction improved their performance. Colangelo et al. (2004) investigated the effects of using different types of acceleration procedures on student performance and concluded that their use led to higher student performance. Gubbins et al. (2007) also found that 30 hours of student participation in mathematics programs had an impact on higher student achievement in the areas of problem solving, data interpretation, and algebra testing. Gavin et al. (2009) found that curricular challenges in math led to higher achievement in understanding math concepts, computation, and problem

solving. Little et al. (2007) investigated the effect of the Javits curriculum on gifted students in a quasi-experimental study. The results showed significant differences between the groups in the area of content learning (Little et al. 2007). A meta-analysis of the effects of enrichment programs between 1985 and 2014 showed the positive impact of enrichment programs on student achievement and social and emotional development based on 26 studies (Kim 2016). VanTassel-Baska et al. (1989) conducted a comparative analysis between the independent class for gifted students and the regular class in the evaluation in the areas of: Improving critical thinking and research, elevating the concept itself, promoting positive attitudes toward school and the learning process, and creating opportunities for intellectually gifted students to interact. The program, which was implemented in a self-contained class for gifted students, was shown to have a positive impact.

Bui, Craig and Imberman (2011) examined the effects of gifted programs on student achievement and behavior (attendance and discipline). They found that they had no effect on student performance, but did have an impact on attendance, particularly in science. The achievement test was not entirely consistent with the purpose of gifted programs.

Riba et al. (2018) conducted an evaluation of satisfaction with after-school enrichment programs for gifted students. There was a high percentage of satisfaction with the program, progress was noted in cognitive, emotional, motivation and interest in learning. They also found that the program had a great impact on the individual's personal and intellectual development.

A qualitative study on the impact of a program in Korea for gifted students in the field of science showed a positive impact: the participating students improved their thinking skills, creative abilities, problem-solving skills and developed higher self-esteem (Han 2007, p. 450). The participating teachers noted a low level of motivation, a lack of individualized educational plans, low student engagement in the tasks and a lack of opportunities for social activities (Han 2007, p. 450).

In Arlington Public Schools, they conducted an evaluation of the effectiveness of the implementation of the gifted program and an assessment of the results and developed suggestions for improvement. The evaluation showed in the area of gifted program implementation (Gifted service program evaluation report: executive summary 2017, p. 4): with the implementation of the general assessment of gifted students, more students were shown to have access to activities for gifted students in all academic areas at the elementary level; the gifted services program has made progress in the area of meeting the learning needs of gifted students (in the area of differentiation methods, additional time, enrichment program, identification process, collaboration between regular teachers and teachers working with gifted students); differentiated instruction is good for all students and promotes the development of the potential of all students. In terms of the outcomes of working with gifted students, the research has shown that gifted students are appropriately included and challenged. Based on the research findings, four suggestions were made: (i) increase the use of differentiated instruction and personalized learning for gifted students; (ii) clearly define expectations for instruction for gifted students and align these expectations with the roles and responsibilities of gifted coordinators, teachers, and principals; (iii) develop a proposal for accessibility of student data for early identification of gifted students and appropriate responses; (iv) develop and implement a plan for clear and regular communication with parents and students.

Evaluations of programs for gifted students aim to identify the diverse values and perspectives of participants

High-quality implementation of programs for gifted students requires the inclusion of diverse aspects and perspectives as well as the values of all stakeholders, such as gifted students, teachers, coordinators, and parents of gifted students. There are many national studies in the field of research on teachers' perspectives on gifted education. For example, Greek research (Kokaridas et al. 2014) shows that teachers' perceptions of gifted education are strongly influenced by their previous experiences of teaching gifted students, their knowledge of general and special pedagogy and the subject they teach, and that attitudes towards gifted education do not differ from other countries and within Greece.

According to Robinson et al. (2005), program evaluation of services for gifted students can be an important way to increase teachers' knowledge and effectiveness and because they bring about positive changes in practice. Robinson, Cotabish, Wood & Biggers (2009) present the Arkansas Evaluation Initiative in Gifted Education. The Arkansas

Evaluation Initiative (AEI) for Gifted Education was established to improve the quality of evaluation of programs for gifted students. Thus, the AEI focuses on improving services for gifted students, particularly for neglected student groups, and with the goal of building a local infrastructure for implementing formative program evaluation. The evaluation revealed that practitioners are interested in program evaluation training but are concerned about time, logistics, resources, and their own skills to support improvements in formative program evaluation.

Cotabish and Robinson (2012) examined how mentoring among practitioners influenced improvements in program evaluation for gifted students. They found that mentoring had an impact on practitioners' increased awareness of the importance of evaluations for gifted students, particularly in the area of providing programs for students from culturally diverse backgrounds and low socioeconomic families.

Koshy and Pinheiro-Torres (2013) evaluated the responses of gifted coordinators to gifted education policy in the UK. The evaluation found that coordinators are dissatisfied with the approach to identifying gifted students, that they have difficulty interpreting policy requirements and respond very pragmatically, and that the implementation of curriculum adaptations is poor. The evaluation also showed that teachers need further training, especially in the area of school policy requirements, the process of identifying gifted and talented students. It became clear that attention needs to be shifted from the identification process to the development of effective learning and teaching strategies.

Callahan, Moon et al. (2014) conducted a statewide survey of gifted education programs and found that most coordinators reported that the district provides a program with specific processes for identifying a group of students in which they are offered an educational option that is different from the regular curriculum or instruction.

Ozcan and Kenan Kayadelen (2015) identified the opinions of special education teachers about the education of gifted students and concluded that teachers do not feel equipped to teach gifted students and that it is imperative to establish centers for the education of highly intelligent students.

McCoach and Siegle (2007, p. 246) investigated teachers' attitudes towards giftedness and gifted education. They found that teachers who had received training in the field of giftedness had a higher perception of their own giftedness, but this did not affect their attitudes towards educating gifted students.

Evaluation of identified gifted students' attitudes toward giftedness revealed a positive attitude toward being identified as gifted and that the negative stereotype can be overcome with a high-quality integrated program for gifted students (Berlin 2009).

Hosseinkhanzadeh et al (2013) investigated the attitudes of parents and students towards different forms of work with gifted students and found negative attitudes towards the integration of gifted students.

Matthews and Kitchen (2007, p. 256) found high levels of teacher and student satisfaction with academic programs for gifted students, but also concerns about negative school climate in schools that offer academic programs for gifted students.

A meta-analysis of studies in the area of questioning and parental influence on gifted education from 1983 to 2012 found three themes: parental influence, parental perceptions of giftedness and ability, and parental satisfaction with the gifted program (Jolly and Matthews 2012).

Based on a literature review, Jolly and Matthews (2012) identified a lack of research in the area of recommendations, which future research should focus on. These areas are: attitudes, values, expectations towards gifted underachieving students, parenting underachieving students, and how parents support and influence the student at home.

Qualitative analysis has shown that instructional strategies focus on getting good grades and lack quality affective education, that there is a lot of pressure on students, that arts programs are not effective, and that resources in the community and school are not utilized (Kao 2012).

Purcell et al. (2002, p. 306) examined the relationship between educational standards, curriculum, and educational needs of gifted students and found a weak relationship. Thus, there are differences between the learning needs of gifted students and the curriculum.

Conclusion

In this paper, we have conducted a thorough investigation and an international comparative analysis of foreign content starting points in the field of evaluation of programs for gifted students, in which we have presented modern didactic mechanisms that strive to renew the evaluation of programs for gifted students, based on the tendency to improve the situation in the field of implementation of programs for gifted students. Based on the results, we can start improving the national programs for the gifted, as the improvement initiatives will be based on an in-depth meta-evaluation that will show us what needs to be changed or improved in said programs to best serve the primary users - the gifted students.

By analyzing the professional and academic literature and other relevant sources in the field of giftedness, we aimed to achieve the following objectives, which we present through four strands of research:

Approaches to gifted program design and evaluation that most systematically and optimally address instruction for gifted students show that the system developed by National Association of Gifted Children (NAGC) (2010) that defines standards and conditions for the implementation of programs for gifted students in the United States of America. According to NAGC (2010), two types of evaluation should be conducted, namely (i) evaluation at the organizational level and (ii) at the program element level. At the program element level, data triangulation of the following program elements should be conducted: (1) program design, (2) process of identifying gifted students, (3) curriculum and instruction, (4) affective dimensions, (5) teacher professional development, and (6) program effectiveness. We should also mention VanTassel Baska (2006) who highlights the elements of the program that should be non-negotiable in the field of gifted education. These elements are: identification, differentiated curriculum, program design, instruction, materials, assessment protocols, staff development, and parent involvement.

Highlighting the evaluation of programs that aim to identify different values and perspectives of participants points to the different role and importance of the teacher in identifying and educating gifted students (Koshy and Pinhero-Torres, 2013; Robinson et al, 2005), from the perspective of offering programs (Callahan et al. 2014) and the support of gifted students (Cotabish and Robinson, 2012), emphasizing the need for a professionally trained profile of a teacher for a gifted student (Berlin, 2009; Ozcan and Kenan Kayadelen, 2015).

The comprehensive analysis and international comparative study conducted in this paper shed light on the planning and implementation of evaluations for programs catering to gifted students. Through an examination of numerous relevant documents and a meta-analysis of gifted education programs, several key findings emerged. Firstly, it became evident that there is widespread dissatisfaction among program coordinators regarding the approach to identifying gifted students. Additionally, there is a notable struggle in interpreting policy requirements, leading to pragmatic responses rather than strategic initiatives. Moreover, the implementation of curriculum adaptations was found to be lacking. Drawing from these findings, the paper proposes four essential suggestions for improving the evaluation and implementation of programs for gifted students: increase the use of differentiated instruction and personalized learning; clearly define expectations for instruction; enhance communication with parents and students; provide continuous professional development.

In conclusion, this paper underscores the importance of reevaluating and enhancing the evaluation mechanisms and implementation strategies for programs catering to gifted students. By addressing the identified challenges and implementing the proposed suggestions, stakeholders can work towards ensuring that gifted learners receive the support and opportunities they need to thrive academically and personally.

Limitations of Study

The evaluation research on gifted education programs included in this research is limited to the selection criteria specified in the method section of this research.

Recommendations

Based on the comprehensive analysis and findings presented in this paper, several recommendations are proposed to enhance the planning, implementation, and evaluation of programs for gifted students as:

- Prioritize differentiated instruction and personalized learning for gifted learners
- Establish clear expectations for instruction
- Improve coordination and interpretation of policy requirements
- Provide training and support for program coordinators to enhance their understanding and interpretation of policy requirements related to gifted education
- Enhance communication with parents and students
- Provide training in instructional strategies, curriculum adaptations, and best practices for meeting the unique needs of gifted students.

Biodata of Authors



M.Sc. **Maruška Željeznov Seničar** has a master's degree in pedagogical sciences (pedagogy) and a doctoral student in humanities - educational sciences at the Faculty of Education of the University of Primorska. She is professionally engaged in the development of training programs for teachers in kindergartens and schools. Her bibliography comprises 100 bibliographic units:

https://bib.cobiss.net/bibliographies/si/webBiblio/bib201_20201115_233801_40480.html

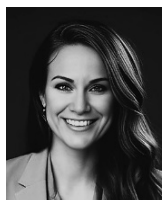
ResearchGate: <https://www.researchgate.net/profile/Maruska-Zeljeznov>



Assistant Professor PhD, **Polonca Serrano**, is head of Center for Pedagogical and Didactic Development and support for teachers (CPDR) and a researcher at Alma Mater Europaea – ECM, Maribor, Slovenija. Her main field of research goes from gifted student's curriculum design and didactics to higher education didactics and innovative teaching. She is currently the manager of the international project called Designing for Enhanced Competence through Active Participation in Higher Education (DECAP-HE), funded by Norway Grants, where she focuses on development of new methods and approaches in the field

of higher education didactics, while simultaneously including the fields of sociology, anthropology, pedagogy, humanities and other social sciences. The project refers to the field of active learning, design thinking, global competences and active citizenship for the 21st century. As a high-ed specialist, she organizes and performs educational and didactical courses for pedagogical staff at Alma Mater Europaea - ECM and wider. **ORCID:** 0000-0002-5240-7748

ResearchGate: <https://www.researchgate.net/profile/Serrano-Polonca>



Associate Professor PhD, **Mojca Kukanja Gabrijelčič**, Director of Center of Giftedness and Creativity, University of Primorska, Faculty of Education. In the field of research, she is mainly concerned with the development of didactics; studies the design of curricula and teaching materials for the social sciences and alternative didactic strategies for teaching in higher education. In addition to didactics, her long-term research is directed towards gifted and talented students, finding (identifying) gifted students in primary school, in history classes and discovering gifted children in preschool, developing didactic strategies for working with the gifted and talent children. Her important contribution in the field of gifted education is mainly in the measurement tool, as she was the first in Slovenia to create an assessment scale for discovering gifted students in history and also for gifted preschoolers. **ORCID:** 0000-0003-0682-613X

ResearchGate: <https://www.researchgate.net/profile/Mojca-Kukanja-Gabrijelcic>

References

- Abma, T. A. and Stake, R. E. (2002). Stakes responsive evaluation: Core ideas and evolution. *New Directions for Evaluation*, 92, 7–22.
- Alkin, M. C. and Christie, C. A. (2004). *An evaluation theory tree revisited*. Evaluation roots. Thousand Oaks: Sage.
- Avery, L. D., VanTassel Baska, J., and O'Neill, B. (1997). Making evaluation work: One school district's experience. *Gifted Child Quarterly*, 4, 124–132.
- Avery L. D. and VanTassel Baska J. (2001). Investigating the Impact of Gifted Education Evaluation at State and Local Levels: Problems with Traction. *Journal for the Education of the Gifted*, 25(2):153–176.
- Baker E. L. and Schacter J. (1996). Expert Benchmarks for Student Academic Performance: The Case for Gifted Children. *Gifted Child Quarterly*, 40(2):61–65. <https://doi.org/10.1177/001698629604000202>
- Barnette J. J. (1984). Naturalistic Approaches to Gifted and Talented Program Evaluation. *Journal for the Education of the Gifted*, 7(1), 26–37.

- Baum, S. M., Hébert, T. P., and Renzulli, J. S. (1999). Reversing underachievement: Creative productivity as a systematic intervention. *Gifted Child Quarterly*, 39, 224–235.
- Berlin, J. (2009). It's All a Matter of Perspective: Student Perceptions on the Impact of Being Labeled Gifted and Talented. *Roeper Review*, 31, 217–223.
- Borland, J. H. (1989). *Planning and implementing programs for gifted*. New York: Teachers College Press.
- Bradley Cousins J. (2003). Utilization Effects of Participatory Evaluation. In: Kellaghan T., Stufflebeam D. L. (Eds.). *International Handbook of Educational Evaluation*. Kluwer International Handbooks of Education, vol 9. Springer, Dordrecht, 245–265.
- Bui, S., Craig, S. and Imberman, S. (2014). Is Gifted Education a Bright Idea? Assessing the Impact of Gifted and Talented Programs on Achievement. *American Economic Journal: Economic Policy*, 6 (3), 30–62.
- Betts, G. (2004). Fostering autonomous learners through levels of differentiation. *Roeper Review*, 26, 4, 190–191.
- Callahan, C. M. (1986). Asking the right questions: The central issue in evaluating programs for the gifted and talented. *Gifted Child Quarterly*, 30(1), 38–42.
- Callahan, C. M. (1993). Development of the scale for the evaluation of gifted identification instruments SEGII). *Gifted Child Quarterly*, 37(3), 133–140.
- Callahan, C. M. (2004). Program evaluation in gifted education. In: S. M. Reis (Eds.) *Essential readings in gifted education* (pp.124–155). Thousand Oaks, CA: Corwin
- Callahan, C. M. (2006). Developing a Plan for Evaluating a Program in Gifted Education. Corwin Press, California
- Callahan, C. M. and Caldwell, M. S. (1986). Defensible evaluations of programs for the gifted. In C. J. Maker (Ed.), *Critical issues in gifted education* (pp 277–296). Rockville, MD: Aspen.
- Callahan, C. M., and Caldwell, M. S. (1995). *A practitioner's guide to evaluating programs for the gifted*. Washington, DC: National Association for Gifted Children.
- Callahan, C. M., Moon, T. R., Oh, S., Azano, A. P., and Hailey, E. P. (2014). What Works in Gifted Education: Documenting the Effects of an Integrated Curricular/Instructional Model for Gifted Students. *American Educational Research Journal*, 52(1), 137–167.
- Carter, K. R. and Hamilton, W. (1985). Formative evaluation of gifted programs: a process and model. *Gifted Child Quarterly*, 29, 1, 5–11.
- Chen, H. T. and Rossi, P. H. (1983). Evaluating with sense: The theory-driven approach. *Evaluation Review*, 7, 283–302.
- Christian, T. (2008). *Gifted education program delivery models: a statewide evaluation of gifted education in Missouri*. Dissertation. Missouri: University of Missouri.
- Colangelo, N., Kerr, B., Christensen, P., and Maxey, J. (2004). A Comparison of Gifted Underachievers and Gifted High Achievers. In S. M. Moon (Ed.), *Social/emotional issues, underachievement, and counseling of gifted and talented students* (pp. 119–132). Corwin Press.
- Cook, T. D. and Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Skokie, IL: Rand McNally.
- Cotabish, A. and Robinson, A. (2012). The effects of peer coaching on the evaluation knowl-edge, skills of gifted program administrators. *Gifted Child Quarterly*, 56, 160–170.
- Doina R. D. (1997). Evaluating Programs for Gifted Students: Meeting the Challenge. *Gifted Child Today Magazine*, 20, 38–40.
- Fetterman, D. (2003). Empowerment evaluation strikes a responsive cord. In: Donaldson, S. I. & Scriven M. (Eds.). *Evaluating social programs and problems: Visions for the new millennium* (pp. 63–76). Mahwah, NJ: Erlbaum.
- Freeman, J., Raffan, J. and Warwick, I. (2010). *Worldwide provision to develop gifts and talents*. Berkshire: CFBT Educational Trust.
- Gavin, M. K., Casa, T. M., Adelson, J. L., Carroll, S. R., and Sheffield, L. J. (2009). The Impact of Advanced Curriculum on the Achievement of Mathematically Promising Elementary Students. *Gifted Child Quarterly*, 53(3), 188–202.
- Gifted service program evaluation report: executive summary (2017). Arlington: Office of planning and evaluation.
- Glatthorn A. (1987). *Teacher Autonomy vs. Curricular Anarchy*. NASSP Bulletin.
- Guba, E. G. and Lincoln, Y. S. (1989). *Fourth Generation Evaluation*. Thousands Oaks, CA: Sage.
- Gubbins, E. J. and Renzulli, J. S. (1996). Evaluating gifted and talented programs: Diving into a quagmire, treading water, or executing the high dive . . . temporarily. In: G. C. Brannigan (Ed.), *The enlightened educator* (pp. 242–260). New York: McGraw-Hill.
- Gubbins, E. J., Housand, B., Oliver, M., Schader, R., and De Wet, C. (2007). *Unclogging the mathematics pipeline through access to algebraic understanding*. Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Han, K. (2007). The possibilities and limitations of gifted education in Korea: a look at the ISEP science- gifted education center. *Asia Pacific Education Review*, 8(3), 450–463.
- Hébert, T. P. (1993). Reflections at graduation: The long-term impact of elementary school experiences in creative productivity. *Roeper Review*, 16, 22–28.
- Hosseinkhanzadeh, A. A., Yeganeh, T., and Taher, M. (2013). Investigate attitudes of parents and teachers about educational placement of gifted students. *Procedia-Social and Behavioral Sciences*, 84, 631–636.

- Huebner, A.J. and S.C. Betts (1999). Examining Fourth Generation Evaluation. *Application to Positive Youth Development*, *Evaluation* 5(3), 340-58.
- Hunsaker, S. L. and Callahan, C. M. (1993). Evaluation of gifted programs: current practices. *Journal for the Education of the Gifted*, 16, 190–200.
- Joint Committee on Standards for Education Evaluation. The program evaluation standards: How to assess evaluations of educational programs. (1994). Thousand, Oaks, CA: Sage Publications.
- Jolly, J. and Matthews, M. (2012). A Critique of the Literature on Parenting Gifted Learners. *Journal for the Education of the Gifted*, 35, 259–290.
- Kahan, B. (2008). Excerpts from Review of Evaluation Frameworks. <http://idmbestpractices.ca/pdf/evaluation-frameworks-review.pdf>
- Kao, C. Y. (2012). The Educational Predicament Confronting Taiwan's Gifted Programs: An Evaluation of Current Practices and Future Challenges. *Roeper Review*, 34, 234–243.
- Kim, M. (2016). A Meta-Analysis of the Effects of Enrichment Programs on Gifted Students. *Gifted Child Quarterly*, 60 (2), 102–116.
- Kirkpatrick, D. (1994). *Evaluating Training Programs: the Four Levels*. San Francisco: Publishers Group.
- Ki-so Han, KS. (2007). The Possibilities and Limitations of Gifted Education in Korea: A Look at the ISEP Science- Gifted Education Center. *Asia Pacific Educ. Review*, 8, 450–463. <https://doi.org/10.1007/BF03026473>.
- Koshy, V. and Pinheiro-Torres, C. (2013). 'Are we being de-gifted, Miss?' *Primary school gifted and talented co-ordinators' responses to the Gifted and Talented Education Policy in England*. British Educational Research Journal.
- Kulieke, M. J. (1986). The role of evaluation in inservice and staff development for educators of the gifted. *Gifted Child Quarterly*, 30(3), 140–144.
- Landrum, M. S., Callahan, C. M., and Shaklee, B. D. (2001). *Aiming for excellence: Gifted program standards*. Waco, TX: Prufrock.
- Little, C. A., Feng, A. X., Van Tassel-Baska, J., Rogers, K. B., and Avery, L. D. (2007). A Study of Curriculum Effectiveness in Social Studies. *Gifted Child Quarterly*, 51(3), 272–284. <https://doi.org/10.1177/0016986207302722>
- Lubinski, D., Webb, R. M., Morelock, M. J., and Benbow, C. P. (2001). Top 1 in 10,000: A 10-year follow-up of the profoundly gifted. *Journal of Applied Psychology*, 86(4), 718–729. <https://doi.org/10.1037/0021-9010.86.4.718>
- Lubinski, D., Benbow, C. P., Webb, R. M., and Bleske-Rechek, A. (2006). Tracking exceptional human capital over two decades. *Psychological Science*, 17, 194–199. doi:10.1111/j.1467-9280.2006.01685
- Lundsteen, S. W. (1987). Qualitative Assessment of Gifted Education. *Gifted Child Quarterly*, 31(1), 25–29. <https://doi.org/10.1177/001698628703100105>
- Marland, S. P. (1972). *Education of the gifted and talented: Report to the Congress of the United States by the U.S. Commissioner of Education*. Washington, DC: U.S. Government Printing Office.
- MacBeath, J. and McGlynn, A. (2006). Samoevalvacija: Kaj je tu koristnega za šole? [Self-evaluation: What's in it for schools?]. Ljubljana: Državni izpitni center.
- McCoach, B. and Siegle, D. (2007). What predicts teachers attitudes toward the gifted? *Gifted Child Quaterly*, 51, 3, 246–255.
- Matthews, D. and Kitchen, J. (2007). School-within-a-school gifted programs. *Gifted Child Quaterly*, 51, 3, 256–271.
- Moon, T. R., Brighton, C. M., and Trinter, C. P. (2012). *A report on the evaluation of the Gifted Preogramming Options*. Community Consolidated School Distric 181. [http://www.boarddocs.com/il/hccsdil/Board.nsf/files/8QNUB76C0EF6/\\$file/D181%20Board%20Final%20Report_board%20docs.pdf](http://www.boarddocs.com/il/hccsdil/Board.nsf/files/8QNUB76C0EF6/$file/D181%20Board%20Final%20Report_board%20docs.pdf)
- Mönks, F. J. (1992). Development of gifted children: The issue of identification and programming. In: F. J. Mönks in W. A. M. Peters (Eds.), *Talent for the future. Proceedings of the Ninth World Conference on Gifted and Talented Children* (pp. 191–202). Assen, The Netherlands: Van Gorcum.
- NAGC Pre-K-Grade 12 – Gifted programning standards (2010). <http://www.nagc.org/ProgrammingStandards.aspx>
- Neumeister, K. S. and Burney, V. H. (2012). *Gifted program evaluation: a handbook for administrators and coordinators*. ZDA: Prufrock Press.
- Ozcan, D. and Kayadelen, K. (2015). Special Education Teachers and Their Opinions about the Education of Gifted Students. *Procedia - Social and Behavioral Sciences*. 190, 358–363.
- Park, G., Lubinski, D., and Benbow, C. P. (2007). Contrasting intellectual patterns predict creativity in the arts and sciences: tracking intellectually precocious youth over 25 years. *Psychological Science*, 18, 948–95.
- Patton, M. Q. (2008). *Utilization-focused evaluation* (3rd ed.). Thousand Oaks, CA: SAGE
- Polyzopoulou, K., Kokaridas, D., Patsiaouras, A., and Gari, A. (2014). Teachers' perceptions toward education of gifted children in Greek educational settings. *Journal of Physical Education and Sport*, 14(2), 211–221.
- Purcell, J. H., Burns, D. E., Tomlinson, C. A., Imbeau, M. B., and Martin, J. L. (2002). Bridging the Gap: A Tool and Technique to Analyze and Evaluate Gifted Education Curricular Units. *Gifted Child Quarterly*, 46(4), 306–321. <https://doi.org/10.1177/001698620204600407>
- Reid, N. (2004). Evaluation of programmes. In D. McAlpine & R. Moltzen, *Gifted and talented: New Zealand perspectives* (pp. 377–390). Palmerston North: Kanuka Grove Press.

- Reis, S. M., Hébert, T. P., Díaz, E. P., Maxfield, L. R., and Ratley, M. E. (1995). *Case studies of talented students who achieve and underachieve in an urban high school*. Storrs: University of Connecticut, National Research Center for the Gifted and Talented.
- Reis, S. M., and Renzulli, J. S. (2003). Research Related to the Schoolwide Enrichment Triad Model. *Gifted Education International*, 18(1), 15–39. <https://doi.org/10.1177/026142940301800104>
- Reis, S. M., McCoach, D. B., Coyne, M., Schreiber, F. J., Eckert, R. D., and Gubbins, E. J. (2007). Using planned enrichment strategies with direct instruction to improve reading fluency, comprehension, and attitude toward reading: An evidence-based study. *The Elementary School Journal*, 108, 3-24.
- Renzulli, J. S. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (2016). *Reflections on Gifted Education: Critical Works by Joseph S. Renzulli and Colleagues*. Waco TX: Prufrock Press.
- Renzulli, J. and Smith, L. (1979). Issues and procedures in evaluating programs. In Passow, A. (Ed.), *The gifted and talented: Their education and development. The seventy-eighth yearbook of the National Society for the Study of Education* (pp. 289–307). Chicago: University of Chicago Press.
- Riba, S., Pérez-Sánchez, L. F., and Villaverde, A. B. (2018). Programs and Practices for Identifying and Nurturing High Intellectual Abilities in Spain. *Gifted Child Today*, 41(2), 63–74. <https://doi.org/10.1177/1076217517750703>
- Robinson, A., Cotabish, A., O'Tuel, F., and Wood, B. (2005). *Developing a statewide evaluation initiative in gifted education*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Montreal, Quebec.
- Robinson, A., Cotabish, A., Wood, B., and Biggers, A. (2009). The Arkansas Evaluation Initiative in Gifted Education. In Joseph S. Renzulli, E. Jean Gubbins, Kristin S. McMillen, Rebecca D. Eckert, Catherine A. Little (Eds.), *Systems & Models for Developing Programs for the Gifted Talented* (pp. 413–423). Publisher: Prufrock Press Inc.
- Rogers, K. B. (1991). *The relationship of grouping practices to the education of the gifted and talented learner*. Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.
- Rogers, K. B. (2007). Lessons learned about educating the gifted and talented. A synthesis of the research on educational practice. *Gifted Child Quarterly*, 51, 4, 382–396.
- Scriven, M. (1991). *Evaluation thesaurus*. Newbury Park, CA: Sage Publications.
- Shadish, W. R., Cook, T. D. in Campbell, D. T. (2002). *Experimental and Quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin Company.
- Shewbridge, C., (2014). *OECD Reviews of Evaluation and Assessment in Education*: Northern Ireland, United Kingdom, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <https://doi.org/10.1787/9789264207707-en>.
- Silky, W. and Reading, J. (1992). REDSIL: A fourth generation evaluation model for gifted education programs. *Roeper Review*, 15, 2, 67–69.
- Stake, R. E. (2010). Program Evaluation Particularly Responsive Evaluation. *Journal of MultiDisciplinary Evaluation*, 7(15), 180–201. <https://doi.org/10.56645/jmde.v7i15.303>
- Sternberg, R. J. and Davidson, J. (2005). *Conceptions of giftedness*. New York: Cambridge University Press.
- Stufflebeam, D. L. (1973). *Evaluation as enlightenment for decision-making*. Worthington, OH: Charles A. Jones Publishing Company.
- Stufflebeam, D. L. and Coryn, C. L. S. (2014). *Evaluation Theory, Models and Applications*. San Francisco: Jossey-Bass.
- Stufflebeam, D. L., Madaus, G. F., and Scriven, M. (2000). *Evaluation models: View points on educational and human services evaluation*. Boston: Kluwer Nijhoff Publishing.
- Tomilson, C. A., Bland, L. and Moon, T. R. (1993). Evaluation utilization: A review of the literature with implication for gifted education. *Journal for the Education of the Gifted*, 16, 171–189.
- Tomilson, C. A., Callahan, C. M. (1994). Planning effective evaluations of programs for the gifted. *Roeper Review*, 17, 46–51.
- Tomilson, C. A., Bland, L., Moon, T. R., and Callahan, C. M. (1994). Case studies of evaluation utilization in gifted education. *Evaluation Practice*, 15, 153–168.
- Tyler, R. W. (1942). General statement on evaluation. *Journal of Education Research*, 35, 492–501.
- VanTassel-Baska, J. (2003). Content-based curriculum for high-ability learners: An introduction. In J. VanTassel-Baska & C. A. Little (Eds.), *Content-based curriculum for high-ability learners* (pp. 1-23). Waco, TX: Prufrock Press.
- VanTassel-Baska, J. (2004). Metaevaluation findings: A call for gifted program quality. In J. VanTassel-Baska & A.X. Feng (Eds.), *Designing and utilising evaluation for gifted program improvement* (227–256). Waco, TX: Prufrock Press.
- VanTassel-Baska, J. (2006). A content analysis of evaluation findings across 20 gifted programs: a clarion call for enhanced gifted program development. *Gifted child quarterly*, 50, 3, 199–215.
- VanTassel Baska, J. and Brown, E. F. (2007). Toward best practice: An analysis of the efficacy of curriculum models in gifted education. *Gifted Child Quarterly*, 51, 4, 342–358.
- VanTassel-Baska, J. and Feng A. X. (Eds.) (2004). *Designing and utilising evaluation for gifted program improvement*. Waco, TX: Prufrock Press.
- VanTassel-Baska, J., Willis, G. and Meyer, D. (1989). Evaluation of a Full-Time Self-Contained Class For Gifted Students. *Gifted Child Quarterly*, 33, 7–10.

- Westberg, K. L. (1999). What happens to young, creative producers? *NAGC: Creativity and Curriculum Divisions' Newsletter*, 3, 13–16.
- Wiggins, G. (1996). Anchoring assessment with exemplars: Why students and teachers need models. *Gifted Child Quarterly*, 40(2), 66–69.