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Learning Resources in Gifted Education

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This special issue is the first of two to be published in the *Journal for the Education of the Gifted* focusing on “Learning Resources in Gifted Education.” The current issue includes five original papers written by authors from four continents who present data from three continents.

The five articles are based on the same theory of learning resources, the educational and learning capital approach introduced by Ziegler and Baker (2013). The concept of *learning resources* that these authors use is broad. It is not limited to physical entities from the environment as, for example, the definition of resources listed in the Oxford Dictionaries suggests: “A stock or supply of money, materials, staff, and other assets that can be drawn on by a person or organization in order to function effectively” (Resource, n.d.). Rather, the term *learning resources* encompasses all the means that educators (e.g., parents, teachers, mentors) or gifted students themselves can use to assist their learning and development. Two types of learning resources are distinguished. The *exogenous* resources of gifted students comprise, among others, social resources (e.g., peers, coaches), material resources (e.g., texts, videos, software), and cultural resources (e.g., values, work ethic). The *endogenous* resources of gifted students encompass, among others, organismic resources (e.g., health, endurance), motivational resources (e.g., learning goal orientation, self-confidence), and personal learning resources (e.g., learning strategies, self-regulation skills).

The first article, “Exogenous and Endogenous Learning Resources in the Actiotope Model of Giftedness and Its Significance for Gifted Education,” by Ziegler, Chandler, Vialle, and Stoeger, elaborates on the theory of resource-orientated gifted development based on systems theory, in particular, the Actiotope Model of Giftedness (AMG; see Ziegler & Baker, 2013). The authors distinguish five types of exogenous learning resources and five types of endogenous learning resources that they term *educational capital* and *learning capital*, respectively. They present evidence from the research literature for each of the capitals. Twelve implications of a learning resource orientation for gifted education in relation to four fields are discussed: gifted education orientations, gifted identification, gifted education principles, and gifted learning resource management.

The second article is titled “Educational and Learning Capital of Israeli Students With High Achievement in Mathematics.” In this empirical study, Paz-Baruch administered the Raven’s Advanced Progressive Matrices and an achievement test in mathematics to 121 fifth-grade students. Three groups of students were formed according to the test results: students of high, regular, and low ability in mathematics. Learning resources were assessed with the Questionnaire of Educational and Learning Capital (QELC), and teachers completed the Teachers Checklist of

Educational and Learning Capital. In addition, students' school grades were collected. According to the author, the results confirm the important role of learning resources. Students skilled in mathematics reported higher learning capital than students with low mathematical performance, and the teachers reported significantly more educational and learning capital for their less skilled peers than for the students skilled in mathematics. However, future research should include studies in which the capitals are measured domain-specifically.

As mentioned previously, the concept of educational and learning capital is relatively new (Ziegler & Baker, 2013). A new approach includes the task of developing many new valid measurement instruments. Therefore, the work by Phillipson, Phillipson, and Francis is extremely important. In "Validation of the Family Educational and Learning Capitals Questionnaire: An Australian Perspective," the authors introduce the Family Educational and Learning Capitals Questionnaire (FELCQ), which draws on the QELC; however, unlike the QELC, the FELCQ addresses parents' assessments of students' capitals. The authors describe the validation of the 53-item FELCQ. They Rasch analyzed the responses of 1,917 Australian parents and utilized the Rasch person estimates in a confirmatory factor analysis. The results confirmed the underlying theoretical factor structure of the Actiope Model, including an extension of the model by parental aspirations as an educational capital.

Ziegler and Vialle (2017) have argued that qualitative measures are more in line with the theoretical assumptions of the AMG. However, all measurement instruments developed thus far are quantitative in nature. In her article, "Supporting Giftedness in Families: A Resources Perspective," Vialle addresses learning resources of families using a semistructured interview, thus adding a new type of measurement of educational and learning capitals to the literature. The interviews were conducted with 32 parents and caregivers. The two main findings were that parents and caregivers draw on all 10 of the educational and learning capital specified resources in creating favorable environments to support their children's learning and development. Interestingly, Vialle also checked to see if any responses had been given that correspond to the theoretical framework of the educational and learning capital approach, which would have suggested the need for its modification. However, no additional themes emerged from the responses by the parents and caregivers.

In "The Learning and Educational Capital of Male and Female Students in STEM Magnet Schools and in Extracurricular STEM Programs: A Study in High-Achiever-Track Secondary Schools in Germany," Stoeger, Greindl, Kuhlmann, and Balestrini used the QELC to examine whether and to which extent the learning and educational capital of male and female students ($N = 801$) differed. They were able to identify both school and gender differences for some types of learning and educational capital. The authors also collected data by investigating the relationship between students' learning and educational capital and registration for a 1-year extracurricular program in STEM. In a regression analysis, learning and educational capital predicted the registration.

The second special issue focusing on "Learning Resources in Gifted Education" will be guest edited by Heidrun Stoeger from the University of Regensburg, Germany, and Wilma Vialle from the University of Wollongong, Australia. The emphasis will be

on research studies testing the role of learning resources for various important topics in gifted education, such as underachievement and verbal giftedness.

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