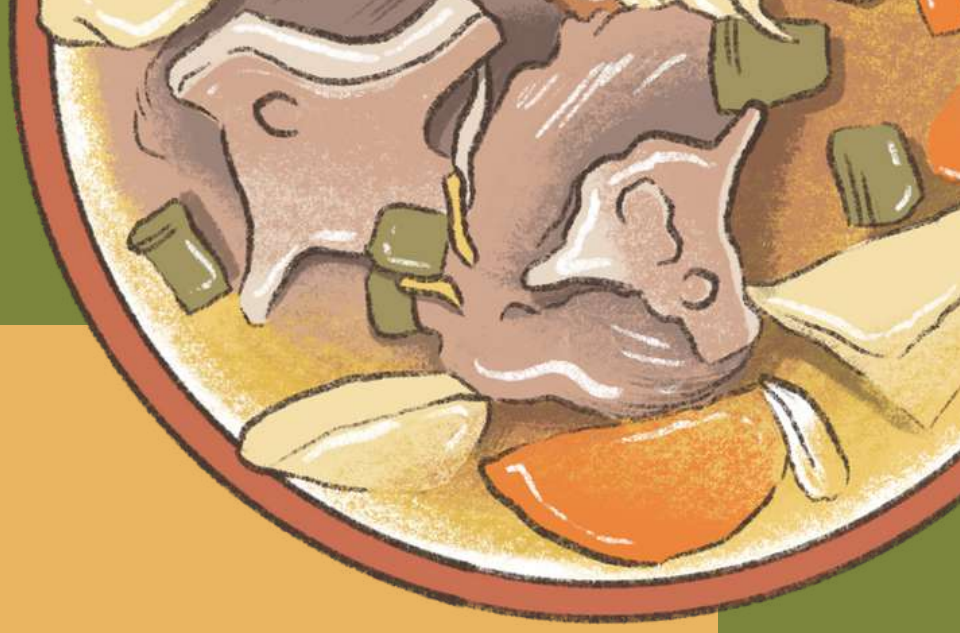
Ivan Alagić



WHO ARE FUTURE CHEFS?

Culinary talent identification

International Edition

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CONTENTS

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01

VOILA!

INTRODUCTION

Idea and purpose
Problem, methodology and results

IDEA AND PURPOSE

This booklet was created as a result of my continuous work in vocational catering and hospitality high school, and research in fields of general giftedness and specific, culinary giftedness and talent. Vocational schools, in addition to their standard programs, educate talented students in advanced and extracurricular activities. The main idea for this booklet emerged from my work and involvement with the selection processes for advanced programs in different schools. My intention is to create a theoretical framework for identification of culinary talent as well as tool that could help teachers improve identification procedures in culinary programs by providing recent theoretical perspectives on culinary talent and by promoting scientifically valid practical implications in everyday educational practice in search for future chefs.

“Culinary talent identification” contains the theoretical background on culinary talent, explains the importance of standardized identification procedure, presents standard elements of the identification process and offers practical guidelines and suggestions for culinary talent assessment. Also, it introduces practitioners to the range of diversity of talented students and prepares them for a variety of educational interventions after the process of identification. The following section describes methodological aspects of this booklet, as well as the final result of this project.

PROBLEM, METHODOLOGY AND RESULTS

The primary challenge this booklet attempts to solve is how to improve the talent identification process in vocational culinary programs. This attempt includes introduction of common or more standard elements of identification that prevail in recent literature and educational practice. Furthermore, it contains practical implications in everyday practice in culinary education. More specifically, the essential part for practitioners contains practical guidelines and suggestions for assessment of specific aspects of culinary talent in students.

Methodology used for creating these segments of the booklet includes literature research and building talent assessment guidelines on a theoretical basis. Evolving Complexity Theory (ECT) (Dai, 2017) represents the theoretical background for development of two crucial parts of the identification approach: the description of culinary talent and practical guidelines on how to recognize and assess specific aspects of culinary talent. Description of culinary talent is developed by creating an analogy with definition of general talent incorporated in Dai’s (2017) ECT model and by including existing elements of the culinary domain. The same model was used to develop the before mentioned talent assessment guidelines for practitioners. ECT explains talent development as adaptation of personal characteristics to specific environments (Dai, 2017).

This evolving process happens in four domains: foundational, personal, professional and cultural. Specific aspects and descriptions of each of these four domains represent the basis for development of culinary talent assessment guidelines for practitioners. Dai's ECT model of talent development is described in detail in a separate chapter.

Elements of the identification process represent practices that prevail in gifted and talented education. This will be described in a separate chapter as well. Alongside the already mentioned parts, the booklet contains chapters on different types of gifted and talented students and, in conclusion, different orientation options needed after the identification. The purpose of these chapters is to inform and inspire practitioners, to raise awareness of diversity within the gifted and talented population, and accordingly a need for educational interventions designed based on individual characteristics of each student.

"Who are future chefs?", as a final result, represents a scientific contribution in the educational practice of culinary programs. It is a practical resource which can be used as a guideline by culinary teachers in designing objective and standardized identification procedures in their everyday work.

02

INGREDIENTS

WHAT MAKES CULINARY TALENT?

Giftedness and talent
Evolving Complxity Theory
Culinary talent

GIFTEDNESS AND TALENT

Giftedness and talent are terms that are usually used to describe traits and competencies of students with high abilities and high potential (Ministarstvo znanosti i obrazovanja, 2022; American Psychological Association, 2015; Feldhusen, 2005; Gagné, 2013). Stoeger et al. (2018) problematize lack of uniform distinction between these two terms arguing on presence of a variety of definitions in literature. For the purposes of this booklet terms giftedness and talent will be used as synonyms.
Similar examples can be found in literature (e.g. Csikszentmihalyi & Robinson, 1986; Davidson; 1986; Renzulli, 1986; Sternberg, 1986; Maarland, 1972). Giftedness is a dynamic multidimensional phenomenon that consists of intellectual and non-intellectual facets (Renzulli, 2005; Renzulli & Reis 2018; Gardner, 1999; Sternberg, 1996; Sternberg & Davidson, 2005; Heller, 1989, 2004) defined by endogenous and exogenous factors (Dai, 2017; Dai & Renzulli, 2008; Heller et al., 2005).

Gagné's Expanded Model of Talent Development (EMDT) (2013) is derived from an earlier conception of the Differential Model of Giftedness and Talent (Gagné, 2004, 2009). Gagné proposes a distinction between gifts and talents in the EMDT and elaborates on processes and influences of talent development. The model indicates strong biological and neural underpinnings of natural abilities or gifts (Luders et al,, 2009). Through the interplay of environmental and intrapersonal catalysts, innate potentials are progressing through maturation and processes of development to gifts. Gagné identified two types of natural abilities: mental (which include subtypes of intellectual, creative, social and perceptive sub-abilities) and physical abilities (with muscular and motor sub-abilities). Again, through interaction between environmental and intrapersonal catalysts, gifts are progressing to possible talent. According to Gagné (2013), talents, as outstanding mastery of systematically developed competencies, can be developed in the following fields: academic, technical, science and technology, arts, social service, administrative, sales, business operations, games and sports, and athletics. When the role of school is considered in students' personal, social and academic development, perhaps the most relevant segments of EMTD for schools and educators are the environmental and intrapersonal catalysts that foster development from gifts to talents. Other scholars and models debated this role of school and differences between giftedness in academic and non-academic fields. The Three-Ring Conception of Giftedness (Renzulli, 1978, 2005; Renzulli & Reis, 2018) has had a large influence on research and practice in the field of giftedness and talent since the 1970s. The conception differentiates academic and creative-productive giftedness (Kim et al., 2013; Simonton, 2000; Zenasni et al., 2016). High achievement, according to this viewpoint, emerges as a result of interaction between three factors: high cognitive abilities, task-commitment and creativity (Renzulli, 1978, 2005; Renzulli & Reis, 2018). The distinction between academic and creative-productive giftedness is applicable when vocational education is considered such as culinary programs in high schools. The focus is on developing practical competencies and talents for work in non-academic surroundings, mainly in catering and hospitality domains, and culinary industry. In today's perspective talented cooks or eminent chefs have a strong social recognition (Aron et al., 2019; Ottenbacher & Harrington, 2007; Muller et al., 2009) and their innovations are often socially perceived as contributions to contemporary culture and social trends.

Renzulli and Reis (2018) point out that both academic and creative-productive giftedness are important, but they place stronger emphasis on the creative-productive giftedness because of the impact that creative and productive individuals have on their social environment (Renzulli & Reis, 2018). The significance of that influence has been recognized widely by the theorists and practitioners who experiment and develop culinary programs for vocational schools (Hu et al., 2016; Mac Con Iomaire, 2008; Müller et al., 2009). Having that in mind, it should be expected that the selection process of talented students is more reliable and more diverse, therefore not focused on IQ tests or academic achievements (Renzulli & Gaesser, 2015; Matthews & Peters, 2018; Horn, 2015; Harradine et al., 2014; Worrel & Erwin, 2011).

EVOLVING COMPLEXITY THEORY

As mentioned in the introduction, the Evolving Complexity Theory (ECT) is chosen to be the central part of the theoretical background of culinary talent identification for the purposes of this booklet. ECT is a theoretical model of talent development proposed by Dai (2017). There are a couple of reasons why this model was chosen to be the scientific basis for identification in this booklet. Actual state of the field of culinary and related industries includes most dynamic cultural, historical, social and economical processes (Aron et al., 2019; Gergaud et al., 2012). ECT takes into consideration the significance of an ever-changing context in which a person operates. Becoming a cook, developing expertise, building reputation as a chef and functioning in demanding environments requires more than innate static traits. ECT states that a fundamental tenet of human development implies dynamic development of person's competencies (Dai, 2005). Furthermore, ECT uses constructs of characteristic and maximal adaptation to explain how domain, person, development and culture jointly shape a particular line of talent development (Dai, 2017). The key process of adaptation begins at characteristic adaptation, across identity formation until possible maximal adaptation which results in high-caliber performance and creative production. Essentially, ECT defines talent as a result of development and personal adaptation to environmental demands and opportunities, which is in line with organizational, procedural and curricular aspects of vocational education and stepping into the culinary labor market. Other reasons for adopting ECT model as basis for identification are elaborately posited crucial dimensions of talent development: previously mentioned *domain*, *person*, *development* and *culture*. *Domain* represents continuum of human competencies, with universal on one extreme to unique on the other (Feldman 2003; Feldman, 2009 in Dai, 2017). ECT differentiates four subdimensions or subdomains: foundational, personal, professional and cultural. *Person* is in the center of the ECT model and it represents an open, dynamic and adaptive individual who interacts with the environment and transforms his or her domain experience into knowledge or creative product (Dai, 2010). Dimension of development integrates biological and socio-cultural aspects of development. Biological foundations are ensuring adaptive aspects of human development that result in unique niche potential specific for each person (Feldman, 2003; Wachs, 2000; Lubinski, 2010. in Dai, 2017). On the other hand, cultural influence results in cultivating certain traits more than others (Dai, 2017). ECT explains these processes with concepts of characteristic adaptation and maximal adaptation. Characteristic adaptation represents spontaneous self-organization of inner resources as a response to environmental opportunities and challenges resulting in a unique developmental trajectory or pathway of talent development (Dai, 2017; Subotnik, 2009). Maximal adaptation includes intentional, purposeful acts to perfect one's trade and surpass oneself once a course of action is set (Dai, 2017). Culture is defined as all cultural experiences and tools that allow children and adolescents to make meaning of the world and function as members of society (Dai, 2017). In the context of education and talent development culture provides rich experiences and support for students to develop expressive, intellectual, social, technical, and psychomotor competencies through formal and informal education (Dai, 2017).

Talent development pathways are unique and end up with a specific niche of each individual, according to ECT, but this model predicts four stages of talent development: foundational, transitional, crystalized and advanced stage. Advanced stage is the state which gifted and talented education is aiming for. Recent literature considers expertise as the crown of vocational education (Ackerman, 2018). If we consider expertise as a continuum, the critical period for reaching a higher level of expertise is during adolescence and early-to-middle adulthood (Ackerman, 2018, 2014). In vocational schools, such as catering and hospitality schools, students start to develop their expertise by taking the first steps and graduating as cooks. To reach a more eminent level of expertise, to become a chef, it takes more investment and further development of basic culinary competencies, e.g. deliberate practice (Ericsson et al., 1993) or apprenticeship (Aron et al., 2019). In order to enable this process, students' potential should be recognized early enough and optimally supported. Or, according to Dai (2017) to place a higher demand on students' competencies.

CULINARY TALENT

Collecting ingredients, food and meal preparation have been basic human activities for thousands of years. Unlike some other domains like arts and sciences, culinary arts have not been a subject of scientific examination that would look closer at psychosocial processes behind sophisticated culinary skills. There is a lack of broader research and theoretical concepts in culinary giftedness and talent (Sowden, et al., 2016). Nevertheless, research is present, often in domains not directly related to education or psychology of giftedness and talent, such as economics, management and entrepreneurship or sociology (Aubke, 2013; Gergaud et al., 2012; Ottenbacher & Harrington, 2007). In recent years, literature shows some relevant attempts to describe this phenomenon. Aron et al. (2019) explored historical and societal factors determining the actual state of culinary talent. Same authors observed indicators of an early culinary talent development in culinary schools in France (Aron et al., 2019). Their results showed that a set of basic skills (dexterity in basic culinary operations, coordination of culinary operations, precision, and concentration) and soft skills (learning ability, quick understanding, reactivity to unexpected events, efficiency in problem solving, sensitivity to professional context, aesthetic sensitivity, special sensory perception skills, curiosity, interests in culinary products and their transformation and knowledge of culinary domain) that could be predictors of the future culinary eminence. Kaufman et al. (2016) applied theoretical concepts of creativity to the culinary domain, from the perspectives of dichotomy of functional and aesthetic creativity (Cropley et al., 2008), The 4C Theory of creativity (Kaufman & Beghetto, 2009) and Propulsion model of creative contributions (Sternberg, 1999; Sternberg et al., 2001). Authors showed in what ways culinary creativity is essential in reaching eminence in culinary and related industries. Also they demonstrated in what magnitude can creative products influence the domain.

ECT defines talent as a high-caliber performance and creative production that is a result of highly developed personal characteristics adapted to high challenges and opportunities of social environment (Dai, 2017). To describe culinary talent as a specific type of talent, for the purposes of this booklet, An analogy with ECT was drawn between definition of general talent and findings by Aron et al. (2019). By combining these two perspectives culinary talent can be described as high-caliber performance and creative production as a result of developed personal characteristics maximally adapted to a highly challenging culinary domain and social environment of the culinary industry. More simply, a talented cook is a highly able person who succeeded in adapting their competencies to a highly demanding work environment in the cooking profession. As an analogy, this explanation could not be considered as a definition of culinary talent due to the absence of scientific validation. Nevertheless, for the purposes of the identification approach presented in this booklet, it can be used as a practical reflection of relevant theoretical concepts. ECT model puts an emphasis on developmental processes in achieving high performance competencies (Dai, 2017). Relevant research in culinary field is in line with this notion and it shows that development in sense of education and training plays a major role in reaching high levels of performance in culinary and related industries (Aron et al., 2019; Gergaud et al., 2012; Horng & Lee, 2009; Hu et al., 2016; Mac Con Iomaire, 2008; Müller et al., 2009).

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IDENTIFICATION

IDENTIFICATION

Identification of potentially gifted and talented students is an important part of the education process (Ministarstvo znanosti i obrazovanja, 2022; Cao et al., 2017; Pfeiffer, 2015; Jung et al. 2022). Every time teachers seek candidates for advanced or extracurricular programs, they perform a certain type of identification. The main goal of identification is the selection of students who have abilities to learn or perform on a higher level than average (MZO, 2022; Pfeiffer, 2012; Renzulli & Gaesser, 2015). In short, educational professionals are looking for students who have the potential to develop talents or higher-level competencies in a certain domain. In order to perform a successful selection with valid results, the identification process should have a certain degree of standardization (e.g. Johnsen & VanTassel-Baska, 2022; Pfeiffer, 2015; Johnsen, 2017; Robinson, 2007). There are different approaches in identification that combine quantitative and qualitative assessments and tools (Lakin et al,, 2022; Little et al., 2022; Renzulli & Gaesser, 2015). The aforementioned paradigm shifts in understanding of giftedness and talent, from unidimensional to multidimensional concepts, had repercussions on identification approaches and concepts. Cao et al. (2017) found that the dominant trends in assessment processes are, among others, multiple criteria identification and greater attention to process-oriented interactive assessment between 2005 and 2016. Usually there are common elements of selection that prevail in education, such as observation, setting the criteria, assessment, monitoring and career orientation (e.g. Johnsen & VanTassel-Baska, 2022; Pfeiffer, 2015; Robinson, 2007). Cao et al., (2017) in their meta-analysis of literature in giftedness assessment found following approaches to be prevailing: ability tests, achievement tests, computer adaptive tests, rating scales, performance-based assessment, dynamic assessment, response to intervention, growth modeling and program evaluation. Standardization in identification procedures is needed to reduce errors that could occur as a result of unreliability of subjective assessment or less structured procedures. Some research shows that even the strictest and most psychometrically-based approaches are not entirely reliable in identifying potentially gifted students (e.g. McBee et al., 2012). It is important to emphasize that there is no universal or ideal identification process. Approaches, strategies and techniques can vary depending on different factors: domain of knowledge or skills, educational programs, age and grade, purpose etc. Nevertheless, it is highly recommended for practitioners who create selection procedures to rely on elements that are reliable and previously tested by scholars and other practitioners in order to achieve a certain degree of standardization and objectivity. Most common elements that are already standard in different identification approaches will be described in more detail in Chapter 5.

DIFFERENT CHEFS DIFFERENT DISHES

DIVERSITY OF GIFTED AND TALENTED STUDENTS

04

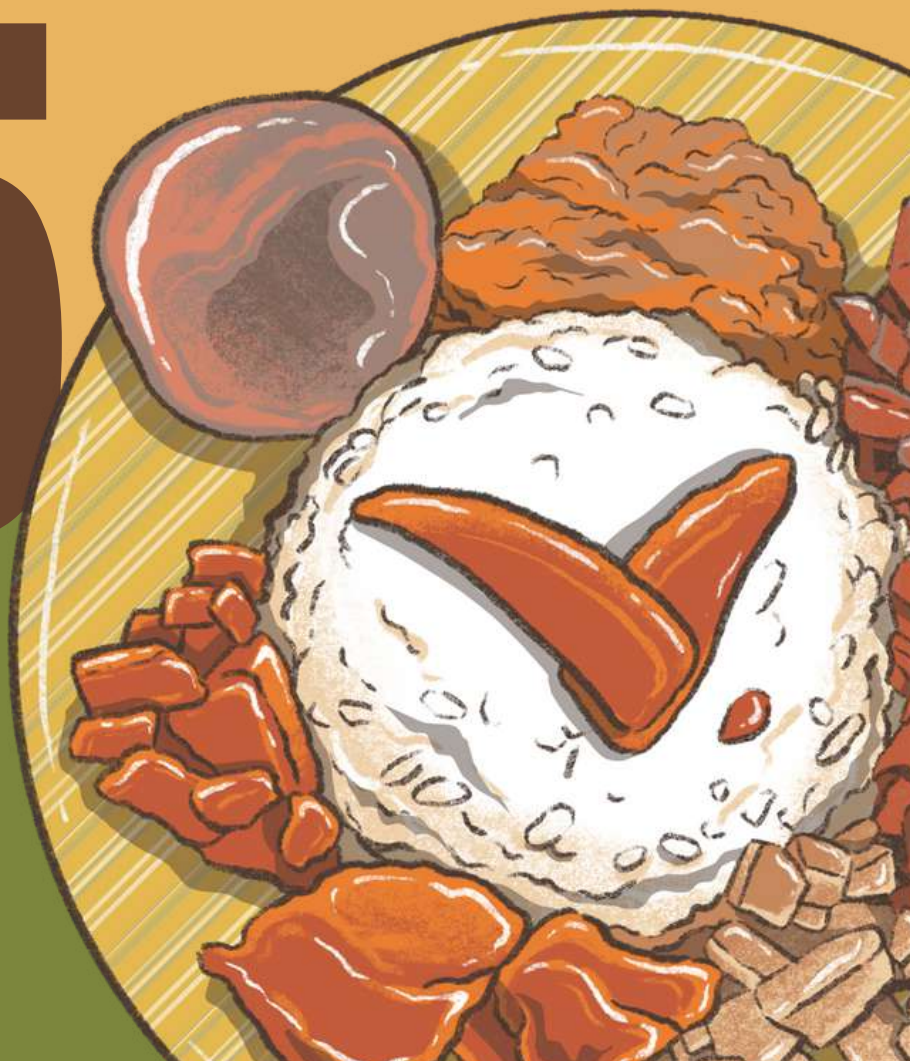
DIVERSITY OF GIFTED AND TALENTED STUDENTS

Students with high potential and talented students are a fairly heterogeneous population. Because of their specific psychosocial development, educational needs and specific domain pathways in talent development, these students often do not all fit in the same box (Subotnik et al., 2011; Cross, 2009). What contributes to diversity in this population are different cognitive profiles, learning preferences, personalities, interests but, at the same time, learning disabilities, attention deficits and asynchronous development (Neihart, Pfeiffer & Cross, 2015; Clankenbeard, 2012; Reis et al., 1997). Some members of this population experience periodic or permanent academic underachievement (Landis & Reschly, 2013; Rubenstein et al., 2012; Reis & McCoach, 2000; Colangelo et al., 1993). These research findings suggest that different patterns of giftedness exist and change over time (Renzulli & Reis, 2018). This means that being highly able or labeled as gifted or talented is not a guarantee that the student will achieve academic or professional success. Also, students who get identified as talented and succeed in becoming an eminent chef, can have quite different achievements. Therefore, practitioners should keep in mind that the identification process could result in finding quite different talented students. Over the recent decades, scholars investigated this diversity within the gifted and talented population. Research showed different results: previously mentioned Renzulli (2005; Renzulli & Reis, 2018) differentiates between schoolhouse gifted and creatively-productive students, Cho et al. (2008) established four types of gifted students (the full-bloomers, the good-achievers, the fade-away and the late-bloomers), Castejón et al. (2016) identified four clusters of gifted students (gifted achievers, cognitive gifted, creative gifted and high achievement and cognitive gifted). Betts and Neihart (1988, 2010) gained popularity among practitioners across the years. This typology differentiates between six types of gifted students: the successful, the creative, the underground, at risk, twice exceptional and the autonomous learner. Being aware of differences between gifted and talented students is necessary especially when educators design advanced curricula. Advanced activities should be designed according to the personal and educational needs of each student or group of students. Nevertheless, it is important to emphasize that proposed typologies should not be considered strictly or as a diagnostic tool, but more as a guideline. In practice, talented students rarely have characteristics of one category, type or profile. More often they have characteristics of more categories at the same time.

MISE EN PLACE

ELEMENTS OF THE IDENTIFICATION PROCESS

05



ELEMENTS OF THE IDENTIFICATION PROCESS

Identification of talented students may vary in different situations and occasions in its format, timeframe, criteria, tools, educational interventions, etc. (Pfeiffer, 2015; Lakin, 2018). There is no universal procedure that could fit all educational surroundings and purposes into one (VanTassel-Baska & Johnsen, 2022; Pfeiffer, 2015). However, some elements are common in the majority of practices and are recommended in creating standardized procedures for specific purposes or schools. Assessment plays an important role, not just in case of identification, but it also allows an inference on effectiveness of school or teachers' approaches and interventions (Schafer et al., 2012).

Previous experiences show that setting multiple and alternative measures prevents misrepresentation (Cao et al., 2017; McBee et al., 2014; Matthews & Peters, 2018; Robinson et al., 2007). Also, first steps in identification should be taken early enough so learning outcomes in advanced programs could be reached (Robinson et al., 2007).

The following infographic (Figure 1) shows key elements of the identification of talented students. Described actions, procedures and resources prevail in educational practice and are broadly present in recent literature (MZO, 2022; Ryser, 2022; Pfeiffer, 2015; Robinson et al., 2007).

PURPOSE

Define the purpose and reasons why identification of talented students is needed.
What do you need from chefs that we can look for in our students?

TIMING

Decide when identification activities will be performed.
Define the time period if your observation of students' performance will be longitudinal.
Schedule frequency of assessments and check-points

MEASURES

Decide what measures will be used for the identification.

GRADES
INTELLIGENCE TESTING
PERFORMANCE ASSESSMENT
PRODUCTS ASSESSMENT

WHAT TO FOCUS ON?

Decide what characteristics relevant aspects of culinary talent will be taken in account and that will be observed during the identification process
FOUNDATIONAL DOMAIN
PERSONAL DOMAIN
PROFESSIONAL DOMAIN
CULTURAL DOMAIN

CRITERIA

Define cut-offs that would categorize students as candidates for advanced programs

TOOLS & RESOURCES

Create protocols and rubrics that will be used for monitoring the identification process

INTERVIEW

Periodically have an interview with selected students to explore their personal needs, intrinsic and extrinsic motivation,interests and plans

06 KITCHEN SCALE

ASSESSING SPECIFIC ASPECTS OF CULINARY TALENT

ASSESSING SPECIFIC ASPECTS OF CULINARY TALENT

In Chapter 2 talent is described as a human trait developed through the process of evolving complexity of a person's competencies. It is a process of adaptation of personal traits and competencies to specific environments. Dai (2017) states that this evolving process takes place in four domains: foundational, personal, professional and cultural. Students with high potential have certain competencies and traits in all these domains that could be assessed and which could predict later culinary talent development and high achievement in the culinary industry. In the process of identification of talented students, the basic task is to capture, recognize specific traits and competencies that represent indicators of high potential.

The importance of knowing the nature of these competencies lies in the fact that they represent a foundation for more specialized training and can become one’s career endeavor and life passion (Gagné, 2013; Coleman & Cross, 2005). Figure 3 depicts domains of talent development with respectful subdomains according to Dai’s ECT model (Dai, 2017).

Like any other talent, culinary talent has general characteristics similar to other domains and certain specific characteristics and developmental trajectory (Aron et al,. 2019; Gergaud et al., 2012; Subotnik, 2009). In the identification process, teachers could use previously described foundational domains for assessment of specific aspects of culinary talent. More precisely, elementary level competencies and behaviors in these four domains can be evaluated as indicators of high potential. Using theoretical models as basis for identification is well documented in literature and educational practice (for example: Renzulli, 2023; Peters et al., 2022; Assouline & Lupkowski-Shoplik, 2012; Sternberg; 2010; Heller & Schofield, 2008; Fell, 2001). The following section (Figure 4) provides guidelines - suggestions and ideas for implementation of the ECT model in the identification process in the culinary area. In order to create ideas for the identification of specific aspects of culinary talent, Elements of ECT model were combined (Dai, 2017) with guidelines and standards included in an official professional curriculum for obtainment of cook qualification in dual model of education published by Ministry of Science and Education of Republic of Croatia (MZO, 2020). Figure 3 shows examples or ideas on how practitioners could assess culinary talent in their classes. It is worth mentioning that these ideas are not definite criteria for assessment and they should be considered as guidelines in the identification process.

FOUNDATIONAL DOMAINS

EXPRESSIVE

WHAT TO FOCUS ON?

In what ways does a student use their imagination and creativity to express their ideas in the kitchen or classroom? Are these ideas original and relevant? Are these ideas of higher quality than the ideas in the majority of students of either their age or educational level?

TECHNICAL

WHAT TO focus on?

Can a student invent or make modifications to existing cooking tools or inventory to improve their performance? Are these improvements and interventions of higher quality than the ideas of the majority of students of either their age or educational level?

INTELLECTUAL

WHAT TO FOCUS ON?

Can a student reason, understand, explain or theorize on specific topics or problems concerning any aspect of meal preparation? In what ways do these abilities and insights dominate above typical abilities and skills in students of the same age or educational level?

SOCIAL

WHAT TO FOCUS ON?

Does a student use effective communication, negotiation, collaboration and leadership to achieve practical purposes? In what way are student's social skills more developed than skills in students of the same age in the same educational level?

PSYCHOMOTOR

WHAT TO FOCUS ON?

Does a student execute and coordinate movements to accomplish complex physical tasks in practice classes? Are these skills more developed than skills in students of the same age or the same educational level?

PERSONAL DOMAINS

KNOWLEDGE

WHAT TO FOCUS ON?

Does a student have high level of academic knowledge from the culinary domain and other relevant domains? Is a student's knowledge more developed than knowledge in students of the same age or the same educational level?

SKILLS

WHAT TO FOCUS ON?

Does a student have high level of academic knowledge from the culinary domain and other relevant domains? Is a student's knowledge more developed than knowledge in students of the same age or the same educational level?

DISPOSITIONS

WHAT TO FOCUS ON?

Does a student have sufficient dispositions for tasks included in preparing meals? Are these competencies more developed than in students of the same age or the same educational level?

VALUES

WHAT TO FOCUS ON?

Does a student have values that enable him to thrive and accomplish achievements in school and practice? Are those values more mature than values in majority of students of the same age or the same educational level?

PROFESSIONAL DOMAINS

PERFORMANCE

WHAT TO FOCUS ON?

Is the quality of a student's performance in the kitchen and in classroom above average performance of students of the same gae or the same educational level?

PRODUCTION

WHAT TO FOCUS ON?

Is the quality of a student's ideas and products on a higher quality level than ideas in students of the same age or the same educational level?

CULTURAL DOMAINS

INTERESTS

WHAT TO FOCUS ON?

Does the student show interests toward the culinary heritage of different cultures? Are these interests more mature than interests in students of the same age or the same educational level?

ACHIEVEMENTS

WHAT TO FOCUS ON?

Has the student accomplished achievements that are recognized by peers, school, culinary school community or professionals? How frequent and significant are student's achievements?

Figure 3.
Examples of assessment of specific aspects of culinary talent based on ECT model (Dai, 2017) combined with cook profession standards (MZO, 2020)
(Pages 22, 23 and 24)

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Ahievements

A POINT
CONCLUSION

Conclusion, limitations and future work
What after identificatio?

07

CONCLUSION

The purpose of this booklet is to improve the process of identification of talented students in culinary schools. Its goal is to introduce the field of talented education and scientifically valid concepts of talent identification to culinary teachers. A theoretical framework was created where culinary talent is described and its components are analyzed based on the ECT model of talent development (Dai, 2017). The idea of the identification process places a strong focus on multiple assessment criteria and, by doing so, perhaps sheds a different light on understanding the culinary talent. “Culinary talent identification” aims to serve culinary teachers as a source of information and provide guidelines for talented student identification.

Limitations of presented identification conception imply absence of empirical evidence for the proposed guidelines. Future research on this topic should include scientific validation of criteria based on domains from the ECT model. In addition, future research should include in its analysis other assessment approaches such as ability tests, achievement tests, computer adaptive tests, rating scales, performance-based assessment, dynamic assessment, response to intervention, growth modeling and program evaluation (as suggested by Cao et al., 2017) and possibly develop systematic identification conceptions for culinary programs. Since the identification is not the end of the gifted and talented educational process, the final section of this booklet is dedicated to primary actions and interventions after identification.

WHAT AFTER IDENTIFICATION?

The main goal of the identification is the recognition of students with high potential and examination of their specific competencies and characteristics (MZO, 2022; Johnsen, 2017). It is important to emphasize that identification is not a self-purposed act but it serves as a crucial information source in the educational continuum. More specifically, identification should serve as a basis for students’ orientation in advanced programs. Even before performing identification, schools usually already establish advanced programs and activities, such as mentoring and preparation for students’ competitions or acceleration possibilities. Some other advanced programs need adaptation and adjustment based on students’ competencies and educational needs, such as grouping and enrichment, or approaches that demand maximum personalization of curriculum, for example, in differentiated curriculum (Kaplan, 2019, Rogers, 2019 in Wallace et al., 2019).

In any of the discussed cases, it is important to use information collected during identification to suggest suitable advanced programs optimal for students' needs and affinities and to also develop adequate professional development plans (Imbeau & Beasley, 2017). Additionally this type of information can be collected after the start of the advanced program through a continuous provision-based identification process (Crepeau-Hobson & Bianco, 2013; Bianco, 2010; Coleman & Hughes, 2009). Perhaps the best way to learn about students' specific characteristics, needs and motivation is to conduct a detailed interview or questionnaire (structured or semi-structured) where the student could express their needs and reflect on their talent development. In-program and career counseling often are crucial points in long-term expertise and career development (Wood et al., 2018; Jung, 2014; Robinson et al., 2007). According to previous experience, identification should include in-school orientation between possible advanced programs and intervention and, as well, at the end of high school education career counseling (Greene, 2006).

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