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## **The Best of Me: a Benchmarking Study of Job Potential in a sample of Italian students**

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### **ABSTRACT**

The present study illustrates a path of assessment for the analysis of the job potential realized with Italian students in their final years of high schools. Aims of the intervention were awareness development of students value in relation to certain personal characteristics and attitudes that make each one being unique in its distinctive value, both in life and in organization; identify for each subject one or more business functions in which he could experience the success of the role. The evaluation was carried out through the administration of a battery of tests for the analysis of attitudes, a questionnaire for self assessment of skills, and deep interviews. For every student who took part in the assessment has been processed and returned a personal profile articulated into individual competence, family of competences, area of expertise, definition of specific gravity of individual attitudes. Through the intervention students developed a good awareness of their own personal skills that has them usefully oriented in the subsequent choice of academic path and job application.

**Keywords:** job potential, career guidance, vocational psychology

### **1. Introduction**

The evolution of the social and economic context within which the person builds its own self-guidance now requires a greater enhancement of personal skills and a working knowledge of the experiential context that constitutes the reference scenario for the construction of a personal project. The prospect of a professional school choice that will be able to outline a linear development path for life is considered outdated, while is increasingly value the ability to orient the person to prepare a draft opinion that consolidates progressively through different paths and that is able to redefine itself in a satisfactory manner in coping with specific experiences of transition. The

orientation is understood as an individual right, as a principle organizer of the planning of a person capable of interacting actively with their social context and as a collective good, as a means of promoting educational success and economic development of the country. Even in a perspective of orientation that does not end with the choice of school and the transition of young people to the world of work, the centrality of the training phase is a strategic node. In particular, educational interventions tend to favor: a) the maturation of a method (a style, a culture, a set of attitudes, etc.) centered on the approach of self-orientation; b) development of guidance skills, not immediately aimed at managing concrete tasks of guidance, but to acquire a functional capacity of activation on critical problems, channeling energies respect to the targets, accountability for the commitments, and so on. The real problem then arises in education in the sense that to guide young people to choices must set up of training within schools or vocational training that directly or indirectly promote the development of a planning based on a realistic understanding of one's self, on the discovery of meanings and values that give meaning to their existence and knowledge of the opportunities of work in the context of their own lives. Making choices, make decisions has become more problematic than yesterday for the new generations who are faced with a multiplicity of options and opportunities for achievement never known from previous generations; brought together from the task of *having to choose*, young people have so much difficulty in orienting the choices and in deciding accordingly.

## **2. Aims of the benchmarking study**

The path of an assessment for the analysis of potential is an intervention specifically designed to achieve a "discovery" of the job potential of students in the last years of high school. The general aim of the course is to identify the particular characteristics of each student that should be valued and enhanced through training on the field and appropriate development interventions. The route itself has two specific aims: on the side of the person, the goal is to increase students' awareness of their value in relation to certain personal characteristics and attitudes that make each one unique and exploitable, both in life and in the organizational field. On the organizational front, the goal is to identify one or more business functions in which the student, if properly trained, could experience the success of the role. This operation, on the one hand "deliver" to position a subject potentially gratified in his role and in its activities, on the other hand, will ensure the organization to raise its standards of work quality relying on a potentially viable resource for that role.



### 3. Methodology

#### 3.1 Articulation of the research

The research involved 200 students from 10 institutions of higher secondary education in the Province of Frosinone, fourth and fifth classes. The intervention has been structured in the manner of group assessment and provided for the administration in plenary (group) for each institution of a battery of tests specifically designed to identify the potential of students. The entire route has been released in two days, respectively intended for the administration of the test, and the returning of results. Between the day of administration of the test and the day of return of results there was an intervening variable period of time of at least seven days that could give way to analyze the tests conducted and process personal profiles.

#### 3.2 Tools and areas of investigation

Evaluation of the potential of students was carried out through the administration of the following analysis tools: A) A battery of tests for the analysis of attitudes (5 areas of aptitude). The battery of tests for the analysis of attitudes is a derivative of the original DAT Test V (*Differential Attitude Test* by G. K. Bennet, H. G. Seashore, A. G. Wesman, 1990). The proposed instrument allows to achieve a measure of five attitudes, where attitude refers to the ease of learning on the basis of appropriate education and environmental inputs, in reference to a specific area of mental reasoning. According to the definition set forth in attitude, the underlying theoretical premise is that mental ability is made up of different attitudes, rather than a single general factor, which should be measured with different instruments and that if properly developed, will provide an added value to the student and the hosting company. Specifically, the areas of aptitude object of investigation were *verbal reasoning* which expresses the ease with which the person can grasp and relate concepts related to the words, the periods and written texts. It expresses ease of the subject in abstracting, generalizing and thinking basis of an examination of the text and language. It allows to predict success in fields where we need a thorough understanding of verbal and written language, including the commercial area, teaching, journalism, law. The test included questions on the correct understanding of written texts, logical proportions between words, logic relevance between terms within predefined lists; *numerical reasoning* which expresses a person's ability to perform tasks of mathematical reasoning. The numerical reasoning test looks at ease in dealing with numerical concepts, combining numerical relationships and deal intelligently material quantities. The test has proved effective in predicting success in areas where it is essential to think in terms of mathematics, physics, chemistry, and professional fields such as engineering, technical and scientific professions,

administrative positions, accounting. The test involved the use of numerical series; *abstract reasoning* which expresses the ability of logical reasoning of the subject released by the use of language and numbers. It highlights divergent thinking skills, creativity, and ease in finding innovative solutions. The test involved the understanding of logical relationships and developments between abstract and geometric figures; *speed and accuracy of perception* which indicates the response speed and accuracy in perceptual activity, providing information on skills needed for many office jobs, secretarial staff and line intended to routine work, for which demand constant attention over time, quickness and precision. The test involved the labeling of lists of numbers and words presented and the comparison between similar figures; *space relationships* which is the ability of the subject to grasp the arrangement of objects and figures in three dimensional space, their movements and their structure. The attitude to the spatial relationship fails to predict success in professional fields related to the design, including specific software, and professional fields such as design, construction, architecture and engineering. The test provided insight into the exact rotation and evolution of two-dimensional figures in space. B) A questionnaire for self assessment of skills (Isfol Model of Skills). The questionnaire for the analysis of skills is the second instrument designed to define an estimate of 18 *soft skills*. The soft skills are related to “how to be” of the subject in work situations and in front of the performance of a task, they represent the person as a whole, its individual guidelines, his motives and are independent from the specialist technical skills. The questionnaire is structured according to the technique of ranking, a technique that requires the subject to make a graduation of statements presented on a basis of correspondence with his own person or by agreement. We asked the subject to graduate the 72 statements in the questionnaire using a scale of values from 3 (maximum agreement and correspondence with the statement) to 0 (no agreement or correspondence with the statement). Here is a list of the 18 soft skills being assessed with a short declaration.

1. Result orientation - focus being employed to do a job as best as possible.
2. Attention to the order, quality and accuracy - subjects carefully check their work, demand the quality, accuracy, and thoroughness in doing things for themselves and others.
3. Search information - search for directions and information in a spontaneous manner necessary to succeed at a task.
4. Initiative - do more than is required in order to refine the results, or to prevent problems. Find or create new opportunities.
5. Persuasiveness and influence - assert your position without coercion and without leverage hierarchies, but by arguing and reasoning.

6. Relationship building - ability to create reports and objective functional links.
7. Development of others - facilitate the development of one or more persons. Foster learning.
8. Leadership skills and assertiveness - attitude and ability to provide guidance and directives. Be direct in exposing its position but without overpowering .
9. Teamwork and cooperation - knowing how to integrate into a working group, sharing information and expertise to achieve the purpose of the group.
10. Leadership of the group - knowing how to lead a group working toward the goal through the means of planning, objectives and strategies, and improve their effectiveness.
11. Interpersonal sensitivity - ability to get “in the shoes” of others and to understand their moods.
12. Client orientation - ability to read and meet the needs of a potential client or whoever is receiving the right job.
13. Technical/professional/managerial skills - subjects will constantly develop the skills and knowledge of its range. Interest and curiosity for new things and knowledge.
14. Analytical thinking - analyze a situation or decompose a complex problem into its basic elements, ability to analyze difficult situations.
15. Conceptual thinking - ability to abstract models of effective action from past experiences.
16. Self-control - domination and mastery of their behavior and their emotions in stressful, bad , difficult situations.
17. Self-confidence - safe in their own ability, awareness of their own capabilities and limitations. No fear to test.
18. Flexibility - ability to adapt successfully to the changes, new jobs, people and situations.

From the set of competence derives 6 groups defined *families of competence*, respectively: a) *implementation and operational skills* indicating a predisposition to act, to perform tasks in an accurate and detailed; b) *Responsibilities of help and service* characterized by a desire to help or serve others, trying to understand their concerns, interests and needs (interpersonal sensitivity), taking care to meet these needs (customer service); c) *Skills of influence* reflect the personal interest and the ability to have an influence or effect on others; d) *Management skills* are a subset of the skills of influence and express the intention and ability to develop and drag the others, improve teamwork and cooperation, plan the work of others; e) *Cognitive skills* to analyze a situation, a task, or a problem. The subject’s ability to arrive to a personal interpretation. The desire to increase their wealth of expertise;

f) *Responsibilities of personal effectiveness* reflect the maturity of the person in front of others and to work as well and the ability to manage critical situations. The same 18 competencies define the other three macro groupings, better known as *areas of expertise*. Specifically: a) Area of diagnosis - is predominant in the subject's ability to analyze and interpret situations, tasks and define strategies for action; b) Area of coping - is predominant in the subject's ability to deal directly with the task, even at the level of emotional control and stress management; c) Area of the report - is predominant in the subject the ability to relate effectively and functionally objective with other roles or people.

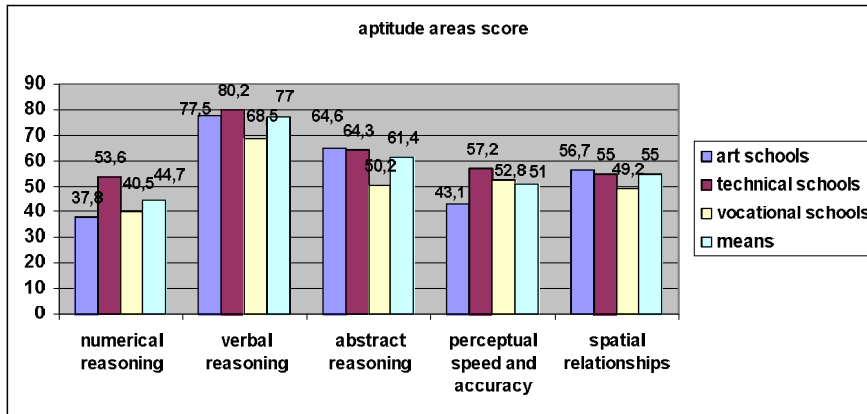
### **3.3 Profile Processing Mode**

For every student who took part to the assessment of the potential has been processed and returned a Personal Profile, structured as follows. The scores obtained in the questionnaire for self assessment of skills were organized by results of individual skill, results of family competence, area of expertise results. These have been interpreted in terms of priorities assigned by the student to the skills transverse to the person. The results showed what skills were perceived most significant for its relation to other people, in relation to the group within he/she was placed and the tasks that had to be performed. Referring to subjective distribution of aptitude, results of the test for each student return the "specific gravity" of individual attitudes further showing such attitudes have more influence in defining the cognitive abilities of the subject. For each student has identified an area or work area within which, if properly trained, he/she could experience the success of the role. The main areas of potential development considered were: Administration and Accounting, Verbal Comprehension and Written Texts, Humanities, Creative and Innovation, Technical Design, Routine and Attentional Tasks, Marketing and Sales.

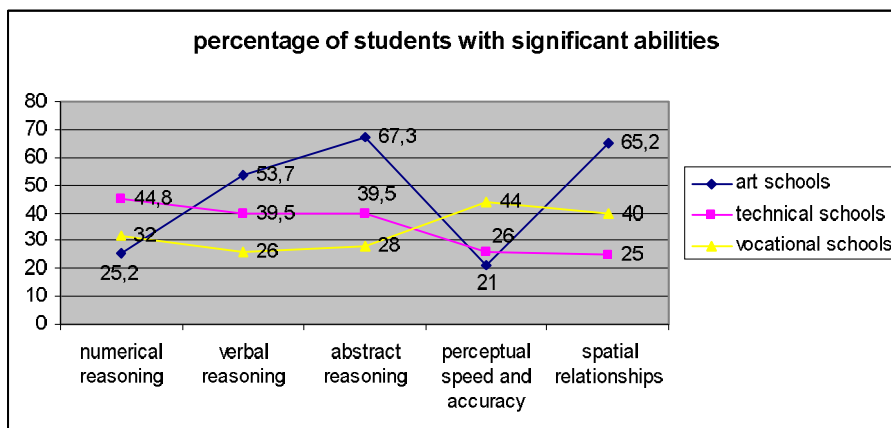
## **4. Data analyse**

### **4.1 Comparison of the types of institutions**

The graph below shows the scores obtained by the three different types of institution to aptitude test (scale from 0 to 100) compared with the score obtained by the entire sample of 10 general institutions (average value).

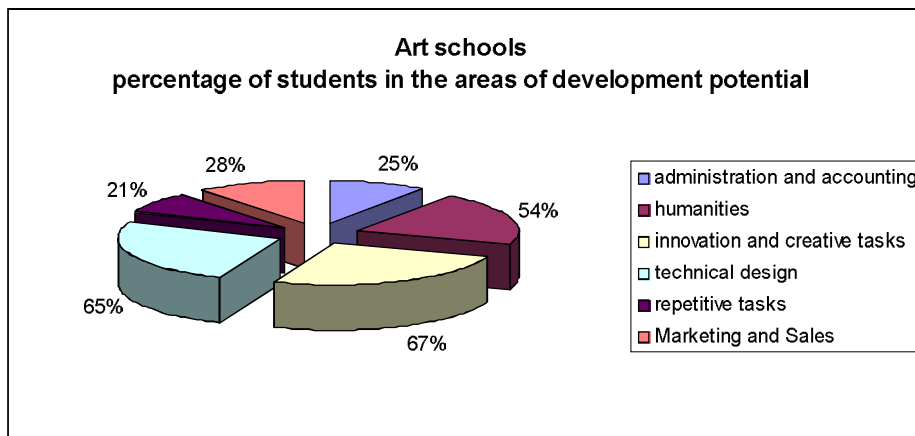


The Art Institutes are placed 3.2 points above the average for the overall sample as regards the attitude to abstract reasoning. Technical institutes have a position higher than the overall average for the sample as regards the attitude to numerical reasoning of 8.9 points. Vocational schools are placed 1.8 points above the average for what concerns the attitude perceptual speed and accuracy. The graph below shows for each type of school the percentage of students with significant skills in comparison to all 5 areas investigated by the test.

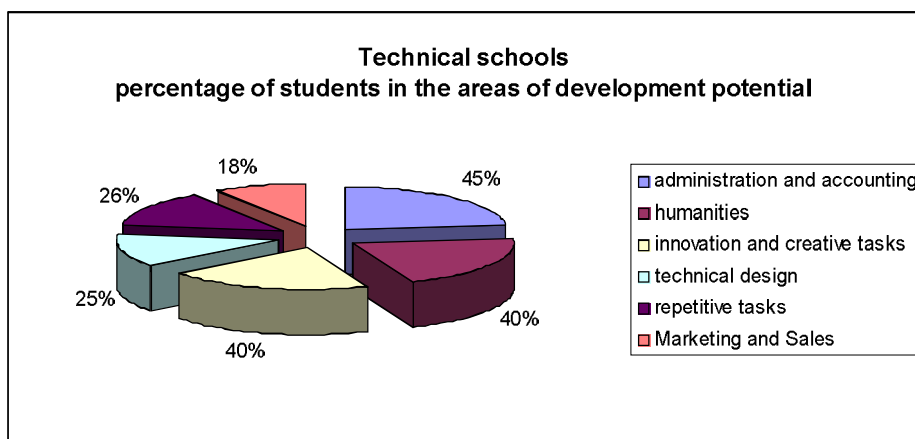


Art Institutes show a higher percentage of students with significant skills in abstract reasoning (67.30%), in the area of spatial relationships (65.20%) and in verbal reasoning. 44% of students in vocational schools show strong aptitude in the area of perceptual speed and accuracy. Technical schools have the highest percentage of students (44.80%) with significant skills in the area of numerical reasoning.

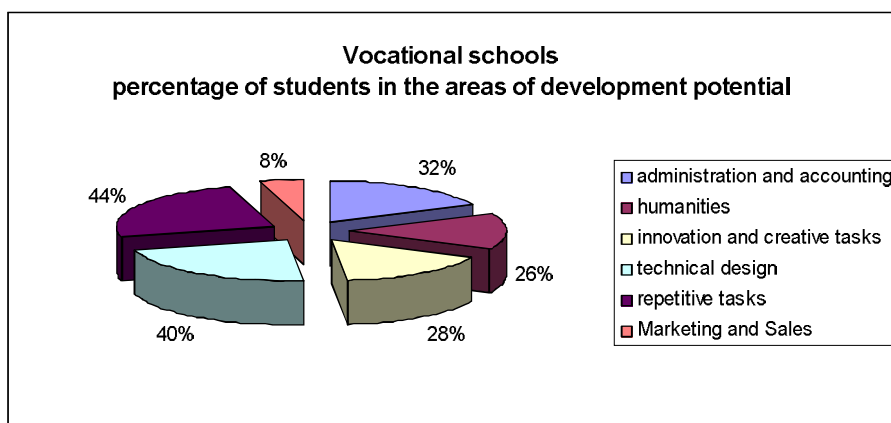
The following graphs show percentage values in the placement of students in the six areas of development considered.



Art Institutes show a percentage equal to 67% of its students placeable in the area of potential development of creative and innovation tasks and 65% in the area of engineering design, including use of specific softwares, architecture, construction, fashion, and design.



Technical Institutes show a fairly balanced distribution of its students within the areas of potential development, with 45% of them placeable in the administration and accounting; 40% of them lies in understanding verbal and written texts, humanities and the same percentage in the area of innovation and creative tasks.



Vocational schools show a percentage equal to 44% of its students with the area of potential development on routine type and attentional tasks. The lower percentage value (8%) refers to the Marketing and Sale domains.

## 5. Conclusions

The data show three main conclusions:

1. The higher scores on the aptitude test, for what regards attitudes to abstract reasoning and spatial relationships, are reported by the Art Institutes. The same report the highest percentages of students placeable in the following areas of potential development: design, including specific software use, architecture, construction, fashion, design, marketing and sales area, tasks that require creative divergent thinking, the ability to adaptation and problem solving.
2. Technical schools show the highest scores in the areas of aptitude and numerical reasoning and verbal reasoning, the highest percentage of students placeable in areas of potential development of accounting and administration.
3. Vocational schools have the highest score for the attitude perceptual speed and accuracy, where among other things, also show the highest percentage of students who fit that attitude.

The data suggest that while attitudes can be considered independent of the knowledge learned, it could not be excluded that a constant cognitive work done towards a specific direction within individual institutions, strengthen the skills that make it possible to be able to perform specific mental operations in faster and easier way. Specific expertise is highlighted by the ability to activate (or mobilize) and integrate (or combine) the internal resources held (knowledge, skills, other personal qualities) and external ones available (people, documents, instruments). This mobilization is carried out in a specific context or situation, and involves an active intervention on the part of the subject to accomplish the task or activity. Competence, from this point of view, is definable from the type of tasks or activities that must be performed validly and effectively. If you want to go beyond the assessment of a know-how and see if they have achieved real work attitudes must be made an observation and a rerecording confirming an initial positive assessment and provide good guarantees of personal possession of the competence in question. In this perspective, the tool more than any other seems to have shown good guarantees of functionality and reliability is the so-called *professional portfolio*: an organized collection (including digital form) of the manifestations of expertise offered by the subject over time. Such collection can be managed by the subject (and in this case he must be aware of the documentary requirements) or by others. The presentation and discussion of this document can

serve as a good basis to identify not only the expertise developed, but also its level and the knowledge that the subject has of its qualities and any limitations.

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