THE NEW APPROACH TO LEARNING

“CREATION <> DEMAND” SYSTEM

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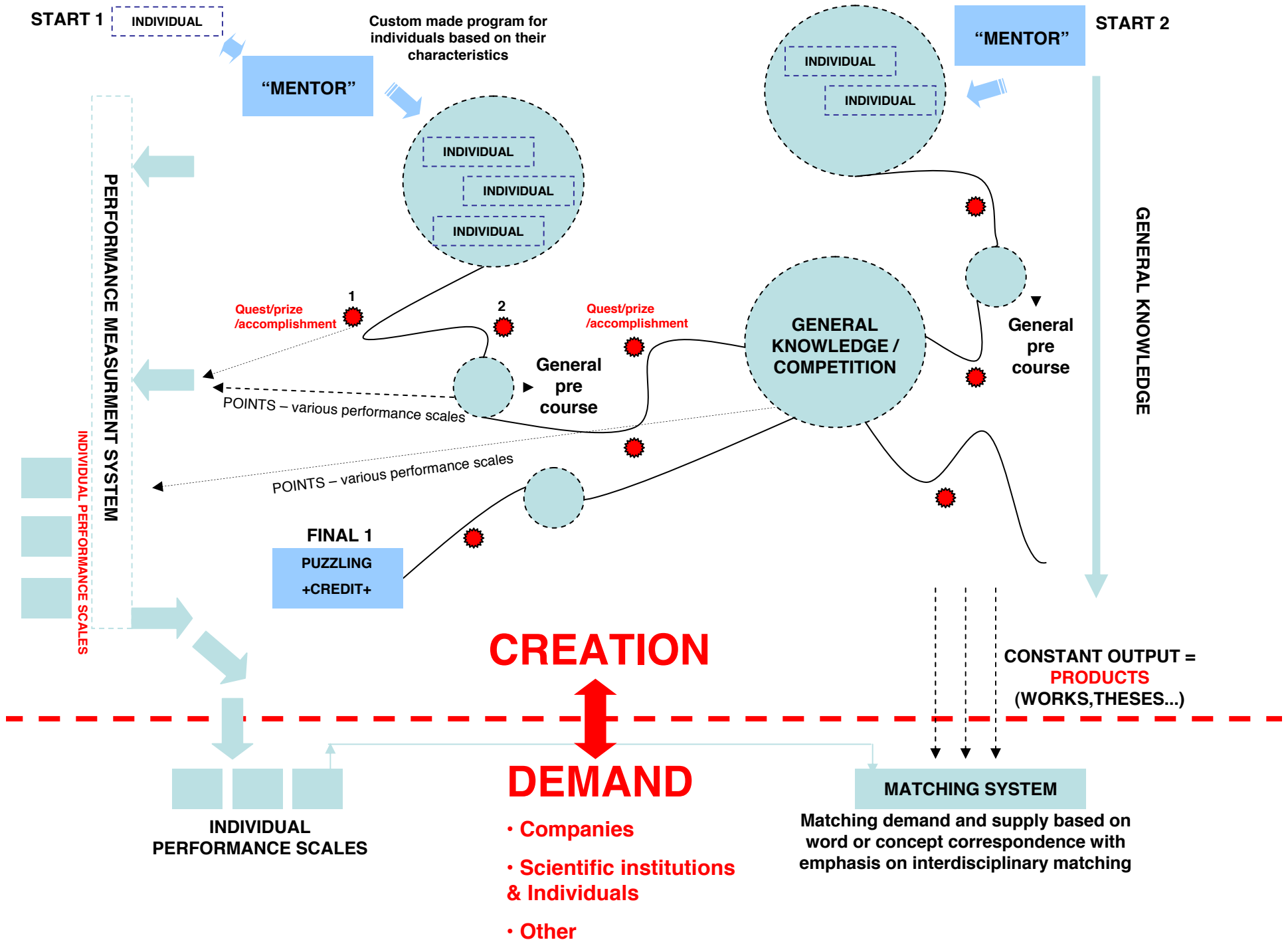
START 1
INDIVIDUAL
Custom made program for individuals based on their characteristics
"MENTOR"
INDIVIDUAL
INDIVIDUAL
INDIVIDUAL
"MENTOR"
START 2
INDIVIDUAL
INDIVIDUAL
PERFORMANCE MEASURMENT SYSTEM
GENERAL KNOWLEDGE
Quest/prize /accomplishment
1
2
Quest/prize /accomplishment
GENERAL KNOWLEDGE / COMPETITION
General pre course
General pre course
POINTS – various performance scales
POINTS – various performance scales
INDIVIDUAL PERFORMANCE SCALES
FINAL 1
PUZZLING
+CREDIT+
CREATION
CONSTANT OUTPUT = PRODUCTS (WORKS,THESES...)
DEMAND
• Companies
• Scientific institutions & Individuals
• Other
MATCHING SYSTEM
Matching demand and supply based on word or concept correspondence with emphasis on interdisciplinary matching
INDIVIDUAL PERFORMANCE SCALES

We would like to present the idea of Cutom – Made – Knowledge system. Primarily, it can be viewed as a substitute to the current education system, but it is actually a system that links intra and inter-disciplinary fields and thus can be characterized as:

1) easy, enjoyable and efficient custom made life-long knowledge acquiring process

2) interlink between knowledge creation and knowledge demand that matches concepts from different fields (either scientific or professional) and enhances their multipurposness

We chose to graphically present the idea as it would be easier to explain and understand how it captures many stakeholders and thus also gives economic ground to various participants. The idea is actually quite simple and we will start by explaining its educational purpose and then later explain how it can be applied to all learning processes as well as to information flows.

OLD SYSTEM

An individual is born an raised with distinct characteristics and preferences wihch are mostly altered througout life. Current educational system follows a pre-determined path kindergarten-school-university-work-post school education. Optional paths for different individuals are possible at later stages, but we can conclude in general that current education is divided into various subjects and targeted at groups irrespective of individual preferences. Children (as well as adolescents and adults) are being served with a huge amount of information which is often irrelevant for many "students" and is justified as "general knowledge" which needs to be acquired. More "ambitious" students tend to widen their knowledge base through extra study which they undertake on their own, but they still follow the same path which allows them to specialize in some field, often the one that would give them the opportunity to be socially recognized. The specialization path to social recognition is usually directed with "where the money lies" assumption. After the final stage of education, we get groups of people with similar knowledge attained through hard work and typically little enjoyment (of course there are exceptions). Naturally, we do have great specialitsts in various fields, but the vast majority of people end up doing something that they don't enjoy and where their true capacities are not used adequatly. That's why we invented hobbies.

IDEA

On the other hand, everyone experienced the joy of studying a certain subject/concept/skill/insight (etc.) where 'one can find himself'. The natural MOTIVATION for these can be explained by the fact that a certain skill will get us a REWARD (self-recognition, recognition by others, monetary reward, self-fullfilment...) but in a manner that allows us to use our "competitive advantage". An example would be – a person that has good vocal capabilities enjoys studying singing (if this study is done in a specific way what we will elaborate on later). Another important factor in understanding the feeling of joy is the existence of - CHALLENGE

Most people are curious and willing to learn if the learing process is "fun" and "challenging". If we would manage to create a system where these two prerequisites are possible, we would get motivated, skillful and satisfied individuals and an educational process that is far more efficient and far more effective than the current one.

CREATION

The idea of custom made education starts with the individual. Based on his/her characteristics he/she is assigned a MENTOR who, in correspondence with the individual, customizes the initial part of his/her education. The mentor is provided by THE ORGANIZATION and can always be changed on demand. By synthesizing smaller groups of individuals with similar characteristics the mentor creates CHALLENGE GROUPS. However, every individual has his/her own study path which is altered based on changing preferences and characteristics as the individual attains more knowledge. The study paths intersect in GENERAL KNOWLEDGE PRE-COURSES where smaller groups are thought elementary concepts and information which is needed for both, further improvment and diversification of potential preferences. However, it is essential that these courses are designed to be challenging and motivating (which needs to be further assessed). Furthermore, every individual has mini tasks, quests and puzzles that he has to solve in order to get to the advanced stage of the education (QUEST/PRIZE/ACCOMPLISHMENT) points. Their purpose are to pose a challenge and engagement which is crucial. To secure a constant inflow of general knowledge information that would allow individuals to widen their aspirations, ideas but also link different concepts, we decided to create GENERAL KNOWLEDGE COMPETITIONS designed similar to quizes where gorups meet, collaborate and compete. The whole process is supervised by a PERFORMANCE MEASUREMENT SYSTEM which tracks each individual's performance and assigns him points for different fields/characteristics which will later be used as a notation. Throughout the entire process, participants are encouraged to produce works (scientific, creative, ideas, designs, products...) which are collected by the ORGANIZATION and are supplied to the DEMAND side (explained later). We denominated this part as the CREATION part of the process.

DEMAND

The DEMAND comprises companies, scientific scolars, institutions and all other stakeholders which are in constant search of new ideas, concepts, designs (let's call these - PRODUCTS) - an example is BP company that is currently desperately seeking for a technical solution to close the leaking oil hole. The demand is always present and is linked with supply in many specific fields (i.e. Mutual Funds seeking for mathematical algorythms that will enable them to generate extra returns or biological scientists seeking a computer algorythm that will fasten their analysis on something etc...) Nevertheless, it is not easy to conduct an efficient search in a timely manner as the supply is too large and too un-organized meaning that the criteria to distinct thrustworthy and valuable PRODUCT does not exist. This opens up an entirely new problem of – filtering knowledge. If someone even wanted to think of the solution on how to close BP's leaking oil hole, he/she would need to understand how the problem itself occured which takes time. The person can browse tonns of articles/videos/talks but would certainly appreciate if these articles (videos/talks) would be filtered based on different preferences and provide him/her with a fast understanding of what actually happened. This is where scaling takes place. By constantly scaling individuals performance and track his her work record, we would be able to get a certain idea of their degree of specialization in a specific field and thus give their works (PRODUCTS) a higher weight. The DEMAND side has to be transparent, easy accessible and searchable, while the supply side has to be able to pose inquieries efficiently. The small QUESTS that have to be resolved ti get a fuller picture of uderstanding specific concept or information are also formed partially by the DEMAND.

MATCHING

By introducing MATCHING SYSTEM (which we find as the issue that needs most attention especially regarding technical issues), we would be able to match demand with supply. PRODUCTS (in the form of writen essays, books, videos, presentations, audio recordings, creative art works, formulas etc) should be matched with the DEMAND. An example would be a car manufacturing company looking for a way to increase car velocity through better design or usage of lighter materials. By submitting a search inquiry, it would get either a list of registered individuals (registered in the ORGANIZATION) with specific preferences who are willing to directly cooperate with the company to find a solution. Another group of results would consist of PRODUCTS which would refer to the topic but with the ability to liaise with the creator of the specific work. By allowing for 24 hour accessibility to works and creators and an efficient search/matching system, knowledge and ideas would have a faster, more focused and more economically sound exchange. It is important to stress that the largest value added should be in inter.disciplinary search, meaning that an effective matching system should be formed in order to be able to link concepts from different fields. The most creative solutions arise as a combination of concepts that are applied in a completely different domain than usually used. An example would be the invention of pricing of stock options and futures which was impossible until 1973 when 2 mathematicians applied an equation later known as the Black-Scholes formula from termodynamics to finance and set a basis for the majority of today's financial transactions. Examples as this are numerous. .

ECONOMIC PURPOSE

The same concept is not strictly limited to formal education (as schools) but can be applied to all forms of education or learning (new language, narrow specialization courses, soft skill courses etc.) Our idea is the creation of a fully accessible and completely interactive system that also has vast economic sense and potentials. To name just a few:

• Memebership fees to the ORGANIZATION (various levels of service)

• Customized programs

• 24h accessible real mentors/tutors (imagine you are stuck with some problem in repairing your car's turbine and your membership allows you to post an inquiry and get a live course from other members of the ORGANIZATION based on your preferences)

• Schools based on the new concept of learning where location is irrelevant

• Companies and institutions membership fees to get access to PRODUCTS

The important point to note is that the ORGANIZATION has to have a strong ethical purpose where the economic benefits would co-exist solely as a catalisator for enhancing infrastructure and attracting stakeholders.

Once again we would like to state that the purpose of this abstract is to set a base for a general concept that needs to be elaborated further. It would be interesting to get ideas on how various parts of the system could be enhanced or transformed to be as efficient and as easy-to-use as possible. It would also be very helpful to get further ideas in the IT domain to see how different elements of the system could be interlinked in a fast and "easy to use" manner. The final aim is for the system to be as self regulating and as self-organizing as possible, although we are aware that it requires certain monitoring and an organization to manage it (the ORGANIZATION), while assessment and regulation subsystems are absolutely required for its well-functioning.

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