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Global Design as the Integral Person Formation Strategy

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ABSTRACT

The relevance of the problem under study is based on the society's need for educating an integral person who is able to solve ecumenical project tasks. Currently this problem (as natural order from the society) is emerging in the educational system and social practices but has yet to obtain substantial scientific and theoretical justification. The purpose of the article is to initiate the theoretical-practical aspect of the educational activity towards educating a designer who is thinking and acting integrally at the early stages of professional development. The lead method for studying this problem is historical monitoring of a person's project practice which provides the possibility to examine project processes within the context of their holistic dimension and to configure the hypothesis on the necessity of changes in the educational system. The article presents the prognostic idea, which is supported by the historical facts, that it would be necessary and effective for the educational system to depart from the practice of niche specialization in training of designers at the early stages of their professional development; it also contains the conceptual definition of and the proposal for a model of educating an universal (integral) designer within the instrumental (tool) framework of animation, computer, object and other modeling technologies which provides a practical effect for the educational system (of general, pre-vocational and vocational education). The article can be useful for innovation-thinking sponsor of educational processes, theoreticians of design and pedagogy, practitioners of design, teachers of design at higher, secondary and general educational institutions, as well as for philosophers, cultural studies scholars, sociologists, psychologists and other researchers.

KEYWORDS
Globality in design, humanization of education, integral design, universal designer

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Introduction

Within the system of vocational education it is important not only to develop the existing practices but also to find new actual trends in the training of a future professional (Romantsev, Fedorov & Chapaev, 2009; Artun &

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Ozsevgec, 2016; Shakurova, 2016; Svirin et al., 2016; Yakhina et al., 2016). In this context of key importance is studying the problems of forming the content of education regarding the training of future vocational design teachers. One of the main prognostic areas of designer training development is a new event in place that has lately been marked (called) "global design".

The topic of *global design* is without doubt related to the problem in place of training teachers for the system of the so-called pre-vocational education of children in the sphere of design (in children art schools) that has quite recently been announced by the Ministry for Culture of the Russian Federation.

The issue of whether the "global design" actually exists is without doubt important and of interest at this time but it is also contradictory which, though, should not lead us from resolving the arisen conflicts. As any emerging occurrence, "global design" has yet to obtain clear configuration and definite content but this is not the reason to deny it and not to include the "global design" in the research practice. We cannot form exact rationale of what generates a person's aspiration for "omnitude" of the world, yet at the same time there are reasons to refer in this issue to the fact that the science of the XXth century has prepared the ground and undertaken the investigation of the issue of "direct influence of the space's energy radiations on our organisms…" (Chizhevsky, 1976).

Within the modern context of practical design the "global design" term is used by universal designers to define the direction (genre) of their activity which includes at the same time graphic design, product design, artwork, graffiti, art design etc. These designers do not isolate themselves within a niche of specialization but constantly expand the field of their design activity. Their works can be found on the Internet, for example. Universal designers (partisans of global design) in a way follow the philosophical assumption that "the positive freedom consists of the spontaneous activity of all the integral personality of a man" (Fromm, 1941).

Within the practice of design universal designers can find a place for themselves, yet the task of training such a specialist within the system of education currently looks hypothetical and at first sight impossible. Thus, in the present article this problem is examined within the possibility of using the idea of global design in training teachers for general and special vocational education systems. This will be of no small importance by itself as in the global design we can see the positive prognostic content and prospects.

In general, training of a *universal designer*, if we understand this term as a *design specialist without taking into consideration specialty and specialization (profile)*, must begin at an early age (Chapayev & Shevchenko, 2012; Lysuenko, 2014; Fedorov, Stepanov & Stepanova, 2015; Ualiyeva & Murzalinova, 2016), as, we can add, a quality training of any single-discipline specialist. Assignment of the so-called "narrow" and "wide" professional approaches to the relevance of a vocational design teacher's activity should without doubt be considered within the context of the systematic approach (Maslow, 1954, 1971). The "location" of these approaches within the system of design functioning is diverging and variative. For instance, the universality of the "wide" approach is indispensible (which is proven by the practice of design education) in the propaedeutics of education processes while the significance of "narrow-specialized" approach manifests itself more actively in the designer's actual practical activity. When

separating the approaches it is also important to take into consideration their interaction and synthesis which are implemented both in the educational design system and when forming the subject-spatial objects of the reality.

Training of a designer in the broad sense of this word, that is, a universal designer is a pedagogical process which not only is currently not solved on a practical level but is not justified on the theoretical level, either, having no methodological basis or specific methods and technologies.

However, there exist certain pre-requisites which provide the possibility to define the key points of the universal designer training process and to create its primary, approximate model.

Such pre-requisites include, for example, a child's demonstrated motivation to perceive integral (let's call it global) information implemented by means of such synthesizing arts that are called screen, multimedia.

Children can with great interest and absorption in material "read" the synthesized on-screen information of cartoons, movies, documentaries the topics of which they can understand etc.

It would be a great mistake to view children's interest in such information as only eagerness to amuse themselves and not as the prospect of developing and directing this interest towards future creative activity. The process of understanding information synthesizing image, sound and action by itself already contains a certain inner, immanent direction of further processing of this information into some socially-induced and relevant material (Chizhevsky, 1976). It is necessary to acknowledge that the pedagogical community is not yet ready for target-oriented practical implementation of this direction. Thus, the task of directing the existing child's motivation for "on-screen action" towards the practical usefulness can be considered one of the most important tasks of the modern pedagogy.

In our opinion, the idea (and also in a certain sense a technology) of the *global design*, which is originating within the global education system and has yet to come into widespread acceptance, is aimed at achieving positive results regarding this.

Let us repeat that the notion which is currently termed "*global design*" is so far a vaguely configured idea, yet at the same time it contains a certain sense giving a foretaste of moving towards new content and the prospect of development.

If we want to be a really innovative pedagogical community we cannot ignore this idea due to the possibility to lose the chance of moving towards new level of a person's development and the integral implementation of creative capabilities (Maslow, 1954; 1971).

Methodological Framework

Methodology of the research

The lead methodological basis for examining the problem of global design is the systematic approach which provides the possibility to see the global design as the ecumenical phenomenon not in an isolated way but within the "environment – person" synthesis. The method of monitoring has provided the possibility to establish the theoretical and practical facts that occurred within

the historical process in correlation with the idea of the global design. The pedagogical observation has provided the basis for creating a methodical-technological concept of global design functioning within the educational system, aided by the empirical study of the educational institutions' experience.

Methods of the research

In order to solve the tasks of the research several methods have been used: 1) theoretical: analysis, synthesis, analysis of the methodological segment of a person's project activity, method of alternatives; 2) empirical: monitoring of the historical process of a person's project activity and design as a phenomenon, observing the learning processes in order to reveal the intentionality of the subject in modeling the "environment – person" system.

Results

When perceiving the word "global" contextually associative meanings arise which are related to the widespread interpretation of the cognate meaning of this term in the current society, namely – globality – an event of global scale (from Latin *globus* – sphere or globe); globalism – a model of political and economical tendency of the modern world's development, etc. (Kemerov, 2004). It should be noted that this interpretation of the term "global" is indirectly related to the above-mentioned "globality" and "globalism". In our text *global* means "taken as a whole, general, universal (cf. French *global*), that is, integrally expressing some phenomenon (in this case – design).

Understanding of design as an integral phenomenon in the modern world has yet to receive substantial theoretical justification and practical content. However, it should be noted that within the theory and practice of design there is a distinct tendency to understand design as a universal project activity aimed at establishing harmony between a person and the surrounding reality, creation of, so to say, socio-temporal ecumene (cf. Greek *oikumene*) which is characterized by an integral, aggregate anthropo-natural-cultural environment.

In this environment a person acts not as a separated subject having narrow, limited functionality, but as a part of the whole (global) structural organism, as a subject which understands this globality and is aware of aggregate ways of its project and practical transformation. In this system a designer is a creative "figure" aimed at solving not only operating, current tasks, but also strategic and integral ones.

The complexity of forming such type of designer is obvious which, however, should not become the reason not to achieve this goal which is relevant, overdue and to a great extent related to the vocational education.

Within the context of modern methodology training of such "super-universal" designer-specialist should be started at an early age. We will not set distinct limits of such an age as the motivation for professional activity is a flexible category which is insufficiently studied. We can only set approximate limits for the age when a future specialist starts entering the professional sphere. Presumably (in the best case) this age varies from 3 to 5 years old. However, a child's attention can be turned in a well-founded way to this or that type of professional activity at a later age.

Let us consider the establishment of a professional within the acmeological meaning. This process can be most conveniently observed by examples from such

spheres as art and sport. The complexity of professional activity in any kind of art (music, painting, ballet etc.) is so high that it can be mastered only if *specialization starts early*. The initial stage of training must be meaningfully and technologically implemented at such high-quality level which can ensure continuity of training at further stages, that is, this initial stage must be implemented as a professional, basic one. Let us say that no specialist in music will undertake to train a future piano player or violinist at the age of 15-16, or even 16-17 years – the age of graduating from school. Training of ballerinas, ice skaters, gymnasts and many other art and sport professionals starts at the age of 4-5 years, and these are professionals who possess high level of *professionalism of activity*. Specialists in most sports, ballet, art and music regard such way of training as the only possible for successful development of a professional. Let us add that, according to specialists' conclusions, only that process of training which is organized in such a way can lead a subject to acmeological heights (Fedorov, Stepanov & Stepanova, 2015). At the same time another approach to professional establishment of a subject is well-known. This approach, unlike the narrow one which is practice-oriented and aimed at educating a professional able to reach *acme* in his activity due to early specialization in this or that type of professional activity, is driven by the purpose of an integral education of a person.

K. Marx and F. Engels (cited from the work by E. V. Ilyenkov (1960) in their time said that "the society will not make people "painters", "violinists", "logicians" or "politicians" but will form from each individual a Person engaged in (even predominantly) in painting, playing violin or logical research" (Ilyenkov, 1960).

E.V. Ilyenkov (1960) comments this saying in the following way: "This is often interpreted in a simplified way, and when taken so it can leave one perplexed or even in protest. Its meaning is not that the society will eliminate the possibility of an individual's predominant development in a certain direction but that it will stop cultivating professional imbecility, ugly one-sidedness of developing abilities and not predominant development of one ability as compared to others".

These words contain clearly expressed view of directing the process of education a person (which is a subject of pedagogy) towards integrity, generality and universality.

A person's aspiration towards universality is distinctly expressed at an early age when a child tries to master different, so to say, ways of communicating with the surrounding reality, involves all his sensory receptors, the forming logic-thinking apparatus and developing emotionally-sensual (aesthetic) intellect.

All this experience is undoubtedly acquired within the entirety (globality) and integrity of processes of reality cognition which are fully established yet and covers only the small part of the *global material*. But the very fact of a child's aspiration to connect with *the entire, the integral* should be viewed not as an incident or self-will of growing person but as an expression of a certain general essence of a Person, his direction towards it, designation of the *global development* trend.

In this situation, within the context of pedagogical influence on a child, naturally arises a question *of a practical matter* – how exactly can the "program

of support" of intentions and directions of a growing person be implemented, as this person aims at this globally expressed trajectory of its development?

The most relevant and acceptable for implementing the ideas of a person's integral development within the context of natural-cultural environment is such type of education which is designated as vocational education (that is, professionally-oriented pedagogy).

Currently implementation of initial vocational education should be viewed as a very important integral process in which a trainee not only acquires professional competency which corresponds to the given level, but also is introduced to a stage of own pre-professional development at the earliest age.

This problem is extremely important for professional (vocational) pedagogy. With regard to this, special attention must be paid to searching for viable, practically relevant approaches to studying the problems of education. In our opinion, in this case special attention should be paid to the increasing need and relevance for humanistic side of education processes which pedagogy as a science has been examining and discussing actively for a long time.

Among the objectives that integrally present functions of education and training in scientific-pedagogical publications the primary is without doubt *humanism* which includes attitude towards a person as one of the supreme values. Humanism presents the concept of human well-being and worldview based on it within the aspects of stating the value of a human being, a person's dignity, supporting the rights and freedom of each individual, justification of possibility of a person's development as species and individual (Kemerov, 2004). Researchers note that a serious obstacle on the way of modern humanism's development is the situation when in social studies people are not viewed within their special being and their strengths and capabilities are taken into account only in abstract form and dimension. Pseudo-dialectic attempts to link the initially torn ideas of the concrete and abstract being of people turn out to be non-viable as images of their social and individual life which appear mutually supportive in reality are mutually exclusive (and reject one another). G. Homans (1984), an American sociologist, appealed to his colleagues to "return people to theory". In essence, this means the need for "returning" people to history, economy, culture and science and presumes radical review of the foundations of the modern natural sciences (Kemerov, 2004).

"Returning people to theory" means, first of all, to make a theory anthropocentric in the sense of its focus towards receiving justified and objectively genuine knowledge about a person which can be substantially expanded within the classic binary "*theory-practice"* opposition. The problem of theory in this case should provide clear-cut vision of the object it examines (a person), as well as combine, in a systematic way, within the cognitive process the empirical and theoretical levels.

In our opinion, the biggest possibilities for solving these issues today belong to that type of education practice which is implemented within the vocational education.

The initial stage of vocational education that corresponds to the humanist-designated tasks of forming an integral person can, within the context of vocational education, obtain a reliable ally and partner, as this system of education even today is ready for practical solution of this problem (Romantsev

& Fedorov, 2010). The basis of the proposed process of solving the problem of the subject's professional humanization can be such trend that is functioning within the vocational-pedagogical system as design education.

Design education, which is implemented in various types of design practices (art design, graphic design, computer design, interior design, landscape design, costume design etc.), can, due to its universality, in training of a professional designer at the pre-professional level, be implemented in pedagogical technologies which are related, to one extent or another, to global design. Let us underline that global design should be viewed as *universal, integral project modeling of a person's habitat and the processes that occur within it which is implemented within the synthesis of the means of the main language systems (visual, auditory, verbal etc.) at the level available to the project subject*.

The process of integral modeling of a person's habitat (ecumene) can be expressed through modeling a fragment of the environment on condition of an integral vision of the environment itself, understanding its structural interconnections in the most general sense.

Let us consider this definition analytically by dividing it into several fragments-notions and localizing them.

Fragment one: *universal, integral modeling of a person's habitat*. This fragment contains the most complicated conceptual meanings. First of all, there arises an issue of the possibility to implement exactly such universal modeling which will have, by definition, the total ecumenic nature. We are more accustomed to fragmentary modeling of the environment related to separating the project functions, that is, mastering a narrow project specialization. Is it possible to implement universal, global projecting? This problem is ambiguous. It is without doubt that creating a real environment on the basis of the conceptually-expressed global approach is very complicated. This can be impossible even for a most talented designer. The most outstanding result of this kind in the world history is related to Leonardo da Vinci who achieved successful results in many areas of creative project activity (Capra, 2007). Yet at the same time even this did not cover the whole sphere of human ecumene.

Are there examples in the modern worldwide practice which could demonstrate *the universal* in solving a project idea, present simple as complex or, rather, represent the complex in synthesis with the simple? One of such striking examples which is a really global designer solution is creating the image of iPhone by Steve Jobs, head of Apple. The design of the iPhone was extremely simple: only one button and active usage of positive colour. Yet behind this simple image there was an idea of digital (finger) control and the structured multi-functionality of the apparatus which not only allowed to drop the user's manual but also provided the possibility for a user to enter in "creative interaction" with a design product.

It goes without saying that not all the people can show such extraordinary results as Leonardo da Vinci or those implemented by Steve Jobs. So is there any point in being concerned about training people who are universally prepared for project activity? This issue can be considered in two aspects.

Aspect one: is it possible to train a specialist who is able to practically carry out this activity? Most probably – no. This task is too complicated. Aspect two: if we take a slightly different view on this, namely, if we see the result of the

design activity not as completed product of general projecting, so to say, ready for use, but an integral general project model of the environment through the system of objects-symbols, objects-signs that represent the general character of the world order.

The initial impression of this method and result of design can look slightly simplified, yet actually this method can be of extreme importance as it will induce a person's project thinking towards creating an integral, universal form of the environment.

The object field (that is, the aggregate of designed environment objects) of the design today is mostly defined by complex, synthesized systems, such as object content of exteriors and interiors of urbanized space, information design, design of barrier-free environment, colour and light design of urbanized space, phytodesign and aquadesign of internal and external urbanized space etc.

These system objects of design are structurally and inclusively complex; mastering their designing is a long process which requires specific, niche training of a specialist, same as designing any other object of the modern design (industrial, graphic, interior, landscape etc.).

At the same time within the process of training a modern designer emerges the trend of total multi-dimensional content of training future designers defined by the integral, universal designing of object environment. It should be noted that such pedagogical experience of environment modeling in education has already been implemented to a certain extent.

If we study the history of this issue which is aimed at mastering to one extent or another the level of universal, total design, we can single out certain facts of education system functioning which are of interest.

For instance, the tasks of school in the Soviet Union included educating an all-round person prepared for broad practical activity and able to use and develop his knowledge and skills in any sphere of work and science (Kirsanov, 1965).

Technologically this was carried out within the bi-discipline set of school subjects "art – handicraft" which included modeling of the following objects: tools, vehicles (automobiles, ships etc.), rockets and several complex ready and individual objects. Let us note that all this was mastered in soviet schools in the 1960s at the comprehensible technological level in the 5th and 6th grade of general schools and was of expressly propaedeutical character (Kirsanov, 1965). It is easy to make conclusions not only about naïveté but also about importance and effectiveness of such propaedeutical approach implemented within simple technologies for training a future professional specialist.

Currently this propaedeutic approach can be implemented at a more complex, modern technological level – virtual-animated (multimedia, computer, on-screen technologies) which can surely help produce the most unexpected modern design solutions.

Global design should be designated as one of those positive changes in the vocational education processes which can form such basic training of a future specialist which is adequate for the modern tendencies of development of a person's professional activity not only at the so-called pre-professional level, but also at the level of the professional competency actually in–demand.

As a result of examining the problem on the basis of the historical monitoring method, as well as the methods of analysis, synthesis, the systematic approach and others, we have revealed the facts of presence within the historic context and successful functioning of the universal (global) design of the surrounding objects. These facts are related, for instance, to such historically significant names as Leonardo da Vinci and well-known contemporaries. The factology of using global design in the system of education is also revealed (the general education system of the USSR etc.), as well as the facts of current professional global designers' activity. The aspect of a person's early professional development is also revealed; this aspect provides to future professionals the possibility to touch acmeological heights in their activity (including a project one).

A humanistic approach to a subject's professional establishment should be specially noted; this approach is designated in the philosophical thought worldwide and is related to consideration of the possibility of an individual's prevailing development towards a certain direction along with stating the universal development of a person which reveals his universal essence.

The authors enunciate both the theoretical justification of the need for universal (global) designing of the ecumene and propose that it should be substantiated with the modern technologies used in the system of education (multimedia, on-screen, animation and other means of modeling).

Discussions

The issue of global design in the aspect in which it is articulated by the authors of this article is raised in the theory and practice of education for the first time. Yet this topic is indirectly linked to the philosophical, sociological, cultural and other specialized research. Along with E. Fromm (1941), A. Maslow (1954; 1971), E.V. Ilyenkov (1960; 1974) and A.L. Chizhevsky (1976), we could include names of other classical authors who examined the problem of an integral person as a whole, in its significance, prospects and relevancy. Here attention should be paid to the works by A. Adler (1926), K.E. Tsiolkovsky (1934), C. Rogers (1961), A. Toffler (1980), H. Gardner (1983) and many other researchers who examined and activates the holistic approach to the essence of a person and their being in the world. Among the modern researchers who have indirectly influenced the topic of the article could be included a great number of authors that raise the problem of "globality" in different aspects – ecological, national, cultural studies, city-planning, designer-environment, pedagogical etc. The pedagogical aspect of forming an integral person in the vocational pedagogy is supported in the works of the researchers of vocational education at different levels: methodological, procedural and technological (Fedorov, 1999, 2008; Fedorov & Falco, 2008; Romantsev, Fedorov & Chapaev, 2009; Romantsev & Fedorov, 2010; Fedorov & Davydova, 2014; Davydova et al., 2016).

The problem of global design is a new topic for the theory. Its discussion within the academic community is emerging which, nevertheless, should not prevent interest to it. This topic is proving itself to be organic in the practice of design and as such should receive a congruent theoretical justification.

The concept of global design proposed by the authors of this article includes a prognostic idea of positive relevancy of using global design in education processes. The authors' concept itself which is related to the interpretation of

global design (as an integral modeling of a person's environment and the processes that occur within it on the basis of synthesis of the main language means – visual, audio, verbal etc. – at the level available for the design's subject) is a new development for the system of education, especially within the aspect of training a professional designer at the early stages of their development.

This concept requires active discussion within the academic community as expected by the authors of this article.

According to the authors' opinion, to continue discussions on the issue of globalization of project thinking and using this phenomenon in the education practice can provide positive theoretical and practical-pedagogical results.

Conclusion

Examining the arising subject-matter of global design within the aspect of pedagogical outlook can lead us to the following conclusions and assumptions:

– The trend of personal development is to one extent or another related to the intent for integrity and generality of own potential which initiates the necessity of forming corresponding pedagogical measures, conditions and approaches;

– "Globalization" as certain implementation of an integral, general development of a person can be of particular importance for vocational pedagogical processes, especially those related to the need for development of a future professional at an early age;

– In a relevant and substantial way *globalization* can prove itself in pedagogy that is aimed at training a future specialist in design, at the propaedeutical level of the well-formedness of the education content (in pre-vocational training);

– The propaedeutical basis of the education content can be oriented at education's subject of different age, including juniors;

– In order to implement the idea of "globalized" training of a future specialist in design, first it is necessary to train teachers who should be oriented at mastering corresponding pedagogical methods and technologies;

– The following can be used as actual technologies supporting the implementation of global designing: modern multimedia technologies (visual-auditory-kinesthetic) combined with the traditional learning technologies and means;

– The aggregate of global design specialists' training tasks should be considered within the aim of training vocational teachers for carrying out propaedeutical activity in children's art schools, general education schools, clubs etc.;

– Actual training of these specialists can be planned and implemented in the near future on the basis of the existing system of vocational education.

It is beyond argument that the problem at hand cannot be covered within one article and requires future multi-aspect consideration.

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