

UNIVERSAL DESIGN – SOCIAL, PEDAGOGICAL AND MANAGERIAL CHALLENGE

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ABSTRACT

Universal design (UD) as a concept of consideration rather than an afterthought that may lead to subsequent adaptations – following the principle of early intervention to address the cause, rather than the symptom. It enforces and empowers everyone to play a full role in society. Individually and mutually, professionally and secularly, UD should fly inspirationally above all social areas. A physical platform which allows to be complemented by practical and emotional learning, that fights stereotypes and prejudices and examines the limits of normality by defining difference as the new normal – is excellent example for Universal design. So, Universal design is the natural way things happen for everyone. Therefore, it should preferably be possible to influence, to attract and invite ideas leading to something everyone can agree with and something that comforts all in own understanding of successful living and prosperity.

Key words: universal design, managerial challenges, social welfare through design, pedagogical challenges, UD.

INTRODUCTION

Two years ago, I was standing at the corner of a collapsing building right in front of the entrance to a Center for Social Rehabilitation and Integration. A group supervision for the professional team of the Center had just ended, and the main challenge of it was how to synchronize the professional actions of the team of social workers, pedagogues, rehabilitators, art therapists, medical staff, and assistants to keep the attention of about 10 kids between the ages of 6 and 10, who had serious problems not only at school but also in the local community – they were distracted, did not get along with their families (or were not understood by them), created worries for their teachers and many other adults.

Then I thought, if we clear the collapsed building, we'll be able, with a lot of enthusiasm and not a lot of resources, to establish a traffic–safety platform where children can have fun with remote control strollers. And

to be sure that such a simple endeavor will have a sufficient contribution to the local community, I figured that it is best to be constructed by children and realized by children. And immediately imagined the happy children competing with their fathers on the playground at every opportunity, while their mothers are smiling calmly from the opposite cafe.

A: EFFECTS TO BE ACHIVED

From a professional point of view, with such an initiative, I achieved several significant effects:

1. Creating a space adequate for joint activities of different generations;
2. Mastering knowledge through a sense of happiness and success;
3. Bringing contact between children and parents;
4. Creating conditions for increasing the time that parents spend with their children;

5. Assimilation of competitive spirit and striving for improvement through play;
6. Focusing a child's attention for a long time;
7. Stimulating the child's fine motor skills in a fun way, which stimulates the ability to concentrate;
8. Presentation of a new model for rehabilitation (the traffic–safety platform itself) for both children and adults;
9. Giving importance to projects created by children
10. And many others.

And yes, I also brought beauty to the environment of the Social Center.

All this very quickly reminded me of the values we invested at the beginning of the 21st century when we set up the Committee on Universal Design at the Council of Europe.

B: DEFINITIONS

Universal design, fortunately, is no longer an innovation, nor a surprising concept.

The scientific and the practical world are already using a various definitions, like for example the one of North Carolina State University:

- **Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaption or specialized design. The intent of universal design is to simplify life for everyone by making products, communications, and the built environment more usable by more people at little or no extra cost. The universal design concept targets all people of all ages, sizes and abilities** (The Center for Universal Design, North Carolina State University, 1997).

However, my favorite one is the definition given by the Norwegian Anti-discrimination and Accessibility Act, where

- **By universal design is meant designing or accommodating the main solution as regards to physical conditions so that it can be used by as many people as possible.**

Usually Universal design is considered from two aspects: political and social.

C: ASPECTS OF THE UNIVERSAL DESIGN

In general, politically Universal design is a contemporary concept, still incomprehensible or unknown in many parts of the world, however increasingly part of our daily lives. This imposes not only political incentives in the improvement of sectoral policies, but through the prism of human well-being – it shapes mostly social, pedagogical and managerial challenges.

Although the political plan is not the direct focus of the present material, it nevertheless has its role as a basis for understanding and guideline to the pedagogical, social and managerial challenges we face today. That's why is important to distinguish a few political milestones:

1. At the beginning of the 21st century, the Council of Europe established the Committee on Universal Design as a political instrument of the Tomar resolution (This Resolution is one of the key Council of Europe documents for promotion of the universal design ResAP (2001)1). This event marks at least one political peak and suggests that the dating of the concept is far back in the years;
2. The Center on Universal Design at North Carolina State University in the USA stimulates scientific development in the field since at least 1995;

3. The EU uses the concept of universal design in many of its political guidelines and documents (although does not always define the concept clearly). The EU currently uses the definition of universal design stated in the UN Convention on the Rights of Persons with Disabilities, which has been ratified by the EU;
4. Scandinavian countries become leaders in the application of universal design, unanimously accepting the political challenge of their territories and practices being fully in line with the principles of universal design. For example, Norway Universally Designed by 2025 Action Plan introduces a concept, including the gender equality, planning and building, public procurement, transport/communication and education.

For the most, the ambition of the early concept of universal design is dedicated to accessibility for people with disabilities. Tomar resolution (2001) is the legal instrument resulting from the Council of Europe work on accessibility, graduated through the promotion of the international use of the Access Symbol devised by Rehabilitation International¹ in 1972 – today a well-established international practice; as well as establishment of specific technical norms and dimensions regarding accessibility in 1979; and also the special report from 1993 Accessibility: Principles and Guidelines. It can be said that all strategic moves related to universal design are initiated on the occasion of the full social inclusion of people with disabilities.

The word “design” may still be regarded as a limitation, a better expression could have been universal usability, indicating that the importance is not for the design as such, the

focus is on an environment that opens for participation for all. One of the primary aims of the Norwegian Universal Design Strategy is to promote equality for and ensure the full participation in society of individuals with reduced functionality, **by removing existing disabling barriers and preventing new ones from emerging.**

That is how Universal design focuses on all people. And of course, I believe we all will agree that the scientific elite could contribute a lot to the nuances that universal design carries within itself.

Universal design is needed in the practice of our daily lives exactly in order to create conditions to emphasize the individuality of each of us. To each wonderful new initiative. In today's age of endless globalization, we increasingly need to be seen as individuals. From a personal point of view, equal start, equal rights, equal treatment are significantly more necessary now in the midst of the 21st century. On the other hand, universal design in its most modern reading should stimulate the best possible in each of us, creating conditions for it to be integrated and invested in the social progress and prosperity. Universal design builds the steps to get away from a way of thinking in which the individual is defined as the problem and in which special measures for people with disabilities are the main solution. Universal design attracts systematic efforts to promote knowledge and stipulate a requirement of universal design in the development of the human-created environment. And that is Universal design's main social aspect.

And going deeper socially, we find one of the main pedagogical challenges of our time – to ensure that the student voice is central in the development of educational practices. Usually students ask for more clarity,

¹ wheelchair user, white on blue

more flexibility and more feedback. Universal Design offers an approach which ensures the clarity, flexibility and feedback sought by students. Since education becomes increasingly diverse, combined with rapid change in the latest decades, we all should consider that teaching and learning is developing in line with the student population while striving to achieve widening participation of students, including international ones. Lecturers may not be experts in particular student-ability types, for example, however using Universal Design framework allows to take all learners into consideration when planning and designing particular curriculum.

D: PRINCIPLES OF UNIVERSAL DESIGN FOR INSTRUCTION

At the core of Universal Design is a focus on variety and choice for students, a movement away from the traditional didactic, often solely text-based, classroom practices of the last century and the embracing of a more dynamic, active and evolving classroom. Good example here gives University College Dublin. Irish scientists offer us 9 Principles of Universal Design for Instruction:

1. Equitable use
2. Flexibility in use
3. Simple and intuitive
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space for approach and use

8. A community of learners
9. Instructional climate.

This might focus our attention on the philosophical thoughts about the pedagogical challenges we face with Universally-designed education. Like, for example multi-faced image of the learner – once a following student, second pedagogical resource, third an agent of change of the contemporary educational system and many more... And going deeper, philosophical framework provides a board range of educational products to be considered. Like, for example science labs, curriculum, educational software, libraries, professional organizations, registration options, student housing and services and many others. Universal Design provides a framework to ensure that all students have the opportunity to fulfil their educational potential. In the current climate of reduced resources, we should respect that Universal Design can save time for faculty during the semester and money for institutions as it can improve student engagement and ultimately retention.

So that is the way how universal design challenges the educational management. In today's globalizing world, expectations to the educational management insist to create conditions for changing the quality of life in the community; to provide a supportive, formative, corrective environment for each human; to attract and motivate as partners all stakeholders. In general, we expect it to manage our life, to manage our family, to manage our work (Fig. 1).

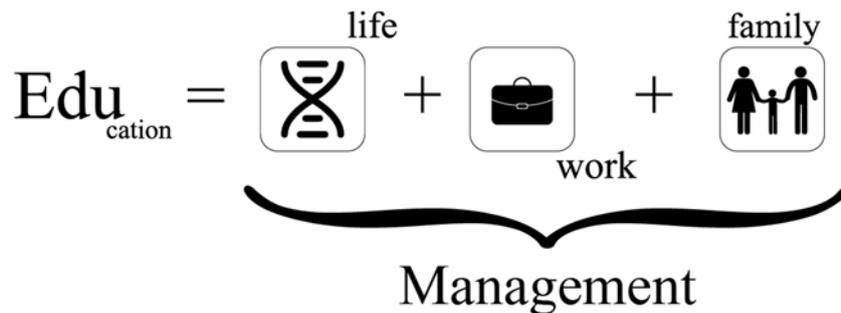


Figure 1:

Therefore, it is logical to assume that universally designed education should be a key to the successful internal policy in each country. To be seen as a process of acceptance by the state of certain responsibilities regarding the functioning and development of education – in a modern society where education is understood as a main social good.

E: BROAD PARTICIPATION

In the context of the social welfare, the first challenge is to make Universal Design principles more known and better understood, thus showing their potential benefits for an inclusive society. It should start by making Universal Design mandatory and by including Universal Design principles as an integral and compulsory component into the curricula of all professions; as well as a compulsory component in the design, production or delivery of goods and services; for initial and further education and training. The biggest challenge, however, is to move Universal Design out of the “disability corner” into the democratization field, since it is a concept to improve active participation in the political, economic, social and cultural life of society and thus directly linked to the essence of diversity, pluralist and participatory democracy and good governance. The universal design necessitates cross-disciplinarily in planning, follow-up, implementation and assessment activities. Appropriate processes for participation are needed to encourage the involvement of a wide array of users, and such processes play a fundamental role in promoting democratic decision-making. Universal design thinking does not necessarily entail the establishment of new work procedures, but requires broad participation from user organizations and various types of user groups. Including the participation of children in the decision-making process – which

should be a key issue as well, although we’re not going deeper in this field now.

Universal design reinforces social objectives in a number of areas, such as sustainable development, safeguarding diversity and the environment, safety in use, aesthetic considerations and many others. Consistent attention to aesthetic perspectives is important to making products and facilities attractive, and may help to ensure that accessibility and usability features are seen as a natural, integral component of the design.

RESULTS

Universal design in practice requires great accuracy in terms of design, operation and maintenance needs. The margin for error is small, and imprecise implementation or insufficient maintenance may cause the inclusive element to dissipate. Operation and maintenance must be carried out exactly. Every effort must be made to ensure that objectives in all spheres can be realized in conjunction with the universal design, to be able to promote sustainable development, primarily in terms of the social dimension of the sustainability concept.

A key feature of the universal design is its focus on seeking ever-better solutions. The principle of universal design is a dynamic tool that reflects the need for ongoing consideration of new means of minimizing limitations. And minimizing restrictions is maximizing social well-being in the modern world.

CONCLUSION

Universal design is a holistic approach to creating environments that are accessible and understandable to, as well as usable by, everybody regardless of age, size, ability or other physical characteristics. By not thinking about separate user groups but about the whole spectrum of human–environment interaction, it increases the number of people

whose needs are being met. It encourages an integrative approach rather than multiple separate solutions and thus becomes an essential component of any social inclusion policy. Therefore, if universal design were to be taught as a stand-alone course, it would risk being regarded as a specific skill area and marginalized as non-essential matter. And also, single exposure is not enough for most people to fully appreciate the value of inclusiveness. So, including everyone on the same arena creates inclusive atmosphere, meeting places and services – emphasizing that universal design is a necessary foundation for ensuring an independent life for people of all ages.

Managerially seen, this challenges all stakeholders to support social and economic sustainability, to encourage innovation and creativity, to promote the ability to contribute based on the person's own abilities, to provide conditions that allow people to manage to do things and to live an independent life, to ensure equal opportunities, equality and participation on equal terms for everyone.

The ability to design products and environments usable by all may be inhibited by certain limitations relating to current knowledge, technological development, access to products and solutions and practical and formal circumstances. For example, statutory regulation, such as conservation and safety considerations. However, with all my respect to all the existing regulations worldwide, I believe universal design is the element of transit in sustainable development, which will provide a quality connection between the present reality and the generations to allow the development to meet current needs without destroying the opportunities for future generations to have their needs met.

We all face the challenge of the change in the composition of the population since an

ever smaller number of people are in active and full working condition, as well as active age. So, it is logical to assume that universal design answers the key managerial requirement to set measures for the well-being of people. There is a need for as many people as possible to use their ability to work and be able to function with less help and/or support from the care sector. Being a participant in a modern society demands the vision of a society in which everyone can take part on equal terms, together with the understanding of human diversity based on which taking part is always being different.

And that is how we find Universal design as a “design-in-time” concept. A concept of consideration rather than an afterthought that may lead to subsequent adaptations. Following the principle of early intervention to address the cause rather than the symptom. It enforces and empowers everyone, including the people at present academic world, to play a full role in society and take part in economic, social, cultural, leisure, and recreational activities.

And this is exactly the reason why the idea of traffic-safety platform designed and realized by children and supportive to both children and adults – individually and mutually, professionally and secularly should fly inspirationally above all social areas. A physical platform which allows to be complemented by practical and emotional learning; that fights stereotypes and prejudices and examines the limits of normality by defining difference as the new normal.

Then maybe paradoxically a real-life project is seen as bigger challenge over the pedagogical, social and managerial ones. So, as it was already assumed earlier, universal design is most successful when it is not apparent. Then good universal design may not be noticeable. So, universal design is the natural way things happen for everyone.

Therefore, I believe we all will agree, it should preferably be possible to influence during any conference and beyond the concrete event – to attract and invite ideas leading to something everyone can agree with and something that comforts all of us in our own understanding of successful living and prosperity.

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