

Humour as a device in architectural education

Ján Legény & Robert Špaček

Slovak University of Technology in Bratislava
Bratislava, Slovakia

ABSTRACT: Humour as a specific way of communication is closely linked to human life, architecture and education. One of the most important benefits of using humour is that it can engage students in learning. Other positive benefits include physiological, psychological, pedagogical and cognitive effects. It can contribute to establishing a tranquil and socially inclusive classroom milieu. Therefore, there has arisen a genre of lecturing, widely referred to as edutainment. It means a hybrid mix of education and entertainment, which relies on more informal, less didactic forms of presentation. The authors assume that it is highly important to teach without burdening students with yet another obligatory subject that is taught solely through a serious, strict and grave approach. Argumentation with paradox or hyperbole is often incomparably more effective than traditional lecturing. The authors advocate the use of humour as a teaching tool in architectural education and allowing students to include humour or caricature in their work. Included in the study here is student work and also works of well-known cartoonists closely linked to architecture.

Keywords: Humour, professional communication, architectural education, cartoon, benefits of humour

INTRODUCTION

Universities are the highest institutions dealing with education and research. In them is created a cultural space with a social and learning climate characterised by a variety of social groups tied together through social interactions and interpersonal relationships. It may be assumed that humour generally has no place in education, architecture or even in science, especially if the following paradox exists:

Few institutions are so conservative as universities about their own affairs while their members are so liberal about the affairs of others; and sometimes the most liberal faculty member in one context is the most conservative in another [1].

However, humour is a serious and complex matter that plays an important role in human life. It is an integral part of the culture of all social groups. Humans start developing a sense of humour as early as six weeks, when babies begin to laugh and smile in response to stimuli. It represents a specific way of communication and discussion, as well as in teaching and research. This is true not only in the humanities and social sciences, but also in the technical sciences and is closely linked to the expression of ideas. It is a two-way process that requires a *transmitter and receiver*.

Humour sometimes can be misunderstood. It can be dry, bitter, infectious, intellectual or brainless. Using it in an educational process may pose a risk - teachers are often afraid to use it; they reject it or just do not understand it. Humour is a variable for individual difference in cognition and human intelligence.

People often think that humour is a low form of human communication whereas, in fact, humour is a complex cognitive skill. High intelligence and humour are correlated. An intelligent person is likely to have a greater sense of humour. Academic/scientific humour can serve as clear evidence of comprehension of a subject.

The most basic structure of humour consists of two elements, viz. *expected content* of serious material to be set up by humour with an *unexpected twist* or *punch line* - which is an outrageous spin of the material or a ridiculous outcome. It can be noted that *recognition* of the incongruity in humour resembles *identifying the problem* and *resolution* or understanding the punch line means *solving the problem*. The resolution requires divergent thinking and creativity [2].

Ziv opines that the ability to see two or more inconsistent, contradictory parts or conditions that are united in a complex object, such as a pun or humour means they have acquired a *bisociation* relationship (the simultaneous mental association of an idea or object in two fields ordinarily not regarded as related). Such relationships are important in scientific work [3].

PLACE OF HUMOUR IN MODERN PEDAGOGY

Included in the rapid pace of change during this decade is an emphasis on creative and critical thinking rather than on pure acquisition of knowledge. Portable electronic devices are now ubiquitous. Many educational institutions have had to face up to the fact that the old teaching methods do not work anymore. In this context, Pusca and Northwood emphasise that *...the content of engineering design education should be continuously revised using communication and collaboration between educators, students and industry representatives, so that the needs of each party can be addressed* [4].

The pressure to better engage students within the modern university has resulted in the rise of a new genre of lecturing, widely referred to as *edutainment*. It means a *...hybrid mix of education and entertainment*, which relies on more informal, less didactic forms of presentation [5].

It can be argued that university teaching is, historically, some kind of *performance*, especially in the context of mass lectures. Humour seems to be a perfect vehicle for edutainment. It can act as a *defibrillator*, *attention-grabber*, a *hook* (a notion used in the film industry and in journalism), *glacial thawing* device and an *icebreaker*. However, one of the most important benefits of humour may be that it can engage students in learning. On the one hand, humour fulfils an important function for an individual within a group, but on the other hand, it plays a key role for the group as a whole. Humour helps build trust and can invoke feelings of belonging and personal value to the group. It releases social tension, tightens bonds to a group, represents a form of social critique, a form of defence against negative emotions such as fear and anxiety or is a form of intellectual play. It has to be stressed that edutainment is not only through verbal humour, but also through organisation of the lesson, activities chosen by the teacher or even by the approach to the students.

In modern pedagogy the use of humour is considered an effective strategy in formal or informal learning. In terms of the communication function, humour provides a way to present oneself, a topic, a lecture. It is a means of penetrating into or out of serious situations. Humour is a form of positive communication, a manifestation of constructive behaviour that increases interpersonal contact, e.g. through eye-to-eye contact. In general, it is believed that teachers are familiar with the power of humour over students during a lesson. Hence, most teachers deploy humour in a friendly way. Mainly, teachers are oriented to the social, psychological and educational function of humour. Humour in the education process was summed up by Huss, who categorised the positives into three groups [6]:

1. It improves the climate in the classroom and promotes co-operation among the members of the group.
2. It creates associations between school knowledge and the students' experiences.
3. As a type of relaxation, it decreases the stress and eliminates obstacles related to learning and understanding the curriculum.

To be an effective teacher, it is crucial to know the intellectual level of the students, as well as to perceive and understand their kind of humour. The higher the level of education, the more difficult it is to incorporate humour into teaching. The humour of younger students is more straightforward; older students have more experience, knowledge and more developed interests, so they are more critical in assessing communication. Mental keenness is a form of intellectual play. Mainly *aggressive/offensive humour* should be avoided. It means that *...any word, object, or action that violates a person's values, moral principles, or norms of behaviour could be offensive* [7].

Table 1: Frequent misconceptions about using humour in education [9].

Misconception	Counterarguments (according to modern pedagogy)
Humour is identified with (narrative) jokes.	Humour has many variations. The most common in teaching is the use of situational humour aiming to release tension/stress. This includes cracking a joke, using a gesture, specifying the context of a given task.
Teachers should not use humour in teaching, because they do not have adequate training.	It is true that teachers do not usually have training in this field. But, someone who uses humour does not have to be a professional entertainer. Humour is used in everyday life. It is just one more step to apply it in
Teachers should not use humour in teaching, because there is nothing funny about what they are communicating.	Humour in teaching does not satirise what the teacher is saying. It is a way of communicating the information. It should complement and not distract from course material.
The use of humour in teaching is a waste of the time the teacher has in the classroom.	At least, the use of humour represents an effective tool for attracting and retaining a student's attention. Positive emotions are a significant supportive factor affecting the extent and durability of memory.

A sense of humour is closely linked with an individual's subjective interpretation. A climate of reciprocal humour should be encouraged. Other forms of humour include *self-enhancing humour* that perceives unpleasant everyday or absurd situations as something funny; *affiliative humour*, which aims to strengthen group relationships and create a pleasant atmosphere; and finally, a *self-defeating humour*, used for mitigating shortcomings and mistakes in order to enhance a position within a group [8].

There exist some frequent misconceptions linked with humour, which discourage vacillating teachers from using humour (see Table1).

POSITIVE EFFECTS OF HUMOUR

Various investigations suggest that humour produces psychological and physiological benefits that help students learn. The main research in the field of humour application in health care, psychology and education was conducted by several scholars, such as Ronald A. Berk, Christine Clifford, Ron Dieter, Avner Ziv and Peter M. Jonas. The benefits that are believed to be associated with laughter and/or humour can be divided into the following four categories:

- a) *Physiological benefits* are expressed by muscle relaxation, stimulated circulation, improved respiration and exercise of the lungs and chest muscles. Humour reduces the level of adrenalin, epinephrine and cortisol (that lowers the effectiveness of the immune system); it lowers the pulse rate and blood pressure, as well as it increases the production of the body's natural painkillers called endorphins. Education can be a bit healthier while using humour.
- b) *Psychological benefits* are considerable, including reduced anxiety and stress (as prior to or during an examination), greater self-esteem and increased student self-motivation to focus on the material. Humour acts to attract and maintain student attention. Additionally, humour can promote a productive and inspiring work environment, which positively affects interpersonal relationships. It can contribute to avoiding staff turnover and increase efficiency at universities. Table 2 follows.

Table 2: Psychological effects of humour in teaching [10].

	Humour inhibits/reduces	Humour strengthens/expands
Psychological characteristics	Mental instability Introversion Submissiveness	Mental stability Extroversion Dominance
Mental states	Uncertainty Tension Embarrassment Unhappiness	Security Relaxation Self confidence Happiness
Social relations	Social differences Formal relationships Poverty of contacts Conventionality	Democratic relations Humanisation Richness of contacts Crushing conventions

- c) *Pedagogical benefits* include creation of a more positive learning milieu by reducing pre-existing barriers to communication between the teacher and the students, which are also barriers to learning. It helps the teacher acquire the student's confidence and improve student attitudes toward the subject and the instructor.

Students are less intimidated and less inhibited about asking questions or making comments, which results in boosting participation in lessons and raises student spontaneity. It plays a role as a discussion starter. Humour helps students to retain subject matter, to remember more material longer, and reduces student negativism or hostility regarding potentially confrontational issues. Sheinowitz states that *2-3 humorous interludes per hour of studies is optimum* since students still need to be able to take notes [11]. To be most effective, humour needs to be real, simple, practical and related to the audience and material. Edutainment as a specific type of teaching, therefore is justified in modern pedagogy.

- d) *Cognitive benefits* are closely related to the psychology of cognitive processes. A teacher who effectively prepares and uses humour within education shows to students that they can be creative, can deal with the issues in unusual ways of thinking or that a mistake is also a valid part of cognition (unplanned humour). The use of humour promotes constructive debate on issues, strengthens the teacher-student connection, as well as extending and deepening understanding that is one of the main missions of education.

Moreover, the previous benefits might not be limited to students. If humour can make the learning process more enjoyable, then everyone benefits. For instance, students usually rate *the funny lecturers* who make learning fun significantly higher than others. They find teachers using humour to be more appealing, competent and effective in their delivery. Teaching awards and evaluations/questionnaires can provide a clue on how to work on teaching methods.

FORMS OF HUMOUR

Ronald A. Berk, one of the leading researchers on using humour in academia, introduced five forms of humour that can be used to attract students' attention. Indeed, there exists a common academic formula: whatever it takes, get their attention! Johann Friedrich Herbart (1776-1841) said, as well: *in teaching, the greatest sin is to be boring* [12].

Berk's forms of humour are divided by *place*, where they are performed. *In-class forms* that rely on delivery include opening jokes (stand-up jokes, anecdotes, quotations, e.g. of famous people) and questions, multiple-choice jokes, top 10 lists popularised by David Letterman, cartoons - single and multiple panel, skits/live dramatisations, spontaneous humour, humorous questions, humorous examples, humorous problems or exercises. *In-class forms* inserted into print materials, and which can be made available on a course Web site are represented by syllabus, handouts, examples, assignments (problems, case studies, scenarios/vignettes, simulations) or tests.

Out-of-class forms on a course Web site include course disclaimers, announcements, warnings and cautions, lists, word derivations, foreign word expressions, acronyms and emoticons or by using visual effects (pictures, graphics, animation, icons and movies), whether by sound effects, such as music, sound/noises or voices. Then, there are *out-of-class forms* that should remain out of class as offensive humour that pushes the limits of profanity, vulgarity or sexuality. Finally, there are *in-class topics* that are not culture specific [2]. Table 3 follows.

Table 3: Some facts about humour according to Peter M. Jonas [13].

No.	Facts on using humour
1.	Speakers are 46 percent more likely to laugh than listeners at their own jokes.
2.	Many speakers even laugh at things that are typically not funny.
3.	People are 30 times more likely to laugh when with other people than when alone.
4.	Women laugh more than men.
5.	Laughing is a social function. People will laugh at things not funny, if they are in groups. Laughter is not about humour or jokes, but about social interaction.
6.	Male instructors can use almost all types of humour to increase their evaluation ratings.
7.	Female instructors should avoid the use of puns or they are likely to greatly decrease their effectiveness ratings. (A jumper cable walks into a bar. The bartender says, <i>I'll serve you, but don't start anything.</i>)
8.	To be perceived as effective by students, instructors should use humour that adds to the content of education and contributes to a point.
9.	Men enjoy sexist, sexual and aggressive humour more than women do, but women enjoy absurdity more than men.
10.	Although women enjoy self-disparaging humour more, men apparently enjoy a speaker who disparages an enemy.
11.	Males use an average of 3.73 humorous items per class period, while females use only 2.43 items.
12.	The most used format for humour is telling funny stories. Overall, the frequency and use of humour correlates positively to perceived appeal, effectiveness and delivery for instructors, but for male instructors only.
13.	Use of hostile or nonsense humour by male instructors is associated with higher overall performance evaluations, while the use of sexual humour is associated with greater appeal.

HUMOUR IN ARCHITECTURE

Architecture and caricature are closely related. Buildings can indirectly mediate cheerfulness and induce a positive mood. There are many crazy homes or cartoons depicting architecture (see Figure 1, as an example). The Dancing House in Prague designed by the Croatian-Czech architect Vlado Milunić in co-operation with Canadian-American architect Frank Gehry is a cartoon, which is decorated with a parody of Olbrich's Art Nouveau ball. The cartoon is a portrait that exaggerates and deforms the basic essence of a thing. In this case, it affects the architecture. Cartoons can be offensive, courageous or just funny. It should be cheerful and maybe funny. Finally, the sense of humour can be considered one of the criteria for a successful career.



Figure 1: Left: modern architecture of hotel in the city centre of Zaandam, Netherland [14]. Centre: Upside Down House, Poland [15]. Right: Crooked House, Poland [16].

Some teachers claim that humour should not be injected into study, which is sober by its very nature. Is architectural education of this kind? True, architects have some difficulty being whimsical. But, argumentation with paradox or hyperbole often is incomparably effective.

The authors of this article hold an opinion that tutors should allow students to include humour in their work. This is usually treated with mistrust, because it is not a common part of mainstream education. With a rigid curriculum, it may be a matter of courage for the teacher to allow the use of humour. However, positively motivated students can produce surprising results.

Some research has documented a close relationship between humour and creativity. People with a better sense of humour tend to be more creative, less rigid and more willing to try new ideas. Humour tends to open up students to divergent thinking previously suppressed.

With the reduction of stress through laughter, there is more time and energy left to learn and create. The instructor and students feel a freedom that encourages divergent thinking and creativity [17].

Architecture mostly is about creativity. To test this, bring students back to life with humour despite boring course content. The absolute condition is still for the teaching to be complete. Experience shows that using humour or using cartoons within an assignment can serve as clear evidence of comprehension of the crux of a problem. The following student works demonstrate this (see Figure 2).

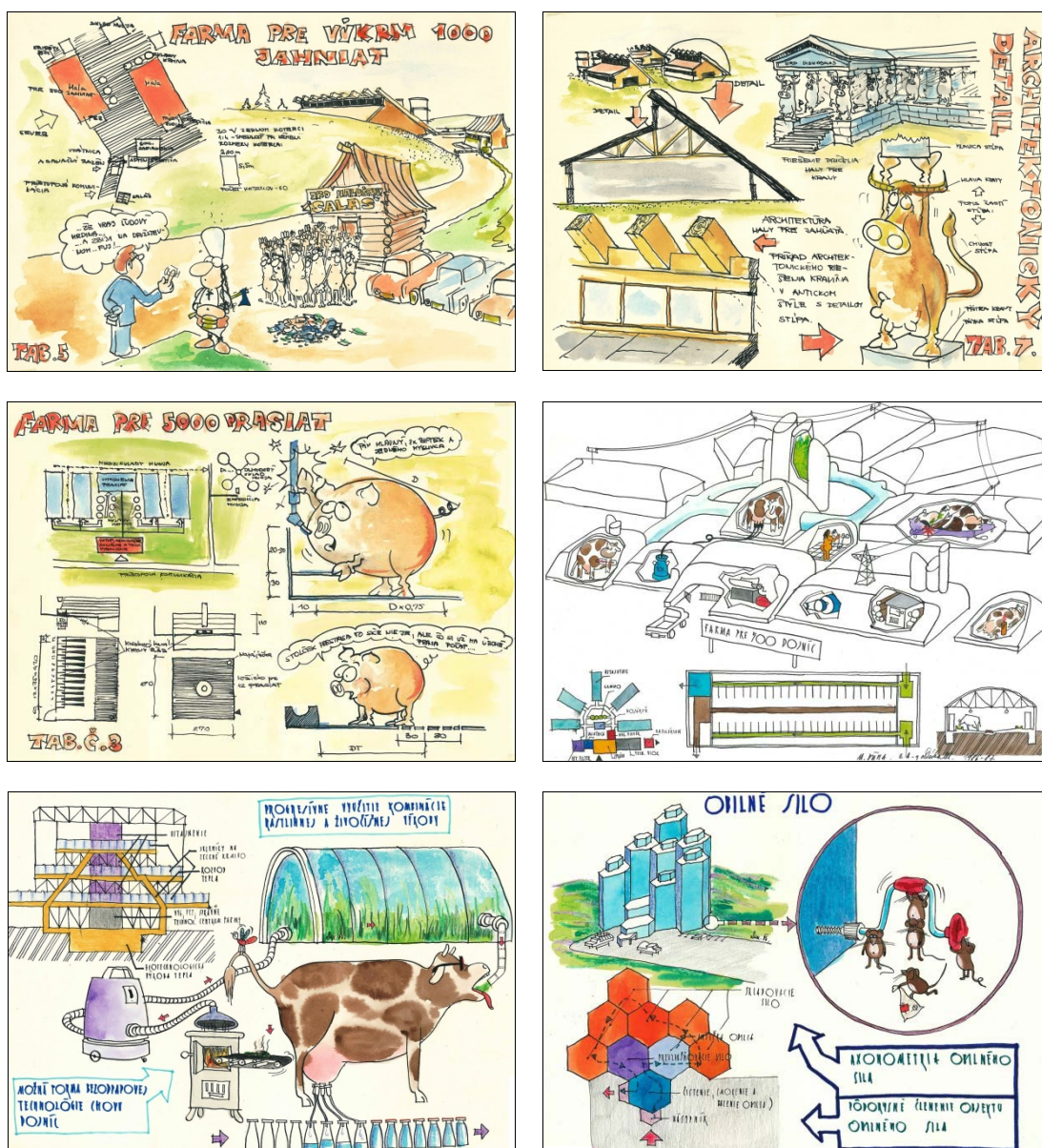


Figure 2: Student works within the subject Typology of Agricultural Structures at the Faculty of Architecture, Slovak University of Technology in Bratislava, during 1970s-1980s. The subject has been dealt with using humour, in the form of cartoons. Outputs mirror the students' architectural thinking within a wider context. Students: J. Baran and M. Dúha. Tutor: R. Špaček.

Such student works based on humour provide the tutor with information on the thinking, interests, attitudes and values of the students. This may uncover a student's alternative ideas - either directly in the joke or through the student's commentary on the joke. This can develop thinking and argumentation within education. It does not mean *to think out of the box*, just simply to make the box bigger. According to Guthrie the use of cartoons does two things:

(1) it shows students in a comfortable, familiar way that background knowledge is necessary if you are going to get the most enjoyment out of life; and 2) you have to read to get knowledge, that is, cartoons provide graphic clues along with the printed material and they unlock the unknown meaning of words [18].

One of the crucial tasks of the university is to teach critical thinking. As presented above, a specific form of humour is a social critique - satire. Architecture offers creators/authors the opportunity to direct attention to current issues related to the construction and the organisation of the city and the life in it. One of the examples of such an approach that shocked people into attention was the *International Exhibition of Cartoon Competition about Architecture - Archikatúra (Archicartoon)* held in Bratislava in 1992, 1994 and 1996.

Mention should be made of Louis Hellman, a British architect well known for his cartoons from the world of architecture and his *Archi-têtes* drawings, in which he caricatured architects by drawing them in the style of their buildings. Other architectural cartoonists include Gábor Benedek with his book, *Bauherrlichkeit* (1982); Alan Dunn, who contributed many cartoons to *Architectural Record*; Austrian architect Gustav Peichl; and Slovak cartoonists Kazo Kanala and Bobo Pernecký (see Figure 3).

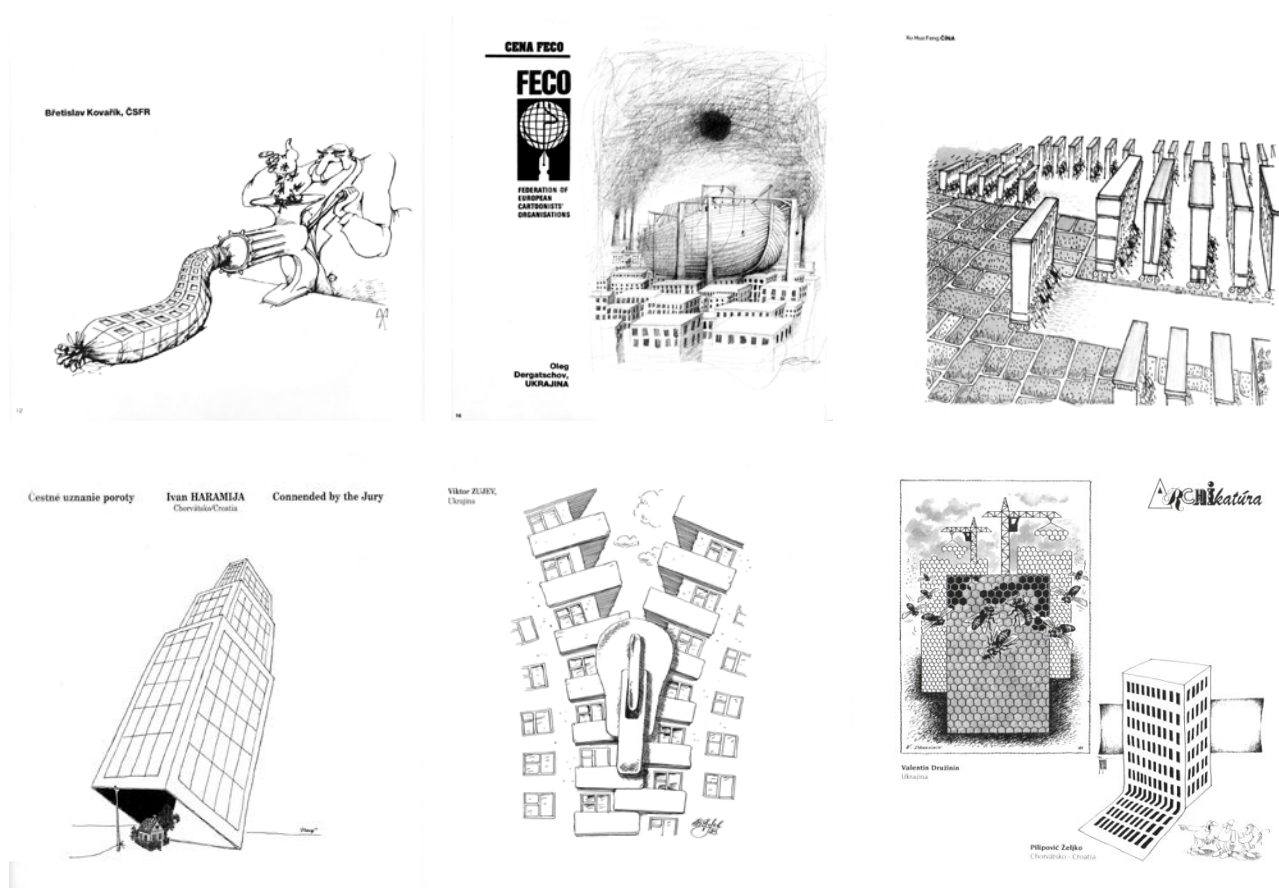


Figure 3: Selection of works from the International Exhibition of Cartoon Competition about Architecture held in Bratislava in 1992, 1994 and 1996. Top left: Břetislav Kovařík (Czech). Top centre: Oleg Durgatschov (Ukraine). Top right: Xu Hua Feng (China). Above left: Ivan Haramija (Croatia). Above centre: Viktor Zujev (Ukraine). Above right: Pilipović Željko (Croatia) (Source: Authors' archive).

Much of the humour that arises during a lesson is spontaneous, because the teacher is only human and makes mistakes that students find comic. Teachers should try to enhance their ability to improvise, to think quickly and react *from the hip* to generate in an instant associations or brilliant ideas. At least they should try, though unplanned humour cannot be taught. A successful technique is to use similes, comparisons and contrasts with real life. Eventually, there is still the second type of humour that needs to be planned and thoroughly prepared.

If teachers are encouraged and guided to use humour, they can gain a sense of control in their lives. The use of humour represents what some researchers call cognitive control. True cognitive control of humour is similar to well-prepared teachers who breed confidence when they know the material and have a true handle on teaching techniques. Obviously, this type of confidence comes with time and practice [13].

CONCLUSIONS

All members of the academic community should endeavour to introduce conditions under which education is being conducted in an optimal way. The authors of this article assume that humour can encourage a positive type of tension, which contributes to concentration and understanding, prevents boredom, reduces pressures, improves ambience and sharpens memory. This can create a tranquil classroom milieu, increase mutual trust between the teacher and students, reduce apprehension and improve accomplishment by influencing the student's personal creative development. Previous research has confirmed this opinion.

According to Sylwester, *humour and the arts are perhaps so culturally pervasive because they both help us to constantly explore the dividing line between appropriate and inappropriate behaviour in pretend rather than real-life situations* [19]. Lacking in today's academic environment is a unifying conversation between scholars, teachers and students of different disciplines. This was also claimed by Wilhelm von Humboldt, when he formed in 1809 the institutes of the Humboldt University in Berlin. Humour can help to address this issue, facilitate mutual communication and contribute to establishing a more enjoyable and socially inclusive environment in educational institutions. When relationships improve, teaching improves!

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BIOGRAPHIES



Ján Legény is an honours graduate in architecture from Slovak University of Technology in Bratislava (STU), Slovakia, where he also earned his PhD in 2013. His doctoral thesis title was the Typology of Solar Town Planning: Urban Structures Generating. He was awarded twice by a post-doc position at the STU with his research topic *Intensification of solar energy use in the urban space*. Presently, he is working in the Institute of Ecological and Experimental Architecture in the Faculty of Architecture at STU. He has authored or co-authored 38 articles. Further, he has peer reviewed conference papers in the field of solar town planning, solar design and sustainability, and has presented papers at international conferences in Slovakia and abroad, participated in various national and international research projects, as well. He co-authored the monograph titled *Solar Strategy of a Sustainable City*. He is a freelance architect and a co-founder of an architectural studio

TRES architects, and has also experience from the office of Chief City Architect in Bratislava. Since October 2018, he has been Vice-Dean for Research of the Faculty of Architecture at STU, and is a member of the scientific board of FA-STU and editorial board of architecture magazine titled ALFA.



Professor Robert Špaček graduated with a Master's degree from the Faculty of Civil Engineering of Slovak University of Technology in Bratislava (FA-STU) in 1976, and in 1984, he finished doctoral studies. He has undertaken many research fellowships: in Weimar (1980), Hannover (1981-82), Manchester (1993-98, occasionally) and Graz (2001). He is a co-founder of the Institute of Ecological and Experimental Architecture at the Faculty of Architecture of Slovak University of Technology in Bratislava, Slovakia (1990). His appointments include the following: Dean of the Faculty of Architecture of Slovak University of Technology in Bratislava (1990-94 and 1996-2002), Vice-Rector of Slovak University of Technology (2003-2007), Head of the Institute of Architecture II at the Faculty of Architecture of Slovak University of Technology (2004-05). Since 2010, he has held a post of the Vice-Dean for Foreign Affairs and Human Resources, and is a member of the

scientific board of FA-STU. He is a member of the editorial boards of several Slovak architecture magazines: Architektúra & Urbanizmus, ARCH, ALFA, Eurostav, Projekt, Revue slovenskej architektúry. In his academic career, he has been a member of nine scientific boards at several universities and faculties. He is an honorary member of the Slovak Green Building Council. He has published nine chapters in internationally recognised monographs, four teaching aids (one of them abroad), more than 60 scientific publications and more than 150 professional publications. He is an author of 22 architectural projects and 48 architectural designs. He has presented at many conferences and has participated in a number of foreign projects, e.g. in Auckland, Bangkok, Budapest, Buenos Aires, Cairns, Cork, Dresden, Edinburgh, Graz, Grenoble, Hague, Hannover, Hobart, Chania, Cologne, Krems, London, Manchester, Bombay, Paris, Perth, Prague, Vienna, Weimar and Wismar. As a researcher and university teacher he occupies himself with sustainable and experimental architecture. Prof. Špaček is presently President of the International Academic Advisory Committee (IAAC) of the World Institute for Engineering and Technology Education (WIETE), and an Associate Editor of the WIETE Journals.