

# Raising students' awareness about ethical behavior

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**Abstract**—This paper deals with examples of ethical and unethical behavior of students. In order to easily pass the exams, students reach for unacceptable methods – they cheat. Paper presents examples from professional and scientific literature about students' unethical behavior, especially when writing exams. After describing different cases from literature, paper presents survey results about students' awareness about ethical behavior at faculty. The survey was completely anonymous and it was conducted among students at the Faculty of Organization and Informatics. The survey results shows that 93% of students cheated at least once on exams but the good news are that that stayed once (or small number of times). Besides that, in research part of paper we presented how Faculty of organizations and informatics deals with unethical students' behavior through special body called Discipline Court. Court uses special regulations in work. We presented analysis of Court's work in period of 28 months. In that period number of reported students was 56. Most of students got last warning before exclusion from faculty as sanction. Top two reasons why they were reported were cheating on exams and plagiarism. At the end of paper a few recommendations how to raise student's awareness about ethical behavior are shown.

**Keywords** - ethical behavior, students' awareness, cheating, plagiarism, moral, ethics

## I. INTRODUCTION

How much is needed for human happiness and total satisfaction? What a man should do in order to be filled with love and kindness? How to make people look at other people benefits not just personal well-being? These are just some of the issues that ethical experts deal with and have been trying to answer them. Ethics is moral philosophy and one of the deepest sciences which interrogates the morality, its origin and aim.

In this paper we will not give answers on such hard questions but we will deal with ethical behavior among student population. Unfortunately, in order to achieve some goals, students sometimes choose unappropriated methods. They cheat on exams (copy answers from small papers – cheat sheets, mobile phones, hands, glasses, nose wipes...) or copy seminar works, projects, source codes, business plans – they plagiarize. The problem becomes higher when this becomes usual students' practice and they start to think that they are not doing anything wrong (*if someone else can, why can't I*).

In this paper it will be shown the foundations of ethics and morality and ethical principles which are reflected by a code of ethics, board for ethics or training. Further, there analysis of student population in Croatia and students of the Faculty of Organization and Informatics as well as ethical awareness and

ethical behavior of students will be shown. Then we gave short literature overview and examples of students' unethical behavior. We conducted a (pilot) research/survey among students of Faculty of Organization and Informatics about their perceptions about ethical behavior at faculty and we showed results of that survey. Second research topic of this paper is related to analyzing application of Rulebook on disciplinary and material responsibility of students at Faculty of Organization and Informatics in period of 28 months. Finally, we gave some recommendations on how to achieve better situation related to this topic.

## II. STUDENTS' AWARENESS ABOUT ETHICS

The word ethics comes from the Greek word *ethos* which means character, custom, place of residence and already in the 5<sup>th</sup> century BC indicating the manner in which living things exists and act in their environment. According to Aristotle, it means a nice, good, useful, but also efficiently and economically. Ethics is in a broader sense the science of morality or moral philosophy. It explores the meaning and objectives of moral norms, criteria for the moral evaluation, foundation and source of morality. Ethics above all, belongs to the philosophy which studies human behavior that is accepted by certain moral aspect. It is normative science and norms decide on the specific nature of ethics and so they differ it from other sciences [1].

The task of ethics is not only to describe and explain, but to determine what people should do and work to be able to live in accordance with what is true and fair and not apparent and false. Among other things, it deals with the art of living that leads to the happiness of the individual and the community. It examines the origins, motives and purpose of morality and seek its foundation.

Many people use morality and ethics as synonyms, but they are used in different meanings. Originally, the Latin word *mos* is a literal translation of the Greek word *ethos* and both indicate the nature and habit. Morality is usually defined as a set of values and norms or rules to evaluate and regulate human behavior [2]. In every society, morality is inherent. It is not always in line with the idea of humanity or morality, but sometimes it is accepted just like that. A person who is morally conscious, examines its actions and events in society. Moral values are always personal values, i.e. they are present only in person and only person itself can achieve them. These moral values can be developed through person's judgement or opinion. A Person must ask itself, whether what he/she doing is good, fair and beautiful, whether this procedure has a specific value and not only pleasure. As moral should be defined as the

totality of valid normal standards and judgement, morality is defined as set of norms and principles that gives validity of a moral or justify moral actions. Ethics therefore is philosophy of morals, and its purpose is examining relationship of moral and morality.

After explaining the basic concepts related to ethics, now we will be discuss the ethical awareness of the student population. Ethical awareness of students is reflected in their behavior at the faculty (or any educational institution) and to employees of the faculty. The main goal of organizations is to strategic goals and the main goal of the students is to pass all the exams and finish college. However, just because of that goal sometimes their actions are inconsistent with ethical behavior. Cheating in exams has become a big problem. The question is, whether the dishonesty and unethical behavior pay off? Will the student feel better if (s)he cheats and gets a good grade or if (s)he is fair and gets lower grade or even fails the exam?

Based on our experience, students in schools and university often cheat on exams to get good grades. They are using a variety of tools for cheating - cheat sheets, whispering, cell phones and the latest technologies. The problem of cheating is widespread throughout the world. According to a survey in 2008 by the US Josephson Institute, even 64 percent of the 30,000 surveyed high school students admitted cheating in exams [3]. However, many believe that the actual numbers are much higher - as much as 75 percent. Although it seems a lot, results from Croatia are drastically worse. According to a survey even 92,71% of high school students reported cheating at school one or more times. Among the student population numbers are lower; about 75% students of the Croatian University said that they cheat in exams [4]. In addition to cheating in exams, there is another widespread form of cheating - plagiarism. Many students copy someone else's work or download it from the Internet and represent it like own original work. Between that, there are many websites that offer buying essays, dissertations or other works, which becomes a major problem which unfortunately seems to be unsolvable (or at least it has not be solved).

The question is why so many students are cheating in exams. According to our experience, the students cheat because they/we live in a society where moral values becomes less important, and everyone tends to achieve their own benefits and satisfaction. For example, high school students cheat because they want to sign up for good colleges for which they need good grades. In general, those are good and fair students, but they cheat to achieve a higher goal. Even a several parents tolerated or approved cheating because they want their children to succeed. However, that is not the best solution because they automatically encourage their immorality and dishonesty. The student population also cheats because of good grades so they would not have to pay a large sum of money (tuition fee). Some of these students who cheat in exams are not caught and they pass without consequences. Perhaps because of this reason, other students who see that cheating goes unpunished, they decide to do it, too - they do not want waste their time and effort and achieve a worse score than the cheating students (sometimes it goes to that level, that the fair student are ridiculed because they are not cheating, and this is *so cool*).

Another reason of cheating is modern technology. It allows the different ways to fool teachers. Among other things, students can easily find examples of exams and professors rarely find it out. Social networks have become a form of sharing such things and they may pose the greatest danger. Bad role models are also one of the reasons why students cheat. Today we see frauds on all sides from successful business people, politicians, athletes, but also ordinary citizens who for example do not pay taxes. When young people see that people in high positions make frauds, they think that cheating is nothing wrong.

But why do students cheat? The purpose of education is to gain knowledge that will help us in the work duties and solving given tasks. When students cheat, then one day, when they will come to the work, they will be with no knowledge. Only later it comes to the light to students that fraud only reduces the chances of success in life, although at first, until the fraud was not discovered, it seems like a good procedure. Of course, cheating in most cases will be discovered - if not before, than at work place. Employers seek for candidates that are good in job they are offering. Many students then experience a *cold shower* when realize that they can't find job because they do not know to do things that are planned for certain job position. Students then want to return to the past and learn. Sometimes, after college, students pay different education, lectures, trainings to get the knowledge needed for job and then they become aware of their bad decisions when they cheated because they had the opportunity to learn all those things during official education.

In the US cheating is shame [5]. In Croatia, it seems to be that cheating is presented like normal and natural thing. Although in all colleges exist disciplinary courts and some sanction for unethical behavior, the number of cheaters is not any lower. Starting this year, high school students received new rules, according to which the cheating is marked as serious violation and according to the Ministry cheating will be no longer tolerated. Later in this paper we will present how this problem is solved at faculty level, in case of Faculty of Organization and Informatics. Rulebook on disciplinary and material responsibility is dealing with responsibility issues of students at the Faculty of Organization and Informatics in Varazdin [6]. By enrolling the college, students accept the obligations related to the college which are defined by the Law and the Statute of the Faculty. The students become responsible for any breach of duty and failure to comply with the rules and the damage caused to the Faculty or its participants.

### III. STATE OF THE ART: EXAMPLES OF STUDENTS' UNETHICAL BEHAVIOR FROM LITERATURE

Recently, at the Faculty of Engineering in Rijeka the case of cheating using cell phones became actual. The professor caught a student who photographed exam and send the picture to his assistants who solved exam and send solutions back. The professor has documented the case and reported to the Disciplinary Commission, but professor was not satisfied with the decision of the committee. Today, in a time of high and advanced technology, there are many devices and applications that allow cheating. From smart watches and glasses to applications that solve mathematical problems. The professor's idea is to introduce a measure which will disturb cellular signal

during the exam, but current law does not allow it. The question was - what to do in order to stop cheating, what measures and how rigorous should they be. Probably, according to the professor, it should be followed by exclusion from the university for catching offenders. Just and only then they will be aware of their damage and then it will not happen again. Therefore others will learn on his mistakes and begin to respect academic integrity [7].

The following incident occurred at Faculty of organization and informatics. The student was talking to a friend and cursed when the professor accidentally heard it. The professor called him into his office, took his index and asked him to sign a confession in which he writes that he cursed. Student apologized, but it was not enough. The professor reported case to the Disciplinary Court where the student got his punishment. He was punished with three months of ban on examination (student couldn't apply for the any exam in that period) [8].

Another example called affair "Index" has shaken the Croatian education system and the entire public (buying grades and buying of passing the exams from professors). The affair has shown that the bribery and corruption managed to get into the most important layers of society. Beside professors, some students were in prison, too. In fact, several of them replaced prison with community service. Punishments were drastic, for those who allowed such thing and for those who used it [9].

These are various examples of violations on rulebook on disciplinary and material responsibility of students. Each of these cases was ultimately punished. Some have passed with minor penalties, some with very heavy penalties. Certainly there are many such examples, which are not publicly disclosed and are a major problem in colleges. The questions remain, how many students are aware of these problems and do they consider such offenses in accordance with moral rules. Cheating on exams will certainly still remain a problem for many generations of Croatian universities as long as punishments are not too strict. But above all, students should learn about moral rules and ethical behavior and understand that honesty is the right way.

Smeureanu and Iancu are discussing about source code plagiarism which is a big and serious problem. It affects computer science and education in general. Students tend to copy their thesis's software from older theses. Because checking source codes manually is a tiring job they propose a detection method based on ontologies created using Protégé editor which can be applied in scanning students' theses' software code [10].

In their paper, Kenji Takahara and Toshinori Kajiwar, are talking about engineering ethics education method for students on the basis of continuous education to improve communication ability. They propose a few steps through which students could improve their communication. Those steps are: debates, fundamental techniques to make a presentation. During the engineering ethics class, the students come to know that the human relations behind the case make ethical matters more complicated [11].

Similar to our research, Byrne and Trushell made a small-scale study with 55 final-year undergraduates, which shows

ICT-enhanced academic dishonesty and cheating behaviors such as plagiarism. This study found, among other things, that engagement in behaviors consistent with patchwriting, i.e. paraphrasing and copying material, was reported only by students who engaged in multiple cheating behaviors [12].

Butakov and Barber in their paper proposed improved way to build a Plagiarism Detection Service (PDS) allowing the school use applicable IP policy and yet allow the PDS to maintain an acceptable search quality. Because plagiarism is a big issue in education, industry and research community, they want to protect student intellectual property. The proposed framework is based on the idea that only a limited amount of information from the student submission is required to locate potentially similar documents on the Web [13].

All these examples are based on the same theme – ethical awareness. Some of them propose various ways to increase fairer education and communication between teachers and students. Our research is based on a survey that shows ethical awareness of students on college and because of not very good results we gave some recommendations on how to improve and increase ethical behavior of students on college.

#### IV. SURVEY: STUDENTS' PERCEPTION ABOUT ETHICAL BEHAVIOR AT FACULTY

Earlier in this paper, we gave one example of disciplinary offence at the Faculty of Organization and Informatics (FOI) which ended in the public, due to the specifics of the case. Other cases of disciplinary offences at the Faculty, which were reported to Disciplinary Court, are examples of cheating, plagiarism, writing grades in the index and other similar offences. To understand why students cheat and thus endanger themselves, we made a survey that will show whether students cheat, how many of them cheat and why. So, the purpose of the paper is to see (on a sample of FOI students) what students' perception towards cheating is.

The survey was completely anonymous and consists of 27 questions with a choice of multiple answers, entering own response and ranking response using Likert scale. The survey was completed by 57 respondents who replied on online survey. The first few questions are about general things; gender, department, year of study, grade point average. Students were also asked whether they have a personal computer and do they have daily access to the Internet. Other questions from survey were related to cheating: had they (students) ever cheated, how often, what is the reason of cheating, are they caught, how they felt while cheating, what are the most often ways of cheating, what they think about punishments and what they consider by minor or serious violation.

On a sample of 57 students who have been asked to answer the question:

- There was 68,4% male and 31,6% female students;
- 24,6% were graduated and 75,4% undergraduate;
- Students were asked to choose their grade point average (GPA) between 2-2.5, 2.5-3, 3-3.5, 3.5-4, 4-



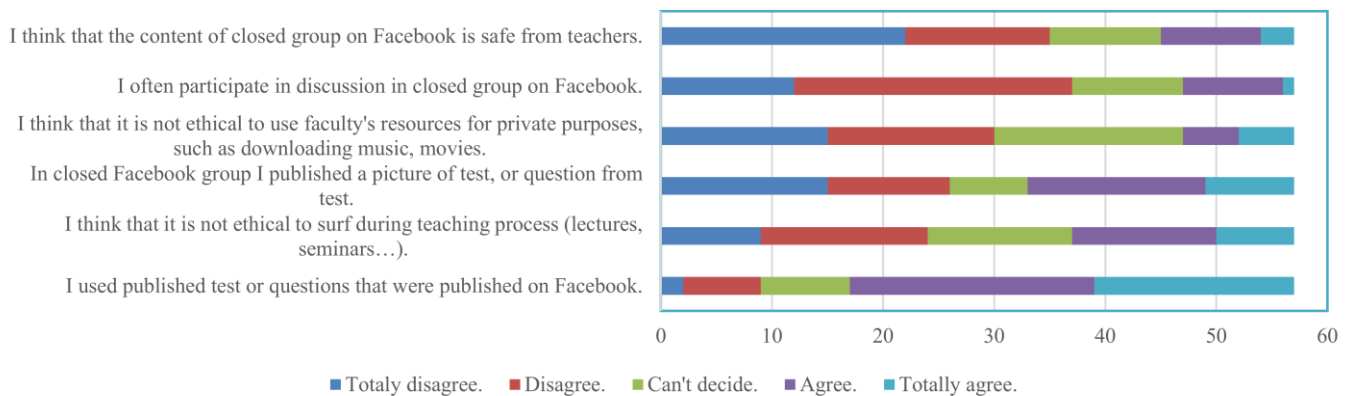


Figure 1. Students' evaluation of selected ethical claims

4.5, 4.5-5. Most common answer was 2.5-3 and no one had chosen GPA 4,5-5;

- On the next very interesting question "Have you ever cheated?" even 93% of students answered "Yes";
- Although a large number of students cheated at least once, next question showed that they do not cheat often. Most of them almost never (50%) or sometimes cheat (35%), just a few cheat always (2%);
- When they were asked why do they cheat most of them answered: "Because what we study is boring and useless" and "I can't catch up with materials, I do not have time to learn". Other answers which students wrote by them own were: "Because I knew I could cheat without being caught", "Opportunity creates the thief – materials are sometimes boring and useless and if it is possible to pass exam by cheating, why not!";
- Interesting result was shown in question: "Have you ever been caught while cheating?". Even 84,2% of students weren't caught and just 10,5% were caught, others didn't cheated;
- A common occurrence in Faculty is taking someone's work without citation – plagiarism. Most students, 57,9% didn't cheated that way, 19,3% did it once and 22,8% more than once;
- The results are showing that very few students were caught in plagiarism, just 20%;
- Even they were caught in cheating, 42,1% of them tried to cheat again;
- All students answered that they feel bad when they are caught while cheating. Most of them feel uncomfortable and few of them don't care;
- Next question is about how they perceive cheating. Nearly half of them, 54,4% perceive cheating as offense (negative), 29,8% as benefit (positive) and 15,8% think something else. For example, they think that cheating is like help, challenge or stupidity;

- There are several methods of cheating. For example, 61,4% of students use smartphones, 33,3% cheat sheets and 5,3% of students use some other methods.

On the end of this part of research we added some claims that were especially interested in last years at Faculty and students had to evaluate how much on scale 1-5 they agree or disagree with the claims. Results of that evaluation are shown on Figure 1. Questions are mainly related to participating on closed Facebook groups where students often discuss about teaching process, teachers, tests. Sometimes those discussions are not positive. Also, students sometimes publish tests and questions from test that they *stealed*.

There were limitations in this survey – number of participants was low (around 5% of all university full-time students). They were selected randomly. Even though many of student had access to survey, only some of them replayed – as they wanted. Survey results are not very positive, satisfying and good because they show that students cheat a lot and very frequently.

#### V. CASE STUDY: RULEBOOK ON DISCIPLINARY AND MATERIAL RESPONSIBILITY OF STUDENTS

Second part of this papers' research is related to analysis how Faculty of Organization and Informatics deal with unethical students' behavior.

In order to deal with students' unethical behavior, many institutions created different documents that describe commonly acceptable ways of behavior. The most often document is codex. Besides codex, institutions can have formal decisions or rule book (regulations) especially related to defining and classifying types of disciplinary offenses. In that direction, Faculty of Organization and Informatics created its' Rulebook on disciplinary and material responsibility of students. There is a body on Faculty level – Disciplinary court – which receives requests for initiating disciplinary procedures from dean (teachers send reports about committed disciplinary offenses to the dean), finds out how (or if) disciplinary offenses are done and determines the disciplinary measures (sanctions).

Rulebook defines minor and serious disciplinary offenses. Some of serious disciplinary offences are: all behavior that is by Croatian's Law classified as felony; falsification of

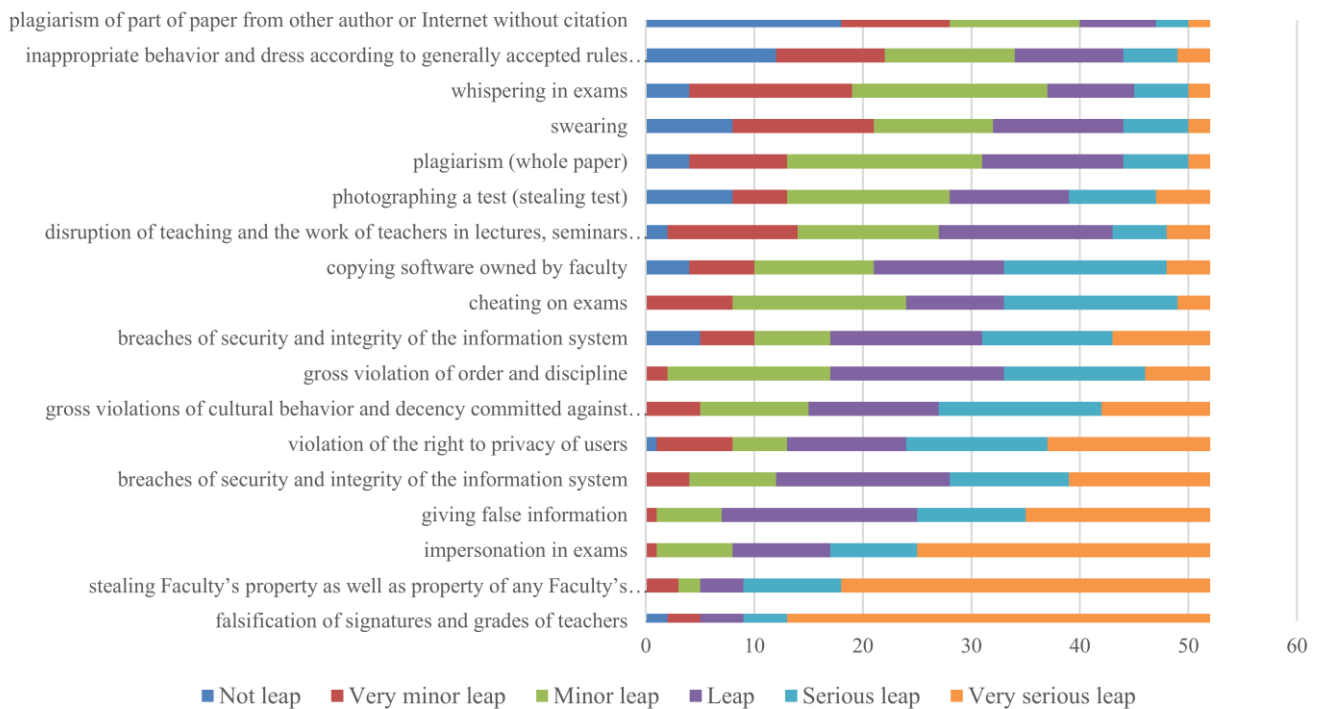


Figure 2 Students' evaluation of disciplinary offences

signatures and grades of teachers; stealing Faculty's property as well as property of any Faculty's employee and student; gross violation of order and discipline; gross violations of cultural behavior and decency committed against teachers and other employees of the Faculty; giving false information or take actions on the basis of which the student achieves some right that does not belong to him, especially: plagiarism of seminar or graduation thesis whose content is work of another student or a third person, copying content from literature or sources on the internet without citation (writing who is the actual author of the content); cheating on exams; breaches of security and integrity of the information system; violation of the right to privacy of users; impersonation in exams. Sanctions for serious disciplinary offences are: last warning before exclusion from faculty; conditional exclusion from faculty during the period of one year maximally; ban on examination; ban on enrollment higher study year; exclusion from the faculty for two years; permanent exclusion from the university.

Some offences that are classified as minor are: disruption of teaching and the work of teachers in lectures, seminars and exercises; whispering in exams; inappropriate behavior and dress according to generally accepted rules for a certain occasion; addressing a teacher or other employee with addressing the "per tu" without his permits; violation of cleanliness of all rooms; smoking in Faculty's rooms. Sanctions for minor disciplinary offences are: warning, public warning and reprimand.

We analyzed work of Disciplinary court of FOI for 28 months. Total number of disciplinary procedures was 56: 55 of them were classified as serious disciplinary offences and 1 as minor disciplinary offence. In case of two students the disciplinary offence was second in their history. For minor

offence sanction public warning has been determined. Sanctions for serious disciplinary offences were: last warning before exclusion from faculty (49 students), permanent exclusion from the university (1 student); conditional exclusion from faculty with ban on examination for 6 months (2 students); ban on examination for 3 months (1 student) and 1 student has been freed of liability.

According to the types of offenses two types are dominating: cheating on exams and giving false information or take actions on the basis of which the student achieves some right that does not belong to him, especially: plagiarism of seminar or graduation thesis whose content is work of another student or a third person, copying content from literature or sources on the internet without citation who is the actual author of the content (plagiarism of students' seminar works, written projects, business plans or similar).

Our survey, explained in forth section, also contained questions related to Rulebook (which is main topic of this section) and how students perceive regulations in it. We asked students if sanctions from Rulebook are correct (appropriate) when observed with offences.

- 64,9% of students think that they are correct, 28,1% finds them too stringent and only 7% finds them too lenient;
- Less than half of students from survey (44%) think that teachers send reports enough; 30 % of them think that teachers should send more reports, and 24% less.
- At Figure 2 we can see how students evaluated different disciplinary offences (using scale 0-5). In total, students do not see big problem in plagiarism

of papers. The most serious leap (offense) by opinion of students is falsification of signatures and grades. On the other hand, plagiarism is perceived mainly as not leap which might be worrisome.

## VI. CONCLUSIONS

After a theoretical introduction in this paper, there is a practical part in the form of a survey. Unfortunately, the survey results show that students are not very ethically conscious. Indeed, only a few are. Cheating on exams nowadays is even easier using modern technology and smartphones. The impact of social networks and media, political frauds and other unfair violations are not good examples for students. Unfortunately, bad influence encourages them for dishonesty. Sanctions at the Faculty sometimes are not enough for students to “learn a lesson”. Therefore, it is necessary to look deeper into the problem of cheating and unethical behavior. The Faculty has defined rules of behavior, but there should be extra seminars where students will try to bring ethics and morality as an essential component of the study. The aim is to achieve that students respect the Code of Ethics and Rulebook on disciplinary and material responsibility. We believe that the Faculty and institutions aren’t totally unable to raise the student’s awareness. Each person is an individual for himself and a lot depends on the own willing. Willpower is the most important. Faculties can introduce some activities in order to influence on changing students’ thoughts, reflections, attitudes and that can result with using students’ own willpower to resist to unethical behavior.

It is important to raise student’s awareness about the importance of ethics and ethical behavior at the Faculty. Here are some recommendations of how it can be done:

- Organizing workshops, seminars, debates related to different hot topic from ethic. For now, it is not enough talked and discussed about this theme. Continuous actualization can help when dealing with this problem.
- If a student makes a specific violation more than once, he should be punished *harder* to teach others on his example.
- However, perhaps the punishment for bad behavior is not the only solution. Maybe Faculty should introduce rewards for good behavior. Good behavior would mean the normal and regular attendance to class, without any violations and attending seminars about ethical behavior.
- Discussions about applying Rulebook at Faculty level, between teachers – for now, a lot of teachers do not report disciplinary offences (even though they are facing this problem often), and actually by doing that, they allow to students to graduate with *holes* in both, knowledge and honesty.

- Presenting *bad stories*. When some student graduate which during the study often used different unethical methods on exams, (s)he didn’t get the knowledge that is needed for job. Those students change their opinions drastically – yesterday: student who only wants to get a paper and tomorrow: students who regret because of it. Presentation of those examples like student-to-student can have influence on students who still have chance to reject unethical methods, take book and start to learn.

To conclude, the concept of ethics is present in many aspects of life. From school to the workplace. It is important to learn what ethics means and why it is important to act in accordance with ethical behavior. The question *how to raise student’s awareness of ethical behavior* will still be opened and subject of many new researches. In this paper we tried to present our experiences and results in order to contribute to the topic and participate in creating more honest world.

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