# Academic Dishonesty – an IDE perspective

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# 1 The purpose of this document

During the past years a dramatic increase of academic dishonesty has been reported world wide. With internet at each desktop, information has been available to anyone instantly but also plagiarism has never been easier than today, but it is also believed that this availability is not the only reason to the increase. New possibilities have changed attitudes and values and the new culture is not always compatible with the culture and values of higher education.

In many respects the old school should be modernized to meet the new expectations and requirements, but there are values that should go the other way. One of them regards of what is right and wrong.

In the class room, the teacher says during the introduction of the course for instance "... and when you write this report you must do it yourself without any help. If you cheat it will be reported to the disciplinary committee!" All the students nod and the teacher is assured that the message came through. The problem of the culture clash becomes obvious when he discovers that some students have co-operated and some students have copied sections of text from a website.

"Didn't you hear me about cheating?" the teacher asks.

"Yes, but I never realized that this could be considered as cheating. I have done this all the time in other courses/at another school I went to. Then it was okay! If I'd knew **this** was cheating I'd of course never done it."

It is of course very hard to determine if the excuse is true or just a simple lie, but in many cases it is actually 100% true. This text is dedicated to all those students that fall into that category. Those that want to cheat and lie will do that regardless of what stands here. The comment to the busted students answer is;

- 1. There are **no** accredited universities that officially recognize academic dishonesty as an acceptable method to acquire a grade, degree or diploma. All schools (world wide) has a program, conduct code, code of honor, honesty policy etc. The information about it might however not always be displayed or discussed on prime time.
- 2. Some teachers have a naïve approach and think that they can handle the situation by themselves. By handling on their own they think that they reduce some paper work and handle it better than some central school bureaucracy. They actually go against the regulations even if they should know better. A teacher acting on his own can get disciplinary actions from the school as well.

This text has no attempt to be a legal document to be used in court. It serves more as a guide and description about the issues around academic dishonesty. The purpose is to explain to the reader what the term academic dishonesty is, and by this avoid situations where the student unintentionally crossed the line with all the consequences that could cause. If a student by awareness and avoidance not even come close to what could be concerned as dishonesty, the quality and level of his/her academic work will probably automatically increase.

Most of the contents of this text is plagiarized and paraphrased from other sources at the internet. All sources are however available at the end of the document. If this paper was submitted as a report in a course without the references it would be an excellent example of academic dishonesty.

This document is limited to describe what academic dishonesty means for a student. Consequences and examples from cheating by researchers or others are not described in this text even if almost all of it is applicable in that scope as well.

If you as a reader have comments or questions regarding the contents of this text, examples or scenarios that can illuminate perspectives on academic dishonesty you are welcome to share them with the author. Anything that can help students from accidentally make them to cheaters is most appreciated from us and your peer students.

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# 2 What is "academic dishonesty"?

In short, academic dishonesty can be described as claiming something as own work when it in reality isn't. It is described in local university regulations [3] and state law [2].

The description can however be interpreted in multiple ways, so this document will describe some of the most common variations of academic dishonesty.

### 2.1 Why plagiarism occurs

Students cite many reasons for plagiarizing, including: (1) being unaware that they're plagiarizing; (2) lacking knowledge and understanding of the subject; (3) poor time management skills; (4) feeling that the subject is unimportant; (5) believing that plagiarism isn't serious; (6) feeling pressured due to over-assessment; (7) poor teaching.

The most common reason given by students is ignorance about plagiarism – that they were unclear about the plagiarism policy and, therefore, unaware that they were doing anything wrong. A common misunderstanding among students relates to paraphrased material. Many students do not realize that paraphrased material should be attributed to the original author in the same manner as a direct quotation.

Some students do not consider plagiarism a serious offence since it does not (in their view) harm other students. Research has shown that students consider cheating in a written final exam to be much more serious than plagiarizing coursework – even if both contribute to final grades [7].

### 2.2 What is examination?

One of the very few things a university teacher by law actually has to do is to examine students [1]. The teacher must in the examination process recognize if the student has fulfilled the goals of the course. One such goal can be "acquiring sufficient knowledge" in a subject and a tool to do so is have tests, assignments, presentations and other examination forms. If nothing else is explicitly said, all examination is performed on **individual** basis. The examination forms and criteria to pass a course must be presented in advance at course start and by the course plan. It is of course very important that those instructions are very clear and precise; for instance what kind of help or tools that are allowed, if you are allowed to co-operate with other students etc.

An important issue is that the student must learn the course objective fulfilling the goals and learning outcomes that is defined by the course plan. This is an absolute measure and has nothing to do with the time spent on a course; that is some students will spend much more time than others. Some students might already have all the required knowledge to complete the course when they start due to other experiences than school. A student might fail if he doesn't reach up to the requirements after 10 weeks even if it is a 5 week course. Time spent and efforts made are actually uninteresting from this perspective.

There is a clear distinction between *knowledge* and *information*. Acquire information is often the first step in the learning process, but then it has to be understood by the student to become practical knowledge. In most cases it is the knowledge of the student in an actual topic that is examined. This means that the student must understand what he is describing. There is no way to evaluate the knowledge of the individual if there has been "helping hands" from others in the picture.

It is of course always the teacher's obligation to have a relevant examination – that is an examination that really can show that the objectives of a course have been fulfilled by the student. It is however never wrong if a student actively shows what he/she has learned in a course, and at higher levels of education activity during examination is more or less required to get high grades.

### 2.3 Why academic dishonesty is wrong

A degree from a university is evidence of achievement in scholarship. Students, upon enrollment, enter a *voluntary* association with the university and academic values.

To pretend acquiring knowledge or accomplish a work when it is a lie can never be rightno matter how big or small it is. There is a zero tolerance against academic dishonesty since knowledge and accomplished work is nothing you can haggle about when you are in a scientific environment. Respect and integrity for those who contribute is essential. Those students that cannot stand up to these values should never study at a university.

First, the only one that is cheated is the one who cheats. Spending time on a university without performing anything is a waste of time.

Second, if a culture in class or a school of cheating is accepted, most people in that environment will adopt into that culture meaning that those that do not cheat see little meaning in doing an effort and will finally cheat as well. The consequence will turn out in poor quality of the students.

Third, the reputation of poor quality of students from a class, program or school spreads fast and takes years or decades for an academic institution to repair. A degree will be less valued, if not worthless, compared to well-reputable institutions with high academic standards and integrity.

By cheating a student does not only risk his own reputation and academic career but as well all the fellow students' degrees and diplomas from past and future are directly put into jeopardy. In the long term acquiring knowledge and earning a degree could just be a waste of efforts, time and money. And in the really long term civilization will collapse and we will have to move back to the caves again.

### 2.4 Examples

#### 2.4.1 Plagiarism – copying

Plagiarism is usually characterized by incorporation of published or otherwise recorded material without full and clear acknowledgment. Even to paraphrase the ideas of others without such acknowledgment is to be guilty of intellectual theft. To quote directly more than three or four consecutive words without the use of quotation marks is also dishonest. All borrowed material, whether quoted or paraphrased, should be documented. [5]

Plagiarism is the use of another person's work (this could be their words, products or ideas) for personal advantage without proper acknowledgement of the original work with the intention of passing it off as your own. Plagiarism may occur deliberately (with the intention to deceive) or accidentally (due to poor referencing). It includes copying material from a book, copying-and-pasting information from the World Wide Web, getting family or friends to help with coursework – even copying answers from a fellow student during an examination is a form of plagiarism (presuming the copied work isn't attributed).

Plagiarism is neither a criminal nor civil offence. In fact, plagiarism is not a legal term and is not legally recognized. But breach of copyright or intellectual property rights (IPR) is illegal; if an act of plagiarism breaches copyright or IPR then it is illegal. Plagiarism of work that has no copyright is of course not illegal, but nevertheless it will be considered as dishonest [7].

#### 2.4.1.1 Paraphrasing

Paraphrasing is a rewritten or small interpretation of a speech or text. A quote that is not exactly matching the source is sometimes called paraphrased. For instance Kennedy's:

"Never ask what your country can do for you!"

can be paraphrased as

"Do not ask what your country can do for you!"

Which of course means the same thing but as a quotation it is wrong. Translation of a text, from for instance English to Swedish, is a form of paraphrasing.

In academic contexts, paraphrasing is considered as simple plagiarizing. A paraphrased text must at all occasions be referred to its origin source, since no own new work has been done. For instance the text to the left is an original text from the computer network company Cisco and the right text is a paraphrased or slightly modified text by a student.

#### Original

While protecting your information may be your highest priority, protecting the integrity of your network is critical in your ability to protect the information that it contains. A breach in the integrity of your network can be extremely costly in time and effort, and it can open multiple avenues for continued attacks. In this section, we describe five methods of attack that are commonly used to compromise the integrity of your network:

- network packet sniffers
- IP spoofing
- password attacks
- denial of service
- application layer attacks

When considering what to protect within your network, you are concerned with maintaining the integrity of the physical network, your network software, any other network resources, and your reputation. This integrity involves the verifiable identity of computers and users, proper operation of the services that your network provides, and optimal network performance—all of these concerns are important in maintaining a productive network environment.

#### Paraphrased

While subscribing to the aphorism that knowledge is wealth and information is power, safe guiding your information for maximum efficiency will certainly rank top on your preference chat. So much efforts, time and money can go down the drain if there is a breach in the integrity of your network; this may/can be open invitations for multiple assaults on network frequency. Five media of assault mainly used in compromising your network integrity:

- Network packet sniffers
- IP spoofing
- Password attacks
- Denial of service
- Application layer attacks

Protecting the physical network and its software coupled with other network resources and company's image are an important issue of interest to any system administrators. While this integrity includes verifiable identity of computers and users there is need to harmonize the operations and the services rendered by your network and the optional performance of your network.

Without a reference the paraphrased text will be considered as academic dishonest. With a reference it will probably not qualify to be academic dishonest, but considered as a bad performed work and failed for that matter. "Getting inspiration" from others to this extent

might be considered as theft. Notice that in this case also the structure of the text is plagiarized and can be considered as academic dishonest since organizing a text is also an important part of the work when writing a paper.

The safest way to write your own text is to put the sources away. Of course you must read texts to get information and acquire new knowledge, but when writing your own text put those texts aside. When you obtain new knowledge you will probably have many sources of information, so read it all first and get your own opinion what's worth mentioning and where the focus should be. Don't fall for the simple and wrong way to plagiarize the one that is closest to you opinion and fill it out with the other texts. And never ever forget to make a reference to the sources since nothing of the above is from your self – except for the work done by writing it all down and maybe some conclusions from your own. These conclusions might after all be the most important part of the text for the examiner and are those that will determine your grade. They are synthesized from your own mind which is a higher form of knowledge than the more mere craft of digesting texts.

There is no fine exact line where a plagiarized paraphrased text turns to an acceptable rephrased text. **In education the required level of independency is often placed into its' context**. For instance it is expected a higher plane of integrity of a text in a course at master's level than in a beginner's course in the same way as it could be expected more from a PhD student than from a student at high school. It is also expected a more thorough work in a student written paper from a course in "scientific writing" than a lab report in "computer architecture" depending on the focus of the course. The closer the goals of a course come to a property of an assignment or exam, the higher requirements of integrity is expected. This statement does however not justify any kind of cheating, but can anyway be some kind of guide in this matter. Always use references and state clearly how the assignment was solved – by this you can at worst just fail instead of being accused of academic dishonesty. The teacher must always be very clear about what is to be expected, but the student must as well ask when there is uncertainty.

#### 2.4.1.2 Why write with you own words?

A common argument to copy text or answers from books and Internet is

"This is so well written. It really says everything and I can't write that better. Why do I have to rewrite answers to questions with something worse [as my own formulation]?"

First of all, the student is never expected to excel authors and researchers that have worked in the area for decades. Second, in most cases the examination's purpose is to determine whether the student understands a topic or learned it to that extent that he deserves to pass and get a grade. By just copying someone else's work the student has just shown that he could find the information and paste it into his own document. Finding information and understanding information are two different things, and in most cases it is the latter that is expected. "Googling" something up and use ctrl+c and ctrl+v is really not much of an academic work. Is it?

#### 2.4.1.3 What about software and laboratory assignments?

Laboratory assignments are important tools to verify theories and strengthen practical skills in the area. Especially the practical skill makes difference between "knowing" and "being acquainted with"<sup>1</sup>, is of very high importance and therefore examined in courses as well.

<sup>&</sup>lt;sup>1</sup> In Swedish the terms are "kunna" and "veta"

The integrity of practical work does not differ from theoretical work and is dealt equally serious from the integrity perspective.

Copying licensed software is often called piracy and is not only academic dishonest but illegal as well. Copyrighted material is not allowed either to plagiarize.

To be a programmer means that you not only are able to understand what a program does but also being able to create programs. The creative part is in programming courses essential. In a beginner's course (such as C or Java) the basics of the creation part is essential and in an advanced course (for instance Software Engineering) platform architecture and structure of the software is more important. Getting "inspiration" from other's solutions is an effective way to destroy the creative part of programming, and the ability for the examiner to recognize a students programming skills is maybe not even possible after this kind of "intellectual contamination".

When programs are created in the real world, re-use code pieces, modules or even complete programs of your own and others is efficient and smart as long as the code isn't protected by copyrights or patents. In education however it is however completely wrong since the objective is to learn create your own programs and the examiner must be able to recognize the students complete programming skills and abilities. If the explicit objective of the assignment isn't learning how to adapt others' code into your own, re-use of code from others is without discussion academic dishonest.

Do not show or give a program from an assignment to anyone. If you wish to help someone, put your program away, and work on their program. If they have no program yet, help them get started by writing on paper or a board, but leave your own program out of it. Even with these precautions, if you develop too much of someone's program for them, the similarities will show, and both of you can easily find yourselves facing charges.

Debugging some else's code is a gray area in this discussion. Many bugs will stump people for many hours, and it's only humane to let people know the pitfall they've fallen into. In most courses students are encourage to help each other in this regard, but be careful: if you find all of someone's bugs, you've deprived them of the process of learning how to find bugs themselves. A rule of thumb is that the fellow student you're helping must be **actively engaged** in the process of searching for the error. Beware of those who merely stand aside and let you fix their program: they're willing to let you make significant contributions to their program, and then turn it in as their own. [3]

More about team work and co-operation can be read in the section 2.4.2 and 2.4.4 below.

#### 2.4.1.4 Self-plagiarism

In many cases it is not accepted to reuse (complete or parts of) work from previous courses. Such work can be considered as self-plagiarism. If you have to possibility and consider reusing such material, always consult your teacher for guidance. At each circumstance you should mention that the material is reused and make a proper reference to the source.

Normally the possibility to reuse shouldn't be feasible. In a carefully planned program of courses there shouldn't occur overlap in such degree that re-use could be possible since that should be considered as a waste of valuable student time. But if the student has a history from a different program or school it is of course likely this opportunity to happen. As a student you should reconsider enroll into such a course in the first place since you might not get full credit for it when you apply for the diploma. In that case you should consult a student councilor.

#### 2.4.1.5 Issues and perspectives

If you for instance are creating a computer program, ask yourself the question: "If this program I'm turning in were worth a lot of money, could someone successfully sue me for a cut of the action?" [3]

#### 2.4.2 Unauthorized co-operation

Examining assignments can be solved individually, in student teams or in other types of constellations. If nothing else is stated, the normal assumption is that the assignment shall be solved individually. The instruction to any examining assignment should however state this explicitly. If the instruction states for instance that it shall be solved in groups of 2 or 3 students it is of course wrong to solve it individually or in a group of 4. If you would like the teacher to make an exception you must ask in advance and to be safe you should get the answer written down at least as an e-mail.

If someone has proof-read your report, helped you to debug a program or provided you with significant material to an assignment or examination moment in a course, you should mention that. Do not take credit actively or passively for something that you haven't done yourself.

This does not mean that students may not help each other; there are just limits to "helping". And the limits are limited to examining parts of a course, which in practice can be tricky to determine. As long as the discussion is general and doesn't go into details of the examining assignment it is acceptable. Observe that examining parts of a course is counting lab assignments, reports, seminar preparations etcetera. Example: A peer student in a basic programming course asks during a lab session;

"Hey, how do I compare if my input string is 'download' in this C-program?"

If this is obviously an important part of the assignment you shouldn't answer

"Use strcmp() and put #include<string.h> in the preamble. I'll show you."

but rather

"Look in the book chapter about strings; there's a section about string compare."

#### 2.4.3 Joyriding

To be able to work in a team is an important and efficient property in today's project oriented world. It has also pedagogical issues since peer tutoring is an efficient way to study at a university where teacher capacity and availability always is limited. In most cases where team work in examination parts is allowed, dividing the task is not allowed. Everybody must be involved in the process. If dividing is allowed, it must be very clear at the presentation of the work who contributed to each part. For example the cover of the report might list all the names in the group but then each chapter states opens with those that contributed to it. It is common to write the person that contributed most first and then in declining order which means that a proof reader might get the last position.

It is however not uncommon that one or some students in a team doesn't contribute to an acceptable level. They do not show up in time or at all when the team has a meeting, they haven't done what was agreed on or just sit and write text messages on the cell phone when all the others are working. This is of course not acceptable from any point of view and the group should make that clear at once. If it doesn't work do not hesitate to talk with the teacher at an early stage. If the teacher shares the view of the situation he could make it clear to the joyrider that he/she will fail if she/he doesn't catch up and improve. The teacher

has also the right to separate the joyrider(s) from the group and by this form a new group. By reducing the labor of a group it is not more than fair to also reduce the assignment size but to what extent must be negotiated and put into context how, why and when the separation was done.

Joyriding is cheating and protecting joyriders is also dishonest.

#### 2.4.4 Fabrication - Make up data or work

Fabrication is the intentional use of information that the author has invented when he or she states or implies otherwise, or the falsification of research or other findings with the intent to deceive[6]. Examples include, but are not limited to:

- citing information not taken from the source indicated;
- listing sources in a reference not used in the academic exercise;
- inventing data or source information for research or other academic exercises.

The last bullet might need some further examples of manipulation, adding, deleting, deceiving, falsifying or excluding source information.

Example 1: An assignment is to make an analysis from about a company, and the data is expected to be collected with interviews of different people at the company. It would be cheating to fake the interviews even if the analysis of the fabricated data is correct. To leave out important facts that turned up during an interview is not only bad journalism, it is academic dishonest as well. If everything doesn't fit into the report, put it in the appendix.

Example 2: A student came late to the laboratory and didn't complete the measurements before the time was up. It would be considered as cheating if he makes up some data to complete the report.

Example 3: A measurement is performed to evaluate or prove a theory. Most samples are nice but a few of them doesn't follow the curve that is expected. To delete those samples is considered as cheating. They should be left as is and commented as for instance a falsification of the theory, inaccurate instruments, special conditions during the measurement or just poorly performed measuring.

#### 2.4.5 Use of unauthorized aids

Read carefully the instructions of how the examination is expected to be performed. Sometimes aids are totally prohibited and sometimes there is a limited list of items that are allowed. Text book and literature might be allowed but not lecture notes on separate papers or in the book itself. A simple calculator might be allowed but not a programmable or a calculator with graphical capabilities. Make yourself clear in advance what is allowed and what is not.

Unauthorized items such as tools, books, notes, communication devices are of course academic dishonest. Ignorance is never a valid excuse.

#### 2.4.6 Substitutes

Employing a substitute to take a quiz, test or examination, or acting as such a substitute is of course cheating...

# 3 Routines

It is in most cases quite easy to find and proof cheating. Tools like "urkund" are being used regularly. Such tools compares all documents that has been turned in previously by all the users which means thousand of teachers nationwide during several years and it also checks with search engines on the internet. Some teachers choose to check everything that is turned in with this tool and some use them on just suspected cases.

The regular routine is when a teacher suspects cheating, he talks with a colleague or director of studies to discuss the matter. They might call for the student and try to analyse what actually has happened. **If the teacher** still **suspects academic honesty, the teacher** <u>**must report it to the disciplinary committee**<sup>2</sup> of the school [3]. The suspicion must be well based but actual proof is not necessary. The teacher must inform the student that he reported the suspected action.</u>

A teacher or a director of studies is not permitted to give any sanctions what so ever regarding academic dishonesty. The only legitimate instance that can distribute sanctions like warnings or suspensions at the university is the disciplinary committee. The committee consists of a lawyer, students and teachers representatives that has no connection with the suspected student.

When the university lawyer receives the report, the student will have a chance to respond to the accusation. When all the material is collected the committee will assemble and the student and teacher will be available to answer the committee's additional questions. After that the committee will publish their sentence.

# 4 Guidelines

Following these guidelines will help you to avoid the pitfalls with a safe distance

- 1. Read the instructions not only the assignment. Make sure that you will solve the assignment with the proper help and aids. If you are in doubt, consult your teacher.
- 2. When an assignment is supposed to be solved "individually" it means that you are not allowed to get or take any help from any other person. "Person" means everybody including students at current and previous course, newsgroups, mailing lists, girlfriend etc. You should solve it in the same way as if you were writing it during a regular written final exam. If you do not understand, want some clarifications or help contact your teacher.
- 3. The names on the cover of a report, thesis, solution to an assignment etc. that is handed in to the teacher are those that have written it and answer for what is written. No more or less.
- 4. Do not take credit actively or passively for something that you haven't done yourself. If someone has proof-read your report, helped you to debug a program or provided you with significant material to an assignment or examination moment in a course, you should mention that.
- 5. Always make a proper reference to texts, diagrams, pictures, statistics, quotes, information, concepts, ideas etc. to anything that is not your own. It is custom to refer to work that is previously done by oneself and should be handled as any reference. From first perspective it might look ridiculous to refer to oneself in third person, but it

<sup>&</sup>lt;sup>2</sup> "Disciplinnämnden"

is nevertheless the clearest way to make it that way. It also gives you the possibility to make it easier for the reader to find out more if it is interesting. Normally only a fraction of a report, essay or thesis is your own work which means that the majority of the text should have references.

- 6. Paraphrased text has its origin from others which means it must have a reference.
- 7. Helping someone to cheat is considered as serious as the actual cheating. If someone steals or "loans" your work you might be suspected to help someone to cheat and you will maybe have to prove that you didn't provide the work intentionally for someone to cheat. It might be even so that you might be accused of stealing others work if you turn in papers later than the cheater. It is therefore in your own interest to protect your own work so it doesn't fall into wrong hands by deleting temporary files on public computers and not leaving printouts in printers. If an assignment is meant to be solved individually there is no reason on earth to show your solution or report to someone other than the teacher. "Individual" means that "helping" and "peeking" is considered as cheating.
- 8. Ignorance of the definitions of academic dishonesty will never be considered a valid excuse or defense so learn them!

## **5** References

- [1] Högskoleförordningen (1993:100) 6 kapitlet, 10§ http://www.notisum.se/rnp/sls/lag/19930100.HTM#K6
- [2] Högskoleförordningen (1993:100) 10 kapitlet http://www.notisum.se/rnp/sls/lag/19930100.HTM#K10
- [3] Greg Kawell, *Cheating and Academic Dishonesty*, CS dept, Samford University, 2004
- [4] Regler och anvisningar för examination i grundutbildningen vid Mälardalens högskola section 2.6 as published 2006-02-23 http://www.mdh.se/stu/studieadmparmen/Examregler.pdf
- [5] Samford University, USA Student Handbook (2004-05) *as published 2006-01-16* http://www.samford.edu/groups/stuaff/handbook/acadlife.html#integrity
- [6] University of Oregon, USA *as published 2006-02-22* http://darkwing.uoregon.edu/~conduct/sai.htm
- [7] Wikipedia *as published 2006-01-16* http://en.wikipedia.org/wiki/Plagiarism