

The Four Stages of Addressing Plagiarism

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Abstract

In Finland, The National Advisory Board on Research Ethics published a document “*Good scientific practice and procedures for handling misconduct and fraud in science*” in 2002. All universities have agreed to follow the exact procedures defined in the document. However, plagiarism within higher education is still a silenced topic, and practically no scientific articles have been published about it in Finland. This article will scrutinise the phenomenon of plagiarism by analysing six plagiarism cases within two universities. The focus is on the time-consuming process of addressing plagiarism in which emotions are expressed strongly both verbally and literally.

The analysis is based on ethnographic data that include observation, documents (notifications of suspected plagiarism, decisions by ethical committees), emails written by suspected plagiarists during the process, and written accounts produced by the whistleblowers of all six cases. Narrative thematic analysis is applied to describe the stages of the process. The first three stages of addressing plagiarism are named disbelief, anger and explaining. When a person notices s/he has been plagiarised, when a teacher notices plagiarism in a student’s paper or when the suspected plagiarist is informed about the suspicion, they all go through stages of disbelief and anger when confronting the situation. Questioning the authenticity of a document can create a hostile conflict in the whole educational community. Explaining the situation from (every)one’s own point of view is the third recognised stage in the process. The fourth stage is dependent on the decision given by authorities or ethical committees: either admission of plagiarism or cover-up/denial of plagiarism.

Introduction

“Although the number of cases of suspected misconduct in science varies, there have only been very few confirmed cases” (Ethical evaluation of research in Finland, 2006, p. 3). This is the “official” view and description of research ethics in Finland and it also implies that plagiarism is almost a nonexistent phenomenon. There have been incidents within higher education in which plagiarism has been suspected, but only a few cases have got the label of plagiarism after they have been dealt with by local and national ethical committees. On the other hand, international research on plagiarism has shown a growing tendency in plagiarism cases (e.g. Park 2003).

The National Advisory Board on Research Ethics published a document “Good scientific practice and procedures for handling misconduct and fraud in science” in 2002¹. All universities have agreed to follow these procedures.² Plagiarism is defined in the document as follows: “to present someone else’s research plan, manuscript, article or text, or parts thereof, as one’s own” (National Advisory Board on Research Ethics, 2002, p. 21). According to the recommendations the suspected or alleged cases of plagiarism are handled locally within the university. If the parties concerned are dissatisfied with the handling of the case, the opinion of the National Advisory Board on Research Ethics can be asked for. (National Advisory Board on Research Ethics, 2002.)

The statement given by The National Advisory Board on Research Ethics (Ethical evaluation of research in Finland, 2006, p. 3) about the small number of plagiarism cases in Finland is verified with teaching material provided on the Board’s Internet pages. The number of suspected plagiarism cases in Finland are based on a survey that was addressed by the National Advisory Board on Research Ethics to the administration of universities and research institutions in January 2003. The questionnaire was mailed to 70 institutions of which 47 replied. Diagrams are used to describe the figures: all in all in Finland in 1998-2002, annually there were 6-22 allegations, 4-16 inquiries, 3-6 investigations and 0-3 found cases of academic fraud. Altogether eight cases of plagiarism were found within Finnish academia between 1998 and 2002. (National Advisory Board on Research Ethics, 2006). In 2007, the Board was requested to give its opinion on two alleged cases of plagiarism: in both the suspect was found guilty of poor reference practice, but no plagiarism was found. (National Advisory Board on Research Ethics, 2008.)

Nevertheless, the Finnish research on plagiarism is scant.³ No national research has been conducted for example on the views and opinions of students or staff in higher education about plagiarism. There are no reliable estimations of how frequent plagiarism is among students and academic staff, and there is no research available on how the matter is dealt with in higher education institutions. The only study within the area of plagiarism was published in the national educational journal *Kasvatus* in 2007 (Kakkonen, 2007). Kakkonen has conducted a small survey about plagiarism and the use of automatic detection programs. Teachers who participated in the study (n=90) work at all levels of education. Seventy per cent of the respondents agreed fully or to some extent that today plagiarism is a problem in the area of teaching. Most teachers had noticed plagiarism at least a few times during terms, and 35 per cent of them noticed it weekly or a few times a month. (Kakkonen, 2007, p. 365.)

¹ The Finnish title does not include the concepts of misconduct and fraud. A direct translation of the Finnish title is: “Good scientific practice and dealing with its violations”.

² The Finnish higher education system consists of two complementary sectors. There are 20 state-run universities working on the principles of academic freedom and autonomy, and 28 universities of applied sciences (polytechnics) (Ministry of Education, 2008).

³ Finnish Wikipedia is lacking material in this subject. In May 2008 there is only a three line definition of plagiarism in Finnish Wikipedia and nothing about scientific misconduct.

The tacit knowledge about the prevalence of plagiarism is alarming for some researchers. There are a few published concerns about the situation. Puuronen (2005, p. 41) refers to his own experiences in teaching and states that “plagiarising is becoming a nuisance in Finnish universities”. Raento (2003) expresses her concern about the way Finnish university students learn to write without using citation marks and failing sometimes to even present the source of their text. Based on her experience as an editor of a journal she also mentions the scarce use of citation marks by Finnish researchers, which sometimes can be interpreted as intellectual theft. Another of her concerns is connected with the use of Finnish language. Many students and also researchers seem to believe “that translating text from one language to another frees the writer for example from the duty to announce the citation” (Raento, 2003, p. 280). In a way the current situation in Finland resembles to what Brian Martin (1994) wrote about plagiarism in another cultural context almost 15 years ago: “[...] it is much more common among both students and scholars than usually recognized and hence infrequently punished.”

The aim of this paper is to focus on the process and difficulties that occur in alleged plagiarism cases. The paper is based on six different cases of suspected plagiarism, the aim is to analyse proceedings in addressing plagiarism, and there is no attempt to estimate the actual extent of plagiarism. A pattern in the process of addressing plagiarism in a university setting is introduced. The concept of whistleblower (e.g. LaFollette, 1996, pp. 137-155) is used of the person who starts the process of defining whether this is a case of plagiarism. There is no national research on the phenomenon of whistleblowing, but the concept was made familiar to Finnish researchers in an article written by Palo in 1999. He drew conclusions from international research and ended up stating that generally notifying about a suspicion of plagiarism causes whistleblowers trouble and hardly ever any praises. It is a common practice in the context of research or higher education to ignore the notification, to protect the person who committed scientific misconduct or to claim that “we don’t know anything about this”. (Palo, 1999, pp. 41-43.) The problematic nature of dealing with plagiarism suspicions is expressed by Martin (1994): “Plagiarism among practicing intellectuals is widely considered to be completely unacceptable, but doing something about it is another matter.” Mallon (2001, p. xiii) has also captured the duplicity of our attitudes towards plagiarism by saying that most of us “prefer gossip about plagiarism to real inquiry”.

Data and method

For this study ethnographic data have been collected on six different incidents of suspected plagiarism in two Finnish universities (appendix 1). The data include observation, documents (notifications of suspected plagiarism, decisions by ethical committees) and written accounts produced by six informants (whistleblowers) for the purpose of this study. Three of the informants are those who were plagiarised and they found their own text in other researcher’s text, one informant found plagiarism in a manuscript soon to be printed and two accounts concern student plagiarism. The informants preferred to write the account themselves instead of being interviewed. Most of the informants are writers as they work as researchers and thus the accounts are well written, and in a way the first level of analysis is done by the informants themselves.

In all cases there are text extracts available that show a new reader the similarity of the texts (one example provides in appendix 2). The texts are copied either word to word (mainly from electronic sources) or there are only minor alterations in the wording. In one of the cases (case A) both the original and the copied documents are in English, and in the other cases the texts are in Finnish.

The data are brought together in a way that each case forms its own chronologically proceeding narrative. In this way the case is not only told or written by one informer; instead the narrative also covers some of the happenings (e.g. emails, statements, discussions). The narrative refers both to the process of making a story and to the result of this process. The aim has been to form progressive narratives, in which each case is followed toward the solution (Polkinghorne, 1988, pp. 13-14).

Narrative thematic analysis is applied to describe the stages of addressing plagiarism. The early observations were about the power and gender relations related to plagiarism (male professors plagiarise female students' or researchers' texts). Later, with more plagiarism cases under scrutiny one of the main themes found was the anger that plagiarism causes in actors involved in the cases. Further analysis revealed a pattern of certain stages. Originally the data consisted of cases in which plagiarism took place among researchers, but also in the cases of student plagiarism similar stages were found and thus two more cases (E and F) were included.

The four stages follow the chronological order of happenings after the notification of suspected plagiarism. LaFollette (1996) has named the stages of addressing plagiarism as exposure, action (investigation and evidence) and resolution (correction, retraction, punishment). In this paper experiences are emphasised and the four stages are named disbelief, anger, explaining, and admission /cover-up.⁴

Disbelief and anger

How do suspicions of plagiarism arise? The informants describe the first moments of how they started to suspect that the text or part of the text is plagiarised from another source. In three cases the informant found his or her own text in a publication, thesis or research plan. Suspicion of plagiarism came as a surprise and the informants describe how disbelief was their first reaction.

“My first thought was that this is not true [...] I started to suspect myself and I had to check the text once again in detail... help me, what do I do now?”

“The co-writer rang me in the evening and said that ‘you don’t believe what he did now’. I checked my email - the professor had sent a direct copy of our text as his own research plan. Even the properties of the document were the same, he only had used save as! Unbelievable!”

When a person notices s/he has been plagiarised or when the suspected plagiarist is informed about the suspicion anger takes over in confronting the situation. Anger is expressed in choosing rough wording both in speech and emails, and when anger arises the use of bad language increases.

”I was told that the text had been published in a book over a year ago and I realised that someone could compare my text to this text and think that I am the one who plagiarised and then I started to get angry.”

“I started to get angry and feel “abused”, honestly said I got really pissed off. And after that my reaction was aggressive: for f... sake this is not going to be left here!”

In cases of student plagiarism, firstly the students' denial and blaming the teacher for the incident (cf. Larkham & Manns, 2002, p. 346) and secondly, the reactions of some colleagues or superiors in

⁴ The naming of the stages is based on the well-known stages of grief developed by Elisabet Kubler-Ross (On Death and Dying, 1969, New York: MacMillan).

the university raised anger (cf. Lang, 2007). Anger was apparent if a colleague or superior spoke up for the student and belittled the teacher's work performance.

"After this hell exploded. The student complained [...] I received from my superior 3-4 emails that were completely inappropriate for a superior. He entirely discredited my professional skill [...]"

Questioning the authenticity of a document can create a hostile conflict in the educational community. The suspected plagiarist can start persuading workmates to go against the whistleblower. In five of the cases the whistleblowers received angry accusations and (hidden or open) threats either from the suspected plagiarist or other persons involving themselves to the matter. The accusations came either by phone or email.

"It was sort of surrealistic that I – who for once tries to defend herself – become the target of threats and accusations".

One informant who had witnessed a few cases of suspected plagiarism in her department condensed the hostile atmosphere and accusations around plagiarism suspicions when she said: *"There is no other issue within science or university that sensitive as plagiarism"*.

Explaining

After the notification the suspected plagiarist is asked for an official statement. Besides the protocol according to which all parties are to be heard (National Advisory Board on Research Ethics, 2002) suspicion of plagiarism initiates a social process involving the suspected plagiarist, the administration and the work community in explaining what actually happened. Explanations flourish and some of the excuses and "explaining techniques" offered by the suspected are similar to those described by Brown (2007) in his satirical article. The blame can be put on the computer: a wrong section or an early draft has accidentally been forwarded. It can be claimed that the original idea dating back 25 years belongs to the suspected plagiarist and that gave the right to use another researcher's text. One of the suspected plagiarists keeps arguing that sloppy scholarship is so common that it justifies his actions: *"Everyone is doing it!"* In three of the cases the suspected plagiarists included hidden pleas in their unofficial emails or official statements when they mentioned sickness in the family or heavy workload or rotten atmosphere at work. In addition, denial seasoned with threats is used by the suspected plagiarist.

"I detain to myself the right to take measures due to this groundless suspicion that defames me and my professional honour". (from suspected plagiarist's response)

However, explaining does not only concern the suspected plagiarist. In the process of addressing plagiarism also the whistleblower is faced with situations in which s/he is demanded to explain what are the "real" reasons and motives behind *"this kind of behaviour"*. In the data, there are descriptions and extracts of persuasive messages and negotiation pleas the whistleblowers received from the suspected plagiarist or someone in the organisation who was in a friendly relation with the suspected. Whistleblowers were suggested to change their mind and withdraw the notification.

At the explaining-stage the discussion about plagiarism can go to the "side tracks". The discussion about what is plagiarism can be blurred and the proponents of the suspected plagiarist lead the discussion in other issues, e.g. the quality of the original paper, the quality of the whistleblower's work, the whistleblower's misunderstanding of the concept of plagiarism and even the laziness of

the whistleblower. In this way it is possible to mix the discussion and lead it to areas and issues that are not relevant in addressing plagiarism.

Admission or cover-up

Out of six cases on focus here in only one the plagiarist has admitted plagiarism. In other cases the suspected deny it. Only one of the cases has ended in a clear admission of plagiarism (case F, the student received a personal warning from the university). If researchers were suspected administration or local ethical committees did not find evidence of plagiarism. In cases A and C also the National Advisory Board on Research Ethics has stated that the proceedings of the university and the suspected plagiarist are acceptable and according to good scientific manner.

The procedures of addressing plagiarism emphasise “fairness and impartiality, the hearing of all parties concerned, and a speedy process” (National Advisory Board for Research Ethics, 2002, p. 22). In one of the cases the solution is not yet available even if the notification has been in consideration for four months. Holding off decisions is present in some of the cases and the handling of a case can take up to two years.

” I received a letter that the secretary of the ethical committee had signed 31.10.2007. The letter announced that the ethical committee had considered my case 25.5.2007 and discovered that in the case there were no problems concerning research ethics and that there is no need for further consideration.”

Definition of plagiarism can be blurred also in the final statements and decisions if authorities do not answer the question if there was plagiarism or not in the case.

”Primarily this seems to be a question of losing mutual trust between the researchers, which in hurried work situations may lead to carelessness and misunderstandings” (official statement from the university)

”Open discussion never took place. Quietly instruction of theses was taken away from me and my colleague.”

The solutions and statements about plagiarism prepared by different authorities in a certain case can also be contradictory. Two committees attached to the Ministry of Education, The National Copyright Council and The National Advisory Board on Research Ethics came to different conclusions in one case (case A). The National Copyright Council (2006) came to a conclusion that the professor had violated the copyright of the original writers. The National Advisory Board on Research Ethics disapproved the Copyright Council’s decision and stated that *“the text presented in the research plan does not represent plagiarism”*. Thus the same case has been seen both as violation of copyright and good scientific practice. When the National Advisory Board of Research Ethics approves the use of a conference abstract by someone else than the writers, the Board manages to dishonour its own definition of plagiarism. The Board defines presenting “someone else’s text as one’s own” **to be plagiarism** (National Advisory Board on Research Ethics, 2002, p. 21), but regardless of that, the Board defines presenting someone else’s conference abstract as one’s own **not to be plagiarism**. The board uses “openly exchanged information” (National Advisory Board on Research Ethics, 2008, p. 4) as an argument to accept the use of someone else’s text.⁵

⁵ The argument reminds one of the excuses mentioned in Brown’s article (2007, p. 6): “It’s okay to plagiarize from people you once worked with.”

Discussion

Solutions to the cases presented in this paper show that defining plagiarism is not a neutral process. Discussion of whether there is plagiarism in a case or not can become very “heated”. The procedures dealing with suspected plagiarism in the context of higher education and research create a complicated interaction process between the persons involved, and sometimes even persons who are not involved start to give opinions on the matter. The interpretation of the concept of plagiarism remains unclear in Finnish research and higher education. Even if the official definition is distinct and widely accepted the cases show that rhetoric and practice differ, and the severity of plagiarism is estimated differently by different actors. The decisions tend to favour the (suspected) plagiarist.

Park (2003, p. 472-473) introduces the colourful rhetoric used in texts when writers describe what plagiarism is. The words and expressions used in Finnish language about plagiarism, however, are soft and benign especially if compared to those used in English. In Finland plagiarism is not sin, theft, forgery, crime, fraud or hoax. Instead, plagiarism is mainly referred to as poor practice. The choice of expressions in talking about plagiarism and the solutions to the cases analysed in this paper remind the situation described by Mallon (2001, p. xiii), when he states that we often see plagiarism mistakenly “an excess of something legitimate”. Thus there is a danger that nationally the solutions given to suspicions of plagiarism lead to friendly attitudes towards plagiarism. We can talk about a hidden curriculum in higher education: It is no use to inform about suspected plagiarism if there are no real sanctions; the reactions in academia cause more harm to the whistleblower than to the plagiarist; even if there are clear guidelines about avoiding plagiarism, new interpretations of guidelines can lead to cover-up of plagiarism. And if only students are expected to avoid plagiarism and follow the guidelines with a threat of punishment, we have ended in a situation of a double standard where university students and staff are treated differently (Posner 2007, p. 90).

Larkham and Manns (2002, p. 347) emphasize the stress involved in the process of addressing plagiarism which might leave “some colleagues reluctant to pursue plagiarism”. Within the data analysed in this paper there is evidence of strong “whistleblower reactions” and hostile attitudes towards the whistleblower. These reactions are largely ignored in organisations, and it can be asked if hostility towards the whistleblower is (silently) accepted. In the cases where plagiarism was not admitted or addressed there is a tendency both to cover up and to shut up the discussion (Mallon, 2001, p. 152). As one of the informants puts it: *“This is like a taboo, we are not allowed to talk about how common plagiarism is in the university, there is no space for rational discussion about plagiarism.”*

References:

- Brown, T. (2007) Ward Churchill's Twelve Excuses for Plagiarism. Plagiary: Cross Disciplinary Studies in Plagiarism, Fabrication, and Falsification [online], 2 (7), pp. 1-12. Available from: - <http://www.plagiary.org/2007/twelve-excuses.pdf> [accessed 15 April 2008].
- Ethical Evaluation of Research in Finland (2006) National Advisory Board on Research Ethics, National Advisory Board on Health Care Ethics, Cooperation Group for Laboratory Animal Sciences, National Advisory Board for Biotechnology and Board for Gene Technology. Available from: -<http://pro.tsv.fi/tenk/ENG/Publicationsguidelines/EthicalEvaluationofResearchinFinland.pdf> [accessed 15 April 2008].
- Kakkonen, T. (2007) Plagiarismi sekä sen havaitseminen ja estäminen Internet-aikakaudella. (*Plagiarism and its detection and prohibition at the Internet era.*) Kasvatus 38 (4), pp. 364-369.
- LaFollette, M. C. (1996) Stealing into Print. Fraud, Plagiarism, and Misconduct in Scientific Publishing. Berkeley: University of California Press.
- Lang, J. M. (2007) It's Not You. Chronicle of Higher Education 54 (9), p. 78.
- Larkham, P. J. & Manns, S. (2002) Plagiarism and its Treatment in Higher Education. Journal of Further and Higher Education 26 (4), pp. 339-349.
- Mallon, T. (2001) Stolen Words. The Classic Book on Plagiarism. (First published in 1989.) Orlando: Harcourt.
- Martin, B. (1994) Plagiarism, a misplaced emphasis. Journal of Information Ethics 3 (2), pp. 36-47. Available from: - <http://www.uow.edu.au/arts/sts/bmartin/pubs/94jie.html> [accessed 15 April 2008]
- Ministry of Education (2008). Education. Available from: - <http://www.minedu.fi/OPM/Koulutus/?lang=en> [accessed 2 May 2008].
- National Advisory Board on Research Ethics (2002) Good scientific practice and procedures for handling misconduct and fraud in science. Available from: - <http://www.protsv.fi/tenk/ENG/Publicationsguidelines/htkeng.pdf> [accessed 26 April 2008].
- National Advisory Board on Research Ethics (2006) Research Ethics. Teaching material. PowerPoint presentation of National Advisory Board on Research Ethics for free use. Available from: -<http://www.tenk.fi/ENG/news.htm> [accessed 26 April 2008].
- National Advisory Board on Research Ethics (2008) Annual Report 2007. Available from: - http://www.tenk.fi/ENG/Publicationsguidelines/annualreport_2007.pdf [accessed 26 April 2008].
- National Copyright Council (2006) Tutkimussuunnitelmaan liittyvät tekijänoikeuskysymykset (*Copyright issues concerning a research plan*). Tekijänoikeusneuvoston lausuntoja 2006:4. Available from: - http://www.minedu.fi/export/sites/default/OPM/Tekijaenoikeus/tekijaenoikeusneuvosto/tekijaenoikeusneuvoston_lausunnot/2006/liitteet/TN_2006-4_edi.pdf [accessed 6 May 2008].
- Palo, J. (1999) Ilmiantaja tutkijayhteisössä. (*A Whistleblower in Researcher Community*). In:

Lötjönen, S. ed. Tutkijan ammattietiikka. (*Researcher's Professional Ethics*.) National Advisory Board on Research Ethics, pp. 40-43. Available from: -
http://www.minedu.fi/export/sites/default/OPM/Julkaisut/1999/liitteet/tutkijan_ammattietiikka_99.pdf?lang=fi [accessed 26 April 2008].

Park, C. (2003) In Other (People's) Words: plagiarism by university students – literature and lessons. Assessment & Evaluation in Higher Education 28 (5), pp. 471-488.

Polkinghorne, D. E. (1988) Narrative Knowing and the Human Sciences. Albany (N.Y): State University of New York Press.

Posner, R. A. (2007) The Little Book of Plagiarism. New York: Pantheon Books.

Puuronen, V. (2005) Tutkintoja keinolla millä hyvänsä. (*Degrees with what ever the means*.) Tieteessä tapahtuu 22 (1) pp. 40-42. Available at -
<http://www.tieteessatapahtuu.fi/0105/puuronen.pdf> [accessed 6 May 2008]

Raento, P. (2003) Erottavatko muiden ajatukset omistasi? (*Do your thoughts stand out of other people's thoughts?*) Terra 115 (4), pp. 278-282.

Appendix 1

The Cases**Case A.**

Two researchers write a conference abstract in March 2005, the abstract is approved in April 2005 to be presented in July 2006 (international conference). Professor presents the abstract text in May 2005 almost word by word as his own research plan in a research proposal for Academy of Finland. The university and The National Advisory Board on Research Ethics fail to find plagiarism in professor's text. The National Copyright Council sees the case as a copyright violation.

Case B.

Assistant professor uses text from his student's Master's thesis (published electronically) in an edited book in which he himself is one of the editors. The text is identical in three paragraphs and in another three paragraphs the text is very similar both in wording and structure. The publisher and the university are aware of the case, but no actions are taken.

Case C.

A doctoral student uses text written by his supervisor. The university fails to find plagiarism, neither does The National Advisory Board on Research Ethics. The PhD thesis is accepted and published.

Case D.

A researcher is found to have used an extract from another researcher's PhD thesis in an edited book. The ethical committee of the university is notified of academic misconduct. The matter has not been dealt in the ethical committee within four months.

Case E.

A student presents a text as her bachelor's thesis. The instructor and a forum of university teachers find the text plagiarised from published texts, and the student fails to use appropriate references. The faculty accepts the thesis and the student graduates. The obligatory archive copy of the thesis is non-existent.

Case F.

A student presents the methodology and research design of her planned Master's thesis. The text is copied from a thesis published electronically a year earlier in another university, copying is mostly word by word, original source is not mentioned. The assignment is failed and the student receives an official caution for plagiarism.

Appendix 2

Example: Extracts of Texts1. Original abstract written by two researchers (31.3.2005)

Finland as a Nordic welfare state has provided high educational level for its citizens, but the differences between the older and younger generations remain wide. Finland is often named as an example of an informational society, where emphasis placed on the knowledge is largely based on the rapid social changes such as use of information technology and globalization.

In our presentation we shall present results of a study concerning the significance of initial education on the life course of Finnish adults. We use a large panel data formed by Statistics Finland drawn from various registers covering a ten per cent sample of Finnish adults who were 18-64 years old in 2000 (n=326 856). The data include the major transitions in the life course such as educational degrees and educational level, occupation, socioeconomic status, employment and unemployment, place of living and family relations (marriage, divorce, children). To capture the significance of initial education we study the life course transitions and divide the population into five cohorts based on different possibilities to education in childhood and youth and the relation of the cohort into the widening use of information technology. The childhood of the oldest cohort (born 1936-1944) was at the time of Second World War and their initial education was short. The baby-boomers (born 1945-1954) experienced the crowded schools, but had opportunities to vocational educational. Those born in 1955-1964 experienced the widening opportunities of education as well as tightening competitions at the gates of the grammar schools. The cohort born in 1965-75 is the first one to go to comprehensive school and who have had information technology introduced either in school or early years of work. The youngest cohort, the “internet generation” (born 1976-1982) has had wide educational opportunities and information technology has been taught in their initial education.
(text continues)

2. Text presented and signed by professor as his research plan (11.5.2005)**Hypothesis**

Finland as a Nordic welfare state with a strong feeling of nationalism has provided high educational level for its citizens, but the differences between the older and younger generations remain wide. Finland is also often named as an example of an informational society, where emphasis placed on the knowledge is largely based on the rapid social changes such as industrialization, use of information technology and globalization (Castells & Himanen 2002). In my study, I shall analyse the significance of initial education on the life course of Finnish adults. According to my hypothesis a high level of initial education means the cumulative advantage which is realized as human capital, cultural capital and/or identity capital (Dannefer 2003; Bourdieu 1986; Cote 1996).

Data and analysis

We use a large panel data formed by Statistics Finland drawn from various registers covering a ten per cent sample of Finnish adults who were 18-64 years old in 2000 (n=326 856). The data include the major transitions in the life course such as educational degrees and educational level, occupation, socioeconomic status, employment and unemployment, place of living and family relations (marriage, divorce, children). To capture the significance of initial education I study the life course transitions and divide the population into five cohorts based on different possibilities to education in childhood and youth and the relation of the cohort into the widening use of information technology. The childhood of the oldest cohort (born 1936-1944) was at the time of Second World War and their initial education was short. The baby-boomers (born 1945-1954) experienced the crowded schools, but had opportunities to vocational educational. Those born in 1955-1964 experienced the widening opportunities of education as well as tightening competitions at the gates of the grammar schools. The cohort born in 1965-75 is the first one to go to comprehensive school and who have had information technology introduced either in school or early years of work. The youngest cohort, the “internet generation” (born 1976-1982) has had wide educational opportunities and information technology has been taught in their initial education. (cf. Kauppila 2002; Antikainen & Kauppila 2002; Antikainen & Harinen 2002.)
(text continues)