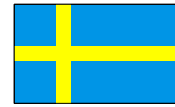


Minerva Questionnaire – Bodil Andersson, Spella Ltd, Sweden



SWEDEN

To complete this report, I have made telephone interviews (in two cases, face-to-face interviews) of roughly 1½ hours each with the coordinators for students with disabilities at 14 higher education institutions (HE from now on) in Sweden. This includes an interview with the national coordinator in Stockholm, Monica Svalfors, who deserves a special acknowledgment.



A questionnaire has also been sent to Swedish HE students with dyslexia through the coordinators for students with disabilities by e-mail or regular mail. About 120 students have kindly responded. Considering that there are about 1500 known students with dyslexia in HE in Sweden, this is a small sample, and probably not representative as it seems that disproportionately many responses came from students who had no ICT support. However, some interesting points have come to hand through the students' questionnaires and they will be presented in the following.

Interviews were made with coordinators for students with disabilities at HE institutions in the cities of Luleå, Umeå, Sundsvall, Uppsala, Stockholm, Eskilstuna, Linköping, Borås, Gothenburg, Halmstad, Kristianstad, Lund and Malmö.

Basic facts about Sweden

Year of entry to EU:	1995
Political system:	Constitutional monarchy, parliamentary democracy.
Capital city:	Stockholm
Total area:	450,000 km ² (174,000 sq. mi.) which makes Sweden the third largest country in Western Europe.
Population:	9 million people
Currency:	Swedish kronor (SEK). €1 = 9,12 SEK (Aug 27 th 2004)
National Language:	Swedish
Recognised minority languages:	Sami (Lapp), Finnish, Meänkieli (Tornedalen Finnish), Yiddish, Romani Chib (a Gypsy language).
Numbers of students in HE:	340 000 in undergraduate studies 18 900 active PhD students (study year 2002/2003).

Legislation regarding disability

The Swedish Disability Ombudsman (Handikappombudsmannen, HO from now on) works for people with disabilities, was established in 1994 and is a government authority. The HO monitors the rights and interest of people with disabilities. The foundation for the activities of the HO are the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities. Sweden has approved the Standard Rules and undertaken to comply with them. The HO was established to monitor how the Standard Rules are observed in Sweden. The Swedish Riksdag (Sweden's legislative assembly and supreme decision-making body; elected by and representative of the people of Sweden) and the Government decide on the functions of the Disability Ombudsman.

The key legislation/documents in the field, include:

- a) **The Disability Ombudsman Act and The Instructions Ordinance**, which prescribe the legal background, powers and formal procedural rules, etc. for the HO and the Office of the Disability Ombudsman.
- b) **Prohibition of Discrimination in Working Life of People with Disability Act (1999:132)**, which basically aims to eliminate all forms of discrimination of people with disabilities in the area of working life.
- c) **Equal Treatment of Students at Universities Act (2001:1286)**, which is for instance aimed at making higher education, both entry and study, more accessible in all respects for people with disabilities.

A new law took effect as recently as July 1st 2003. It is The Act Banning Discrimination (2003:307). Basically, this law strengthens the rights for people who may have been discriminated on basis of ethnic origin, religion or other belief, sexual orientation or disability, as the obligations of institutions, associations, employers etc are made clearer. If they fail to fulfil their obligations, they may, for example, be convicted to pay the damages. The new law covers a number of areas in society such as goods, services and housing, the labour market and the licensing of professions.

More information on Swedish legislation against discrimination can be found at <http://www.ho.se/start.asp?sida=348&lang=en> and <http://www.oppnare.se/files/Engelska.pdf>

General view on dyslexia

Dyslexia is generally accepted as a disability in Sweden, but we still struggle with some issues in relation to this. In Sweden, several professional groups are involved in the dyslexia field: psychologists, speech and language therapists (the education of speech and language therapists' in Sweden includes a considerable part on written language) and special education teachers. There is no group equivalent to the UK's "educational psychologists" All these categories carry out reading and writing assessments, using partly similar, partly different assessment tools.

Nothing in Swedish legislation decides which professional group “owns the dyslexia issue” and there is no definition, or cut-off point, which all professional groups completely agree upon. According to Swedish school legislation, there is no need for a certain diagnosis in order to get the help required at school, but still, there are schools where this is asked for.

Different classification systems are used, some are intended for patient registration within the health system; another one is used within the unemployment services etc. It is important to appreciate the difference between descriptive scientific definitions and those used for clinical purposes, or for deciding about access to special education or other resources. For the individual, this situation can theoretically cause some problems, for example if access to remediation and technology requires a “dyslexia certificate”. However, most professionals would agree on a definition of dyslexia in line with a well-known, widespread definition by professors Høien & Lundberg (1999)¹ which in essence says that: “Dyslexia is a persistent disorder of decoding the written language, caused by a weakness in the phonological system.” This states that dyslexia is a language-based disorder. A recent consensus study among Sweden’s 24 PhDs in the dyslexia field, carried out by professor Mats Myrberg of the Stockholm Institute of Education, confirms this view. Having said that, most people in the field appreciate the considerable comorbidity in dyslexia: many of the people with dyslexia, as described by the “core” definition above, would also display related symptoms, such as working memory difficulties or organisational difficulties. There is a growing interest in these possibly related conditions, as well as in dyscalculia and multilingual issues.

According to the National Board of Health and Welfare in Sweden, it is “customary within the health service to have a registered medical doctor or a registered psychologist carrying out the assessment, but anyone with sufficient skills can do it. An assessment requires pedagogical competence as well as qualifications from the health system” [*my translation*]. Note that this covers only the custom in the health system. Within the unemployment services, it would normally be a psychologist who assesses; in hospitals a speech and language pathologist, and here the WHO classification system ICD-10 *has* to be used. In schools, there is a variety of solutions and actual practice varies with local conditions. Usually, a trained special education teacher or a school psychologist would carry out the assessment.

In 1990, the FMLS, which is the main Swedish user organisation for people with reading and writing difficulties (www.fmls.nu) with about 6,000 members, was acknowledged as a handicap organisation in Sweden. This means, for example, that any governmental suggestion concerning citizens with reading and writing difficulties is referred to the FMLS for consideration. Quite understandably, this acknowledgment was interpreted as a general acceptance of dyslexia as a disability, but it definitely did not mean that Sweden then agreed upon the fine definitional issues. The FMLS is not an association for “pure” dyslexics; as a handicap organisation it welcomes anyone who finds reading and writing a struggle.

¹ Høien T & Lundberg I (1999), *Dyslexi. Från teori till praktik* [Dyslexia. From theory to practice]. Stockholm: Natur och kultur publishers.

During the nineties, the general understanding of dyslexia was raised considerably in Sweden. Several efforts during the Literacy Year of 1990, as proclaimed by the UN, helped increase the understanding for the reading disabled in Sweden. A successful nation-wide campaign was arranged in 1997 to raise the public's awareness about dyslexia/reading and writing problems, directed by FMLS and The Swedish Dyslexia Association and others. Many dyslexia resource centres started in the nineties, as did special teacher training courses and courses for psychologists and speech and language therapists. A large number of conferences relating to the field of dyslexia have also been arranged.

Guide to the education system

The Swedish public school system is made up of compulsory and non-compulsory education. Compulsory schooling includes regular compulsory school, Sami school, special school, and programs for pupils with learning disabilities. Non-compulsory schooling includes the preschool class, upper secondary school, upper secondary school for pupils with learning disabilities, municipal adult education, and adult education for adults with learning disabilities.

Historically, private schools have been rare in Sweden. However, in 1992, after a reform which made it possible for private education sites to receive governmental funding, a steady increase of private schools has been seen. Today, there are 600 private compulsory schools and 273 private upper secondary schools in Sweden².

Swedish children start school at age 7, or upon request by the parents, at age 6. After the nine-year compulsory school attendance, most children continue to upper secondary school, which lasts 3-4 years. All education throughout the public school system is free. More information about the Swedish school system at www.skolverket.se/english/system/swedish.shtml

32% of the Swedish population aged 25-64 have completed higher education. There are 38 institutions of higher education run by the state through the Ministry of Education and Science plus 9 semi-private institutions of higher education that are partly run by the state, and also the University of Agricultural Sciences. The major learning sites are located in Gothenburg (31 000 students), Lund (29 000) and Stockholm (26 000). 15% of the students have an immigrant background.

The median age of a Swedish student today is 22:4 years. Higher education is government funded and, with very few exceptions, there are no tuition fees for Swedish or even foreign students. A requirement when applying for higher education, is a pass in the "core subjects" Swedish and English. More about the consequences for dyslexics later in this report.

The Swedish academic year has two terms: Spring term, running from mid January until early June, and Autumn term between late August and early January. Full-time study for one term is equivalent to 20 points, which equals one point for each study

² <http://www3.skolverket.se/friskola03/friskola.aspx>

week. A Bachelor's degree requires at least 120 points and a Master's degree 160. Postgraduate studies can end either in the achievement of a PhD of 160 points or a licentiate's degree of at least 80 points.

Guide to disability in higher education

At all institutions of higher education in Sweden, there is a contact person/coordinator who works with issues regarding educational support for students with disabilities. The coordinators are annually involved in turning the national policy plan into a plan. More information regarding HE and disability in Sweden can be found at www.studeramedfunktionshinder.nu/english/ www.heagnet.org

Through contact with the coordinator, a student with a documented disability will have access to compensatory support during the academic study years. For a student with dyslexia, this might mean extra time at examinations and note-taking (another student gets paid for this) or using assistive technology. At an increasing number of HE institutions, there is also a dyslexia pedagogue, with whom the dyslexic students can discuss and plan practical study issues such as study organisation.

The tables below come from www.studeramedfunktionshinder.nu/english/

The first table shows the latest statistics regarding disabled students in Sweden. It is obvious that the group who has specific learning difficulties/dyslexia constitute the vast majority. Today, they make 54%³ of all the students with a known disability, i. e. *those who have contacted the coordinator* – more disabled students are likely found in hidden statistics. In total the recognised students with dyslexia equal about 0,44% of all students (converted into full-time students).

	2003
	In all
specific learning difficulties, dyslexia	1 456
visual impairment	162
mobility impairment	360
deaf students (with interpreter)	149
deaf students (teacher knows sign language)	15
neuropsychiatric disabilities	97
mental illness	141
hard of hearing students (without interpreter)	140
others	157
postgraduate students	21
In all	2 698
Students who have been in contact with the coordinator for planning of the studies, without applying for other forms of support	1 457
All in all	4 155

³ In the academic year of 2004, the number had gone up to 58% (personal communication with Monica Svalfors, Dec 21st 2004).

In the table below, the changes and growth of numbers from the start of the statistics in 1993/94 can be viewed through a number of years.

	93/94	94/95	95/96	97	98	99	00
specific learning difficulties/dyslexia	55	99	182	243	322	395	548
visual impairment	85	105	105	101	128	123	144
mobility impairment	91	105	100	95	143	175	207
deaf students (with interpreter)	48	53	87	55	57	68	78
deaf students (teacher knows sign language)	-	-	-	75	60	20	50
hard of hearing students (without interpreter)	30	64	92	92	63	81	100
others	15	38	86	70	110	82	193
postgraduate students	-	-	-	17	18	17	12
In all	324	464	652	731	883	944	1332
Students who have been in contact with the coordinator for planning of the studies, without applying for other forms of support	159	254	395	390	431	575	769
All in all	483	718	1047	1121	1341	1519	2101

In Sweden, each HE institution has to set aside a certain percentage of their total grant for all undergraduate level education to cover the extraordinary costs for educational support measures of students with disabilities, but please note that ICT costs are *not* to be included here. Between the years 1993 and 2003, the percentage level was 0,15%; as of 2004, it is 0,30%. This means the interviews were carried out while the level was still 0,15%. Additional money can be applied for from Stockholm University, which annually distributes an extra grant to the HE sites where their own funding does not cover their costs for compensatory pedagogical support to individual students.

There are earmarked IT accounts in the HE organisation, but there is no special account for ICT used for special needs. According to the interviews carried out, this earmarked money does by no means cover the costs, but most coordinators say they have to supply what the students are entitled to and therefore, they simply cannot keep their budgets. Especially the interpreters for the deaf students cost a lot, and it would not be fair to, say, refuse a large number of dyslexic students their legitimate service just because the particular HE institutions happens to have one or two deaf students at the same time.

In the year 2003, the 0,30% money was 22,000,000 SEK (about €2,43 million). NB: This money does *not* include ICT costs at all, only other services such as:

1. Adaptation of course plan or speed of studies
2. Alternative means of examination (oral, at computer etc)
3. Note-taker at lectures (co-student gets paid for doing this)
4. Sign-language interpreter
5. Proof-reading help
6. Study-skill courses
7. Personal mentor

Talking books – a unique service

The Swedish Library of Talking Books and Braille (the TPB) constitutes a unique service. Swedish Copyright Law permits libraries and organisations officially

authorised by the government to produce published books as phonograms for lending to people with reading disabilities. This can be done without the permission of authors or publishers. Today, the TPB offers about 86 500⁴ talking books and DAISY books. The TPB is also involved in a considerable amount of research and development. More information about the TPB can be found at <http://www.tpb.se/english/index.htm>.

All dyslexic students in HE have the right to have all obligatory course literature (i.e. published books) as talking book loans from the Students Service of the TPB. The student acquires an individual ID from the TPB which allows him/her to borrow a DAISY player and have new literature recorded. The coordinator at the HE institution assists students to apply for this ID and service.

Definition of dyslexia in higher education

Dyslexia is accepted as a disability which entitles a student to compensatory support. In the Equal Treatment of Students at Universities Act, the overall definition of disabilities reads:

"Disability: permanent physical, mental or intellectual limitation of functional capacity as a consequence of an injury or an illness that existed at birth, has arisen thereafter or which may be expected to arise".

Documented reading and writing difficulties are within the scope of the disability definition above. However, there is no definition of dyslexia, including sharp cut-off criteria used, throughout Swedish HE. The coordinators and the pedagogues rely on the assessments carried out by various types of professionals – their role is not to be part of the general professional debate regarding clinical cut-offs and definitions. My impression from the interviews carried out is that this pragmatic system seems to function smoothly and satisfactorily.

What legislation supports dyslexic students?

The Equal Treatment of Students at Universities Act came into force in the spring of year 2002. This law states that a student must not be discriminated on grounds of sex, ethnic belonging, sexual orientation, or disability. It covers all levels of academic studies and research as well as admission, study environment, teaching and examination and employment, etc. This act puts pressure on all levels of teaching and approach in the HE institutions.

The needle's eye: admission to HE for students with dyslexia

Except for the grades and merits from secondary school, it is possible to enter Swedish HE through a special admission test called the Swedish Scholastic Aptitude Test. It is administered on a certain date twice a year throughout the country. The National Agency of Higher Education allows people who can show a certificate of dyslexia 50% longer time to complete the admission test. They are also allowed to skip one part of the test, which is not included in the real aptitude test, but used by the

⁴ June 2004

National Agency of Higher Education for trial purposes only. Various professionals can supply the certificate necessary. Please note that the abilities that must be tested target reading ability only, and the assessment is therefore not to be regarded as a complete dyslexia assessment. It focuses on the reading disabled person's possibilities to complete the aptitude test if given extra time – nothing else.

A special reference group evaluates assessments by psychologists, speech therapists, teachers and doctors who wish to "be on the list" of the National Agency of Higher Education's test administrators. Sadly, some people believe this to be an official list of people with dyslexia competence, which was never the intention. Several well-known and acknowledged experts are *not* on this list, for all kinds of reasons, such as work load.

If one is at the end of one's resources, there is another possibility left: admission on special grounds. Very few dyslexic students enter HE this way and do this, one still has to fulfil a number of criteria: a pass in the core subjects Swedish and English and usually, a HE aptitude test must have been completed. If dyslexia is stated as the reason for applying for admission on special grounds, one must show a confirming certificate of dyslexia. Each application is evaluated individually.

Assessment

Who carries out the diagnostic assessment varies with local conditions. It is often a speech and language therapist or a psychologist but can also be a special education teacher. Most coordinators I have talked to would accept a certificate as long as it looks professional and reliable.

There are no formal demands on the qualifications of the assessor, but according to the interviews carried out, a professional background in either speech and language pathology, psychology or special education and experience in dyslexia assessment is required.

Many students already have a certificate stating dyslexia when they contact the coordinator at the university, but this varies with local context. If this is not the case, there are various ways to solve the situation. In some places, money is taken from the previously mentioned 0,30% pot to cover the costs or a dyslexia pedagogue carries out the assessment within the scope of his/her post. Several HE institutions will ask the students to pay by themselves. This may cost between 500 and 2000 SEK (= €54-219). Often, the coordinator has developed good collaboration with a certain local, external assessor. In some cities, the student can get a certificate through the health service, provided that the student is registered in that municipality. This costs about 150 SEK (= €16). The main reason why all students don't do this is usually the time factor – the waiting time can be several years in some cities.

Contents of assessment

A typical assessment would contain various Swedish achievement tests of word decoding, non-word reading, reading speed, reading comprehension, free writing, spelling; sometimes also verbal repetition, memory skills and phonological awareness. An example of a commonly used, time-limited decoding test is "Läskedjor" (Reading

chains) by Dr Christer Jacobson, which consists of three parts: character chains, word-chains and sentence chains. The student's task is to mark where there should have been a space. A corresponding English example of a "word chain" would be the below:

lightappledrum

Personal history is normally included in the assessment report, with information about any hereditariness, early language development, previous schooling and support etc. A psychologist's report would often contain a WISC-profile.

The diagnostic assessments are carried out either on site or externally. If the student is seeing an external assessor, he/she will usually visit the assessor's office. If the dyslexia pedagogue at the HE institution does the assessing, the student will be assessed on site.

Provision of support

In Sweden, the assessment of study needs tends to be done in an informal interview situation where the coordinator and the student discuss and create a specification of required support together. Then the student can see the dyslexia pedagogue and the person in charge of the ICT equipment and try different software. Many students knock on the coordinator's door during the first term, or even before starting at HE. Some do not show up until a couple of terms later and indeed, some not until it is time for the big exam paper at the end of the studies.

It is extremely rare for a Swedish student with dyslexia to get a personal computer as a loan through the HE institution. There are two different concepts for providing ICT: a special "resource room", to which the student has free access, or adapted computers in the common HE library. These different concepts may reflect underlying differences in views (thoughts of special needs and inclusion) but very often, the reason seems to be a financial one.

The HE institutions sometimes lend the student a tape recorder (to tape lectures etc) or a scanner pen. Some have a laptop for loan at exams only.

How do students with dyslexia get to know about their rights?

In order to get support, the dyslexic student has to come forward and contact the coordinator for students with disabilities. But how do the coordinators spread information about their services? This is an interesting question, as traditional, written information, such as a leaflet, may not be the dyslexic student's first choice.

Most of the coordinators I interviewed appreciate the above and inform orally about their services at the general gathering of newcomers at the start of each term. There are of course also brochures, leaflets etc available too. Most HE institutions have a website with special pages for students, where information on disabilities and support is available. One coordinator told me that they had to explicitly state "reading and writing difficulties/dyslexia" as many of the students with this disability did not think

of themselves as disabled, and therefore did not understand that the web information was relevant to them.

I noted that very few web pages with student info are accessible for reading disabled people in terms of allowing for magnification, change of font etc. Very few have server-based speech, which would allow for listening to the website information without a special text-to-speech program on one's local computer. Most of the coordinators I talked to, had not thought of this but agreed that this was an area of concern.

What is the general dyslexia awareness amongst staff?

The general impression from the interviews carried out is that dyslexia awareness is growing, but that the need for information is always present. The Equal Treatment of Students at Universities Act may have "forced" staff members to raise their awareness and knowledge. Many coordinators say that some HE departments have come further than others in this regard. In a few HE institutions, there seems to be a particular "difficult" department, where students with dyslexia are not treated as well as they should – assumably because of lack of knowledge and understanding. Uppsala university has created and published a booklet called "Teaching accessibly" which gives teachers tools for adapting their teaching in general terms.

Availability and costs of ICT

The 14 interviews and the student questionnaires show that the local ICT conditions for students with dyslexia do vary. At some HE institutions, there is still no ICT support available, although under way. At other sites, the ICT support seems to be well developed and thought-through.

What is used can be seen below. The estimated prices in Euros⁵ below apply for single user licenses. Often, HE institution asks for an offer for multiple licenses or, indeed in some cases, campus licenses, which brings down the costs per user considerably.

1. Talking course books/literature	Free
2. DAISY players	Lent from the Swedish Library of Talking Books and Braille
3. Text-to-speech systems	€87- 1250
4. Spell-checker for dyslexics	€81,5
5. Digital dictionaries	€108-150
6. Scanners	€43-430
7. OCR software (to use with scanner)	€180-678
8. Scanner pens	€126-328
9. Speech recognition systems	€615-1095
10. Word prediction programs	€109
11. Tape recorders	€40-50

⁵ Conversion per Aug 27th 2004 . 1 €= 9,12 SEK.

(Intelligent search methods, allowing for severe misspellings – presently available at www.ne.se, the The Swedish National Encyclopaedia. A Swedish-influenced spelling like "körkil" will guide the user to "Churchill".)

From the interviews and student questionnaires, the most commonly used kinds of ICT in use by dyslexic students in Swedish HE today seem to be:

1. Talking books (no burden on the HE budget)
2. Special spell-checker
3. Text-to-speech systems (+scanner with OCR software)

The least used type of technology seems to be speech recognition and word prediction, which is hardly in use at all. So far, there has been no Swedish concept-mapping software available. Recently – after the research for this report was completed – one program has entered the market. It was noted in the students' questionnaires, where concept-mapping software was mentioned, that very many students expressed an active interest in this, asking for more information, writing that organisation tools was greatly needed. Some even called up to hear more.

Entering and completing HE for a dyslexic person in Sweden: possibilities and obstacles

According to the coordinators I have talked to, the major obstacle for first entering HE for dyslexic people in Sweden is lack of previous support. This often leads to lack of self-esteem and/or grades that are too low to apply for HE. A 19-year-old who has struggled throughout school, yet faced failure a lot of the time, is likely to rule out the chances to succeed in HE. Some coordinators also mention the role of the English language, being one of the core subjects which one must pass to be able to apply for HE. For many Swedish dyslexics, written English is almost impossible to master.

Regarding the chances to succeed in HE, several of the people I interviewed, expressed a very positive outlook. They see continuous improvement and facilitation for the students with dyslexia year by year and in this context, they all highlight the role of the teacher's knowledge and understanding. According to the coordinators, a vast majority of the teachers genuinely *want* to help, but don't always know how to. Many of the coordinators spend a lot of time on teacher information in general terms, as a "preventive measure". When it comes to particular reasons, i.e. regarding a certain dyslexic student, most of the coordinators prefer the student to solve the situation with the teacher(s) himself/herself, arguing that they are adults and the coordinators should not take the responsibility for them.

The main obstacles for completing HE seem to be:

1. The student not accepting having a disability, trying to hide it or make it anyway by working extreme hours (which eventually lead to collapse). The coordinators say that an open atmosphere is a must for successful cooperation.
2. Talking books not delivered in time. If a course book is already available as a talking book, it is normally delivered within a week, but if not, and the book has to be recorded, it could take up to 8 weeks. This means the teachers need to specify the literature lists a long time in advance, which far from all teachers see as a realistic demand

3. The amount of literature to be read in itself. Screening and skimming is hard for the majority of students with dyslexia, who tend to read everything, word by word.
4. English course literature is a reality in most courses. This can cause serious problems for many Swedish dyslexic students.
5. Sudden changes in a specified literature list, for the same reason as above.
6. The odd "difficult" teacher who seems to find helping dyslexic students a burden.

What training is available for tutors to ensure dyslexia friendly delivery?

So far, there is no special course or the like. As said previously, the coordinators continuously "train" the staff, indirectly and sometimes directly (or the dyslexia pedagogue does this). Several of the staff I interviewed expressed an interest in a course on dyslexia friendly delivery for ordinary HE teachers.

Are there web sites to support the teachers?

No, none so far, though many coordinators found this a very good idea.

...and what do the students think?

As was said in the beginning of this report, about 120 students have completed and returned a simple questionnaire about ICT support. The questionnaire contained questions about what ICT (hardware and software) they had access to, how it was funded, what they thought of it, what (if any) training they had had in using the equipment, and what ICT they did not have, but may be interested in. There were also some questions regarding how much the students thought using ICT had helped them, plus some space for personal comments.

The overall impression is that the students who have ICT access are relatively pleased with it, but many address the wish for personal, portable equipment rather than sharing computers on site. Receiving the course literature as talking books is greatly appreciated by almost all the students who have responded. Several students also mention using tape-recorders, special spell-checkers and text-to-speech systems. Very few have had training in the use of the equipment they use, but they are not complaining – maybe the equipment is easy enough to master on one's own?

Quite a few of the students have purchased software with their own money. Here are some positive student voices:

"Without the ICT, I don't think I would have made it."

"I would be lost without my spell-checking software."

"The support and ICT is crucial. There is a great risk of giving up without this."

"I am so glad the Talking books library exists and that I can have my course literature on CD-Rom. That is such an efficient tool for me. Would like a computer with a good spell-checking program."

Many students express an interest in concept-mapping software, which was not available in Swedish when the questionnaire was sent out.

There are also some critical voices and suggestions for improvement:

"The opening hours of the resource rooms are not adapted to the individual. Also, I have kids and must study late at night – at home!"

"I have no idea what ICT is available. What the university has offered me is writing help which I use (...) but I would prefer to do without that, if there is ICT that can do the job instead."

"A personal laptop (...) could be adapted and used in a way a stationary computer that several people use can't. A laptop is portable and can be used in different rooms, for example doing group projects."

"I think dyslexics should be allowed to borrow a laptop while studying (...) because it takes longer for a dyslexic."

Surprisingly many of the responding students state that there is no ICT available at all to them. This may be true, as disproportionately many of the students responding come from HE institutions that have not yet started their ICT activities full scale. My interpretation of that is that the students who still have responded are very keen and eager to "get going" and some explicitly say so too. Some state, quite rightly, that it is impossible to judge what they "would like to have" when they have no idea what the software and hardware opportunities are.