

Inside Information on Williams College from the Outside

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Preface

This report describes my view on the liberal arts college Williams College in Williamstown, Massachusetts, USA. It is mainly based on observations during my visit as a STINT Fellow at the Department of Computer Science during the fall semester 2008 when I co-taught an introductory course (CS134) in Computer Science. My views on American culture are also influenced by my previous visits and stays in the country, now including 43 American states, two territories, and Washington DC and totaling over two years.

My view on liberal arts education is influenced by the two reports by Patrik Mehrens *Learning from Liberal Arts Education* (2006) and *The STINT Programme for Excellence in Teaching - A Follow-up Report* (2007). I have also learned quite a lot from discussions with my colleague Viggo Kann (STINT Fellow at Amherst College 2006) and the other 2008 STINT Fellows during the workshop at Smiths College on October 19 2008. I have also visited the Rensselaer Polytechnic Institute (RPI) in Troy, NY.

During my visit I have interviewed students, faculty, the Chair of CS Department, Dean of Faculty, Vice Dean of Faculty, Public affairs office, several sports coaches and the owner of the Williams Shop. I have attended faculty and department meetings and meetings with the Committee on Education Policy, the Chairs of all departments and committees.

Despite this, I do not claim I know the truth about Williams College, nor liberal arts education in general. I know most on how the Computer Science Department works, but very little on other departments. The views in this document are mine and should not be regarded as anything else; in particular, the views here are not representing Williams College, nor the Royal Institute of Technology, KTH.

Higher Education in USA

There are approximately 4000 colleges and universities in the US. In many of these a course is considered an atomic unit and in that case a semester comprises four courses. Education before college is in general 12 years, starting at age 6. After, in most cases, four years of college students graduate with a bachelor degree. Slightly more than 50% of high schools students continue to college and slightly less than 40% finish college with a degree. Basically all American colleges and universities have a sabbatical system that allows faculty to leave the college for anything from one semester to a couple of years. The sabbatical programs differ in the number of years between sabbaticals, the length of them and the funding.

All American colleges and universities participate in varsity sports. While not always popular among academic faculty, it is a part of the culture that would be very difficult to change for recruiting purposes and for relations with alumni.

About 300 of these colleges are liberal arts colleges. There are several definitions of “liberal arts”, but for the purpose of this report my definition of liberal arts education is:

1. It requires or encourages a diversity of subjects.
2. It is small in the number of students.
3. It has a strong focus on quality in education
4. It has a strong notion of community.
5. It has a strong focus on faculty-student interaction.

For a more diversified view, see Mehrens (2006).

Smalltown USA

Williamstown is located in the northwest corner of Massachusetts with walking distance both to the state of New York (over a mountain) and to Vermont. The population is 4.700, not counting the students.

Being a stranger in a small town does not last long. With three kids (2, 4, 6) it took us two weeks before we could not walk up the 300 meters/yards Spring Street (Williamstown “downtown”) without meeting people that came over to have a chat with us. This is partly due to the small community where everybody knows everybody, but also due to the fact that Americans in general happily involve themselves in conversations with strangers. This goes way beyond the greeting phrase “How are you?”

Williams College

Williams College has for a long time been the highest ranked liberal arts college (U.S. News and World Report 2008) in the USA. However, as soon as the news on my arrival reached the USA, it dropped as a stone on the ranking list to a tie for the first place with its archrival Amherst College. On a more general ranking (Ordo 2006) Williams College was ranked as number four in USA after Princeton, Stanford and University of North Carolina, but before Yale and Harvard.

Williams was founded in 1793, which makes it the oldest college in Massachusetts with the exception of Harvard. The focus is on a liberal arts bachelor, but there are also two masters programs in Art History and Developing Economics. The students of Developing Economics are recruited from all over the world and alumni are now placed in governments and government’s administrations all over the world, which is considered a great asset for Williams. In general, all students and alumni are considered an asset of Williams College.

Majors are offered in more than 30 subjects, the most common in descending order are Economics, English, Psychology, Political Science, Art, History, Biology, Math and Chemistry. One third of Williams College’s students continue directly to grad school (for a master), another third will in a couple of years.

In the fall 2007 2.112 students were enrolled. In 2008 6.448 students applied to Williams College and paid the fee of 60 USD. 1.194 were admitted, which gives an

admission percentage of 18.5%. A little less than half of these will enroll in the end. Women students were fully accepted in 1971 and are now half of the student body. The U.S. minority enrollment is 29% and 7% of students come from outside USA. Of the 520 first-year students who entered in 2001, 91% graduated from Williams within four years and 95% within six years.

The admission is based on selecting a team that will enhance the experience of all at the college. There is also a strong emphasis on diversity. All applications are read by at least two people and rated academically from 1-9 and non-academically from 1-7. Of those in the highest academic group (which is the top 2% in the country), a third is admitted. For the lower groups the odds are falling.

There are 26,500 living alumni of record in the world's first society of alumni (founded in 1821), and 75 regional alumni associations nationwide and overseas. The academic year 2006-07 62% of the alumni donated something to the college. More than 65% of the alumni from the classes of 1970 to 1990 have earned at least one graduate or professional degree. The most popular graduate disciplines for alumni are management, education, law, and health care. Each year approximately 10,000 alumni visit the college together with 4,000 present parents and approximately 20,000 others. Parent engagement in students has increased significantly over the last ten years.

Sports at Williams College are mostly conducted in division 3, but considering the academic focus at the college, the Ephs are surprisingly successful. The presence of sports at the college is officially motivated by "Mens sana in corpore sano" and in some sense as a community builder.

My impression of the college can be summarized in one word: professionalism. This includes meetings where I perceived most, if not all, speakers to be very disciplined and to the point. It includes the administration that despite the fact that I was the first STINT Fellow at Williams College and did not fit into any previous category (teaching, but not receiving any salary from the college) quickly found ways to put me on the right lists for everything I needed. On the day of my arrival my name was on the door, on directory listings, in the stairways, and in almost all cases with the dots above the ä in the right place. I reported an uncooperative door handle and it was fixed the next day. One morning after three weeks I was in my office unusually early. The door opened, a woman entered and came towards me with her hand stretched out in a greeting and said with joy in her voice: "Hello, I am Pat. I am your custodian. How great to finally meet you!" Surprised over her enthusiasm I mumbled something like "Ehm, hello, and thank you for keeping my room so tidy!" Pat answered with a sense of pride and joy: "Well, that is what I am here for!". She left me with an impression that she was not here only for the money, but rather she was an important part of the college.

The college seems to take good care of its personnel. There is a beautiful faculty club with faculty dinners approximately once a month. As an employee you have access to the college's art museum. There is a baby-sitting service and the college has its own daycare.

Another thing that is impressive is the promotion of the brand name and the college's color. I have seen everything purple: napkins, doors, raincoats, hats, decorations on

brick walls, information signs, bicycle stands and binders. I have seen the Williams Collage name even on water bottles. In addition, there is the Williams Shop. It is a private store, that has no affiliation with the college but the owner is a Williams' alumnus. It used to be an ordinary sports store, but now sells almost exclusively Williams merchandise. The store area is approximately 60 by 40 feet. Counting only Williams merchandise, there are approximately 325 different clothing items and at least 400 other items for sale in the store (different sizes not counted). There are five full time staff and two part time. Last year (2007) approximately 49,000 items with William's logos or name went out of the door. It is difficult to estimate the market value for the college of this, but it must be significant.

Pedagogy

The College has always been committed to excellence in education, but in the 1980-ies the focus shifted from educating New England gentlemen to research-based education. The shift started already in the 1970-ies, but was made a general policy during Frank Oakley's presidency 1985-1993. Before the shift, departments could have Friday lunches with sherry, and almost all professors came (back) from one of the New England universities like Harvard and Yale. These students and professors were highly skilled, but the lack of other influences maintained a somewhat stale situation when "all" had been to the same schools. After the shift, more faculty has been recruited from other (fine) universities and diversity is one of the college goals.

With the best students in place the focus on education aims at lifting these students individually to learn as much as they can. The ideal picture for the strong focus on faculty-student interaction is at Williams the president of the College from 1836 to 1872: Mark Hopkins. A skilled teacher in the Socratic tradition, he has been immortalized at Williams by the aphorism "The ideal college is Mark Hopkins on one end of a log and a student on the other." That is: the more interaction, the better academic engagement. There are today seven students per faculty and the average number of students per class is twelve.

The diversity in subjects is achieved by demanding at least three courses in each of the three divisions (Social Sciences, Humanities and Science). There are pre-defined majors and that require at least twelve courses, but the students can propose majors on their own. Students must pass at least eight courses per year. For students that get low grades (D+ or lower) the teacher must fill in a special report card which will result in a discussion on that student's performance in a committee. The teacher has the option to fill in the same report card even for higher grades if he/she thinks it would benefit the student.

Diversity in students are supported by the need blind admission: First the students are admitted, and not until after their acceptance they are asked whether they can afford the tuition, and if not, offered scholarships. For the 2008-2009 academic year, 48% of the student body will receive awards ranging from \$2,989 to \$52,416 depending on their financial situation. The actual "price tag" (tuition, fees, room and board) is \$47,530 for an education that actually costs the College roughly \$100,000 per student. The average financial aid awarded 2007 was \$35,513. The actual price tag for the student is determined as a tax on their family income and assets.

The religious diversity among students and faculty result in a calendar that includes religious holidays for nine different religions that might affect academic work.

Courses without labs require 3 h/week in class, and 6h/week with labs. This gives the students (with four courses per semester) a scheduled filled with 12-24-h/week in class. Students can also do up to 10h/week research during the semester. The selection of students for research is partly based on what the faculty believes is best for the student. You cannot get both stipends and count the research as a course; it is one or the other. Students may also be hired for research during summers (up to 10 weeks).

Since 1988 Williams College have tutorials courses that have no classroom teaching. Instead the teacher meets with students in small groups (normally two students) and discuss a topic from a textbook or research paper that the students should have read and understood before the discussion. These courses are very popular among students.

At Williams College there is a winter studies period (in January) intended to experiment with new topics/courses and/or new pedagogy.

Williams have had an honor code since 1893. As a part of it, the students take their exams without monitoring. As a teacher you sit outside the room in order to answer questions.

Williams College encourages students to study one semester abroad and has satellite operations in Exeter Collage at Oxford, UK; Mystic, CT, and the city of New York. At Mystic, some of the courses take place on a traditionally rigged tall ship.

Course evaluations are administered centrally with one standard form and an open blue sheet. In addition the lecture facilities are also evaluated.

Economy

The economic strength of the college is impressive. Before my arrival Williams College had 1.9 billion USD in endowments. There seems to be money for everything. Besides all the college buildings, housing for students and faculty an incomplete listing follows:

- Ten students of Geology will go to Galapagos Island over spring break to study geology. Similar field trips are planned for Hawaii and the Caribbean the coming years. All is financed by an alumni donation.
- Financial support for sabbaticals and research projects.
- Mounted projectors and designated computers (both Mac and Windows), wired and wireless net in all classrooms).
- If you attend all possible lunch meetings, you would never have to pay for lunch. There are pedagogical lunches in groups on four (self selection), science lunches, experiential learning lunches, language lunches (speaking mother tongue with language students), lunches with guest speakers, etc.
- Students that would like to form a group for anything can get financial support to do that. This includes everything from a Waffle Breakfast Club to Environmental organizations.
- There are funds for students to take a professor out for lunch as well as professors taking students out for lunch (or entertaining them at home).
- Study areas with 42" flat screens.

- Sports facilities including among many other things an Olympic size pool, ice hockey arena and golf course.
- I was offered three power adaptors for my Williams laptop. One for my office, one for my home and one to take with me to the classroom.
- While employed at Williams College all faculty and staff get 50% of the Williams tuition fee as a discount on *all* college fees (not only at Williams). If your children attend a lower priced college or university (and there are plenty of those), this could pay for the entire tuition.

When I left the college, their assets were down to 1.4 billion and the economic crisis were discussed daily. The need blind admission means that there is no way to adjust to market downturns. The main savings in this downturn will come from postponing projects like the renovation of Weston Field (the outdoor sports arena). They will continue to spend 250.000 USD on parties for donors (but they will raise more than that on the first party). There will be no salary increases and some positions will not be filled or only partly. As the president said “You cannot fire anyone here in Williamstown, we are all married to each other!”

The sense of community is present. The president and the deans asked the department chairs to minimize spending during the present academic year. This wish was discussed in a department meeting at CS and all agreed that the department should do their share.

Faculty

There are 323 voting member of the faculty and 58% of these are tenured. Of the faculty 97% hold doctorates or other terminal degrees. In addition to the faculty there are 288 FTE Administrative Staff and 457 FTE Support Staff. Staff increases and decrease is initiated from the department itself, but needs to be argued with the Committee for Appointments and Promotions. Most important argument is the curriculum but also number of students per class and number of majors. There is a mentoring system for new faculty.

The women faculty share is 40% and increasing. Recruiting has become more complicated by an increasing number of two-body¹ problems over the years. In 1980, one of fourteen in the History department was a commuting family. Today, it is eleven out of twenty-two.

The tenure process is documented and all information is collected here at Williams. All classes are evaluated by a standard form and an open “blue sheet”. These are gathered by a student who gives them to the central administration that in turn gives them back to the teacher after all grades have been finalized. Senior staff also visits the lectures.

Approximately 55% of those that are hired on a tenure-track position end up with a tenure position. Some faculty members decide to leave before they ever stand for tenure. They get other job offers, switch careers, or decide that they don't stand a good

¹ When faculty gets hired and have a spouse that lacks other job opportunities in the area.

chance of being promoted and leave before the decision. Of those that stay for the decision 78% get tenure. This is a slight increase over the last years from 74%.

Besides faculty and staff positions, there are also a few “lecturers”. They teach, but are not called professors. In some cases these positions are used to solve two-body problems. The location of the college makes such problems more common than in more heavily populated areas.

On average 25% of the faculty is on leave. The main reasons for these sabbaticals is to recharge, write books, articles, and do active research in order to become better teachers. At Williams College you will get one funded semester off after three years of teaching, and may be on sabbatical for a maximum of two years at a time. As a consequence, there were 60 new faculty greeted on the first faculty meeting of the academic year (or 19% of the faculty). The teachers I have met have all been passionate about education, but they all do research as well, mostly during summer break and sabbaticals. The senior faculty gets $\frac{3}{4}$ of their salary during sabbaticals. You should apply externally for grants to fill up the rest of the salary, and if you fail, you should apply from the college for the funds showing that you have at least made an attempt to apply from external sources. However, if you fail at applying even for that, the college has been generous anyhow.

The average work hours for faculty are high. “Every waking hour” is of course an exaggeration, but not far from the truth. There are no studies made on the time spent for the college, partly because of the difficulties defining “work” in an academic setting like this. A survey made in 2004/5 by the Dean of Faculty’s office directed to faculty that had left Williams College voluntarily (e.g. without failing tenure requirements) revealed two main reasons: the high workload and the limited social possibilities that follows a combination of the workload and the somewhat isolated location. The normal workload is four courses, but at departments with labs, the teaching requirements are three courses per year.

The average salary (2007-8) varies from Assistant Professor at \$73 100, Associate Professor at \$90 300 to Professor at \$126 400. In the Economic Department salaries are slightly higher. Raises are monitored by the Compensation Committee (in lieu of a union) and decided by the Provost. They result in a fixed amount in $x*1000$ USD + a percentage that is the same for all. People that think they deserve a higher than average raise must make an argument by writing a description on all progress and the hard work made during the last year.

At Faculty meetings all faculty is invited. During this year the existence of Williams in New York has been discussed and voted on at a faculty meeting.

Committee members are in some cases (e.g. the CAP, the CEP, and the Steering Committee) elected by the faculty at large. In other cases, each faculty member indicates their committee preferences on an annual basis and then the Steering Committee makes the assignment.

Computer Science Department

The Computer Science Department at Williams comprises seven faculty (four seniors), one AA and one computer system specialist. Their course list includes 36

courses, but the actual number of courses offered each year differs with the number of faculty on leave (and the ability to hire visiting professors). The courses are mainly traditional core

Computer Science courses, but also *Minds, Brains, and Intelligent Behavior: An Introduction to Cognitive Science* and *Integrative Bioinformatics, Genomics, and Proteomics Lab*. The last two are given in cooperation with other departments (Philosophy & Psychology and Mathematics & Chemistry & Biology).

Their winter study courses include *Designing and Building a Desktop Computer*, *Inside Google: The Technology and Its Impact on Our Culture*, *Welcome to the Dollhouse: Playing with Dolls, From Barbie to The Sims* and *LEGO Robot Engineering*.

Due to the labs, the teaching load is limited to three courses per year. Despite this, the average working time per week is estimated to 60 hours (both by me and the senior staff).

Although all faculty have their favorite courses, all are expected to be able to teach (in) any of the courses and the assignment to courses are normally changed every semester.

There are three Mac labs with 23, 18 and 6 iMacs and one Unix lab with 18 workstations. The two largest labs have a mounted projector with a designated computer and all computers in those labs face the screen. Three of the labs have adjustable desks that can be raised and lowered individually. Students work mostly alone, and only occasional in groups.

At the CS Department the average number of different classes given by an individual teacher is 4-5 in a two-year period. Practically all research is done during the summer. Research grants are rarely used to reduce the teaching load, but may increase the income by providing for salary during the summer months. The grants are also a resource to hire students during summer for approximately USD 3.500 for a ten-week period. If the student pays USD 300 for food during that time, the housing is free and provided by the college.

New faculty openings are advertised in CACM, Chronicle of Higher education, and on the web page. The latest tenure track position received over 200 applicants. Approximately 20 were selected on a basis on some kind of educational achievement (award, documented success) and a Ph.D. with active research record. These 20 were interviewed over telephone with the goal to invite three to Williams for the final interview.

Students

This section is mainly based on interviews with students.

There are of course several different reasons why students select Williams College but on the top list are:

- Network: being a Williams's alumnus provides you with an enormous network of other alumni with similar interests and experiences that also are potential employers.

- Community: The mindset of the professors of really assisting students to improve their knowledge, the long traditions, the friendly neighborhood all gives a feeling of being a part of a really big family.
- Climate: Coming from Long Island and rural New Jersey neither of the interviewed students would even consider moving south due to the heat in the summers.

In addition, for all that still are uncertain what to do, the idea of Liberal Arts College is appealing.

The position on ranking list is helpful, especially if you are not from the main geographical recruiting area (New England and New York) and therefore have not heard about Williams College before. For students from outside the USA the ranking lists are essential, as well as the fact that Williams College offers scholarships also for international students.

In general, after scanning ranking lists and driving through potential college locations, most students visit 3-5 colleges before applying. The students I met had all made the selection themselves, without parental involvement. However, had they picked colleges with mainly basket weaving courses their parents probably would have interfered.

The students are aware of which students that are paying for college and which are on scholarships, but it is not a big issue. There is one drawback on being on scholarship and that is if you mostly are coming here because of the scholarship, but are not really comfortable living in a small, slightly isolated community with genuine winters.

There is a student organization that represents all students called the College Council. The main differences compared to high school are the scheduling and the workload. You are on your own and the amount of academic work was “like a punch in the face!!!” the first year. The academic workload can sometimes be brutal. They both wish there was a fall break of a week to make it possible to catch up. As an example, the Sawyer library is open from 8:30 in the morning to 2:30 the next morning. However, in a study of academic workload, students spent on average 11 h / week in class and an additional 16 h / week on academic work outside classes.

All I have met praises the reception of students. The students describe Williams’ JAs (Junior Advisors) as a cool friend and social facilitator while other colleges RAs (Resident Advisors) seem to be more of a strict hall monitor.

There is an impressive amount of things to do at the college, but after your freshman year it becomes more important to find other activities outside college as well.

Why is Williams College the Best?

It is clear that the strong economical position and the top position in the ranking list facilitate maintaining the position. The high ranking and the good reputation attract the best students. While the college stands for diversity in many aspects (income, race, culture) the student body is really homogenous when it comes to age, ambition, amount of knowledge and willingness to work hard. This homogeneousness facilitates

teaching and being among other hard-working ambitious people (both students and staff) inspires many to go the extra mile to achieve perfection.

This selection and refinement of students result in graduates that are more likely to end up in high well-paid positions and therefore donate more money to the college, which gives the collage more strength to hire the best teachers, support present faculty with research funds that in the end results in better education.

The interesting question is though: How to become the best if you are not? My answer can only be a speculation, but I believe the key is attracting the best students. Dividing students into “good” and “bad” is of course an oversimplification of such a complex variable, but let us merge the variables acquired knowledge, ambition, social skills and willingness to work hard. Students that are in the top end of the curve for all those four variables are more inclined to end up in a higher position in society than those that are on the other end for all those variables.

How do you attract the best students? The need blind admission process that will attract especially the best, not so well off, students (including international students), a reputation of highly skilled teachers and the network of the alumni in high positions that may offer a jump start in an interesting starting position after graduation.

What to take home to Sweden

- Focus on quality education as the mission.
- Sabbaticals that give the teachers a genuine possibility to do research, write papers and books and be inspired by new environments.
- Selection of a team of top students, not only the ones with highest grades.
- Focus of assisting students to graduate on time.
- Less time with teachers in lecture halls, more in individual and small group interaction.
- Religious holidays reminder.
- The marketing of the brand name.
- Engage students in research early.
- Focus on diversity.
- More liberty for students to select courses.
- Higher pedagogical demands on teachers.
- Promotions through pedagogical achievements.
- Direct democracy even of tough decisions.
- Centralized evaluation of lecture halls.

Things I wish I could take home, but presently see no solution for

- The community building part of varsity sports.
- Half of the endowment.
- The non-competitive atmosphere between departments.
- The active alumni.
- The American openness towards strangers.

Things I have no wish to take home

- The high workload, at least among science faculty.

- The tenure system. While I can clearly see the advantages for selecting top faculty, the pressure on the junior faculty at a time when they are settling with houses and family does not seem healthy. Also, the evaluation procedure functions as a hindrance for pedagogical renewal and once tenure is achieved, rotation between universities is obstructed.
- The grade system that due to the grade inflation since the Vietnam war has resulted in a system that compare students with each other rather than their knowledge.

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