

# Report

(containing 24 pages)

## Teacher Exchange Program Wisconsin Technical College System - USA Hessen Vocational School System - Germany From 6<sup>th</sup> to 19<sup>th</sup> of October 2002

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### Technical

**College:** Chippewa Valley Technical College CVTC – Eau Claire, WI 54703

### Host-

**teacher:** Alan Dohm, 658 Galloway Street, WI 54703, [ADOHM@cvtc.edu](mailto:ADOHM@cvtc.edu)  
Gateway-Campus in Eau Claire

### Coordinator-

**teacher:** Dean Tabor, Dean of Curriculum, [DEANTABOR@cvtc.edu](mailto:DEANTABOR@cvtc.edu)  
Clairemont-Campus in Eau Claire

### Journey:

After 9 hours flight we reached safely Chicago airport on Sunday 6<sup>th</sup> of Oct. 2002:



The arrival at Chicago airport and the bus travel to Waukesha was well organized. At the Technical College in Waukesha we had a very warm and kind welcome.

The voyage was really exhausting. I had to drive additionally for 8 hours by bus and by car to my destination-town in Wisconsin. So I reached Alan's house in Eau Claire after 23 hours of traveling at 9 o'clock on Sunday evening. I was so worn out, that I was not able to have enough conversation with my host-family; I went to bed immediately. The next morning, I had to get up quite early to be right on time at Reception Valley Rose on Clairemont Campus at 08:15 a.m. I was indeed tired that morning. This should be changed in the future. After such an exhausting journey you need at least one day to recover to be fresh and relaxed for the following program.

## **Phase 1: Program at CVTC Eau Claire – October 7-12, 2002**

### ***Monday 7th of Oct.:***

08:15 – 10:00 a.m.

The introduction to the Presidents and all the teachers of CVTC was very nice. I was overwhelmed of the kindness and the great interest in my person. After my introduction I tried to answer various questions about the German educational system. Many questions concerned the teacher-education and the financial situation of schools in Hessen.

10:00 – 12:00 a.m.

The next item on my schedule was a tour to the Clairemont and the Phillips Campuses in Eau Claire. I visited mainly the facilities of nurse education; the excellent equipment was impressive. In Germany the nurse-education doesn't take place in public schools or colleges; the hospitals have their own nursing-schools.

12:00 – 4:00 p.m.

I traveled with Dean and Alan to Gateway in Eau Claire where I was introduced to the teachers of the faculty and the administrator of this Campus Steve Michaud.



Steve Michaud (Administrator) and his secretary at Gateway Campus

After lunch I visited a Mechanical Design program with Tom Vanderloop. I was really impressed about the excellent computer equipment which is much better than at an average vocational school in Hessen, even at universities in Germany you don't have computer-facilities like that. Every computer has access to the Internet. The Mechanical Design software (Autodesk Inventor) is also used in my vocational school in Weilburg, but the performance of the computers there is not sufficient to work efficiently with this software.

***Tuesday 8th of Oct.:***

08:00 – 11:00 a.m.

This morning started with a visit of the heating/air-conditioning, metal-workmanship and welding laboratories and programs at the Clairemont-Campus:



Students of the air-conditioning/heating-program occupied with Mechanical Design



Air-conditioning/heating-systems-laboratory

The air-conditioning/heating-systems program is quite different to the education in Germany. In Germany more than 80 % of all central heating systems are warm-water-pump-installations with radiators. In the USA this is totally different; nearly all heating systems are air-conditioning-installations. Energy saving and exhaust emission control don't have the important meaning in USA like in Germany. In Germany the exhaust emissions of every heating-boiler is controlled one time a year by the chimney sweep. If the exhaust emissions are too high, the use of the heating-system is stopped. This is in USA unknown. The correct burner-adjustment of the boiler is a main subject in the German heating-system-education. The heating-system devices and especially the boilers in Germany do have a considerable higher technical level than in USA.



Workroom for metal-workmanship



Welding-workroom

The facilities of the welding- and the metal-workmanship-workrooms do have the same degree of technical standard and equipment like in Hessen vocational schools

11:00 – 12:00 a.m.

The next agenda item this day was to visit a heating- and air conditioning company (ERV SMITH SERVICES INC.) in Eau-Claire, where one of the instructors of CVTC is additionally employed. In the German education system it is normally not allowed for teachers, who are state-servants, to work beside their teachers job in companies or other organizations. It was very interesting for me to talk with the owner about technical details of heating systems and the German apprenticeship-system, mainly with regard to it's transfer-possibilities to the Wisconsin education and industrial system.

1:00 – 4:00 p.m.

This afternoon we took a further tour on the Chippewa-Campus in Eau Claire to ESEC and Grudem. I visited the police-, the fire worker- and the truck driver-education. All these programs are not part of the education at vocational schools in Germany. The police in Germany has own schools - nowadays subject university (*Fachhochschule*) - ., the fire workers education is done in many cases by volunteer fire departments – only big towns have professional fire workers – and the truck drivers education is mostly done by private organizations or in the army.



Truck drivers education at CVTC - Dean in the truck

### ***Wednesday 9th of Oct.:***

08:30 – 10:00 a.m.

I traveled together with Frank Borg and Roxann Vanderwyst to Menomonie to see the “Incubator” at Stouts University; there we met Cyndy Newcomb. The Incubator is an institution for young companies to train their production process and to cope with the starting difficulties in business. After a certain time of training the company has to

leave the incubator and start business on the free market. In Germany promotion projects like this are known as “Join-ventures”. The company at Stout’s Incubator is manufacturing plastic parts. It was very instructive to discuss with the company’s engineer Len Vetsch about German technology and the German education system.

10:00 – 11:30 a.m.

The next item this morning was a tour to “Philips Origin”, a manufacturing company for plastic parts in Menomonie. The high technical standard of the manufacturing machines and the working conditions are on the same level as in companies of this size in Germany.

11:30 a.m. – 01.00 p.m.

The visit of the High School of Menomonie was necessary for me to get a complete picture of the education system in Wisconsin. I was really surprised about the excellent equipped workshops in this High School, especially for welding and metal-workmanship, which are almost on the same level as average vocational schools in Hessen.

02:00 – 03:00 p.m.

After lunch we decided to visit the manufacturing company of Cindy Newcomb’s husband in Menomonie. The company is producing electrical switch facilities and some workers have got their education at CVTC. It was very interesting to discuss German quality standards and the German apprenticeship-system with the owner. He admitted, that an apprenticeship-system, that could be established in Wisconsin according to the example of the German system could be an advantage for his company.

03:00 – 04:00 p.m.

The last item this day was a tour to the Menomonie-Campus of CVTC. The administrator Sue Brown showed me the facilities of the campus. I watched a teaching lesson, that was broadcasted by CVTC-television, where the students could communicate interactive with the instructor over the screen and by microphone. In Germany vocational schools don’t have such technical communication facilities, even most of the universities don’t have it.

### ***Thursday 10th of Oct.:***

08:00 – 09:00 a.m.

The morning started with a tour to the Gateway-Campus in Eau Claire. I explored the various workshops and laboratories for the electronic and the mechanical programs. The high technical level and the excellent equipment impressed me very much. Especially the laboratories for the electronic programs are in a very excellent condition, average vocational schools in Hessen don’t have facilities like that.



Electronic laboratory at the Gateway Campus

The facilities of the metal-workmanship at Gateway are comparable to the technical standard at vocational schools in Hessen:



Metal-workmanship at the Gateway Campus

Afterwards I visited Alan during a lesson in his classroom :



Alan in his classroom at Gateway

The equipment in the classrooms at Gateway is excellent: In every classroom there are multimedia devices installed: beamer, oversized tv-screen, video-camera and microphones. The classrooms at vocational schools in Hessen don't have this facilities at their disposal.

At least I inspected Alan's office at the Gateway-Campus:



Alan's office at Gateway

At Gateway every instructor has his own office furnished with a writing desk, computer and telephone. Common German teachers normally don't have their own office. Before and after the lessons German teachers meet in the teachers room and have a break together. Only the members of administration at German schools have their own office.

09:00 a.m – 01:00 p.m.

I traveled together with Dean to the Mississippi, which is in Germany the most famous river in North America. On our way there we stopped several times to have a look at the countryside:



Farm in Wisconsin near by Eau Claire

During this tour I got an impression of the hard life of the people, who earn their keep on farms in Wisconsin. Dean told me, that there are some Amish-farms in this area. The Amish people are not very popular because of their unusual way of life but they are respected as hard workers. The Amish-people is the only population-group in Wisconsin, who spreads out the German language in Wisconsin, although it's a kind of German dialect, that is even for a German very difficult to understand. The Wisconsin population has more than 50 % German ancestors, but only very few of them, mainly older people, speak German.

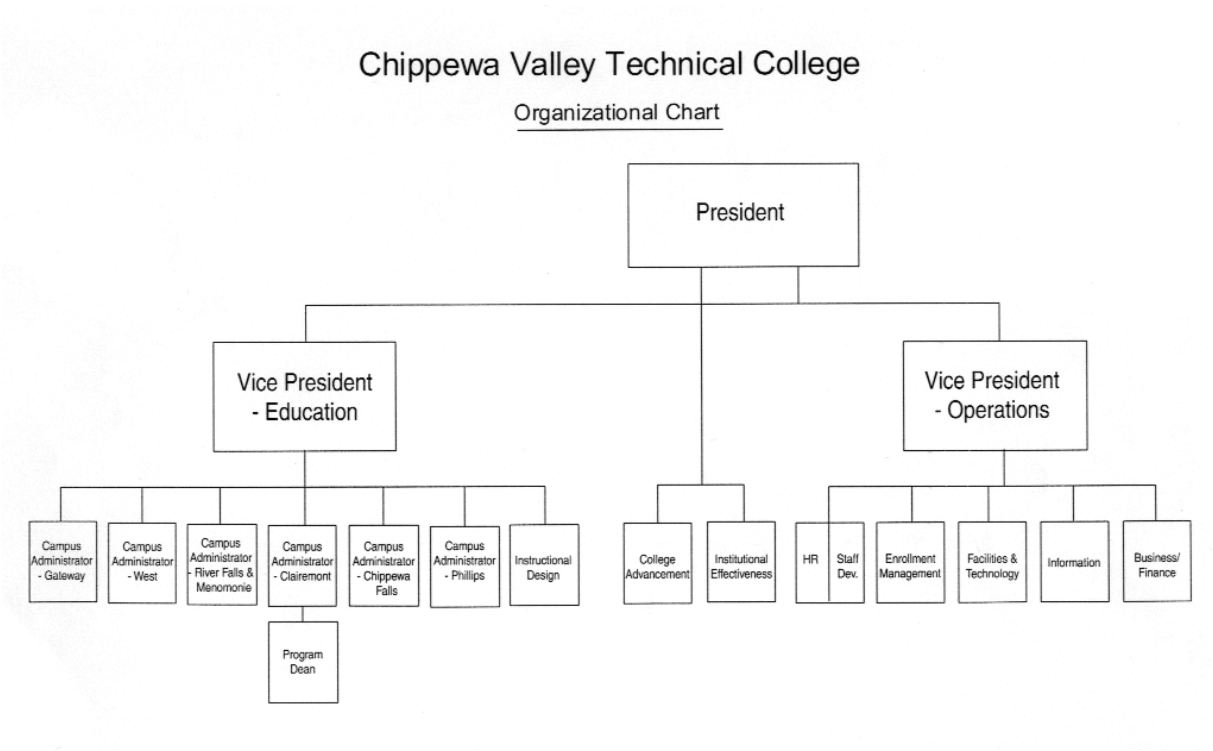
02:00 – 04:30 p.m.

Together with Dean, Alan and Steve Michaud I visited EC-Industries in Eau-Claire; this company is manufacturing metal-dies for plastic industries all over the world. EC-Industries has about 150 workers and technical employees. The technical standard and the working conditions are comparable to a company of this size and line of business in Germany.

05:00 – 08:00 p.m.

I was invited to participate in the Boarder Meeting of the Directors of CVTC, that usually takes place once a month. The Board of Directors of a college is a very independent institution with mighty competence and authorization that has no equivalent in the German education system. The most powerful institution at German schools is the conference of teachers, which is absolutely not as powerful as the Board of Directors. After the completion of some items of the agenda I was introduced to the members of the Boarder Meeting and was asked to talk about my impressions of CVTC.

I told them, that the equipment and the facilities of CVTC are excellent, even universities in Germany don't have this technical standard. The organization of the College is in my view much better than in German vocational schools: The College has qualified staff, that is especially entrusted with tasks of operation, like facilities/technology and business/finance. This shows the following organizational flow-chart of CVTC:



A teacher at a Technical College has much better working conditions concerning the equipment of the classrooms and the laboratories than a teacher at a vocational school in Hessen. A teacher in Hessen for example normally has to install all computer-hardware and -software himself and he's also responsible for the service.

But on the other side the level of apprenticeship at a Technical College in Wisconsin is much lower than in Germany. In Germany the apprenticeship-education is based on three institutions: vocational school, industrial-, or craftsman-company and the chamber of craftsman or industrial and commerce. Everyone of them has his own apprenticeship programs . Only companies with an educated master can take part in apprenticeship-education in Germany. In the Wisconsin education system there is only the Technical College in responsibility for apprenticeship; there is in fact no educated care in the companies and no programs in addition from the chambers.

***Friday 11th of Oct.:***

08:00 – 10:00 a.m.

That morning I took a further tour on the Clairemont-Campus to the machine-tools and automotive laboratories. These facilities have an equivalent technical level like vocational schools in Hessen. After that I explored the laboratories for IT-Networking:



IT-Networking laboratory at the Clairemont-Campus

The equipment of this laboratory is outstanding like the other computer workrooms on CVTC. The CISCO-Networking-Programs on CVTC are also part of the IT-Education of the Staatliche Technikerschule, a neighborhood school of the Wilhelm-Knapp-Schule in Weilburg. This might be a good base to make a students exchange program between CVTC and the Technikerschule.

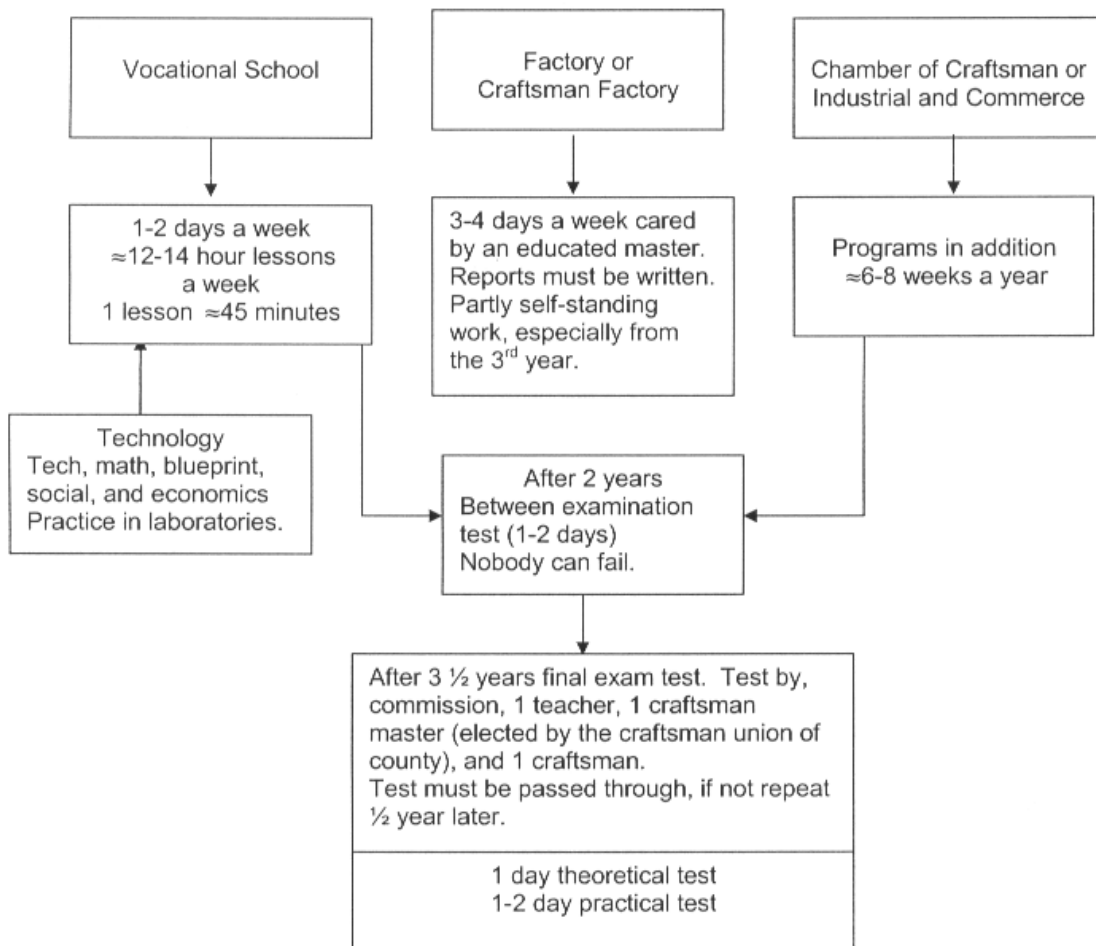
10:00 – 10:30 a.m.

The local TV-Station of Eau Claire (Channel 33) invited me for an interview. The reporter asked me about the differences between the German and the Wisconsin Education system with regard to the financing by the students. I answered that the students in Germany don't have to pay for their studies, the state pays for it. So the students are able to fully concentrate on their studies, they normally don't need to work parttime. In Wisconsin and in the whole USA the students at colleges and universities have to pay for their studies.

10:30 – 12:00 a.m.

Dean and I discussed with Dr. Ihlenfeld, the President of CVTC, the differences between the German and the Wisconsin Education system. The basis was a flow chart about Apprenticeship

**Apprenticeship in Germany**





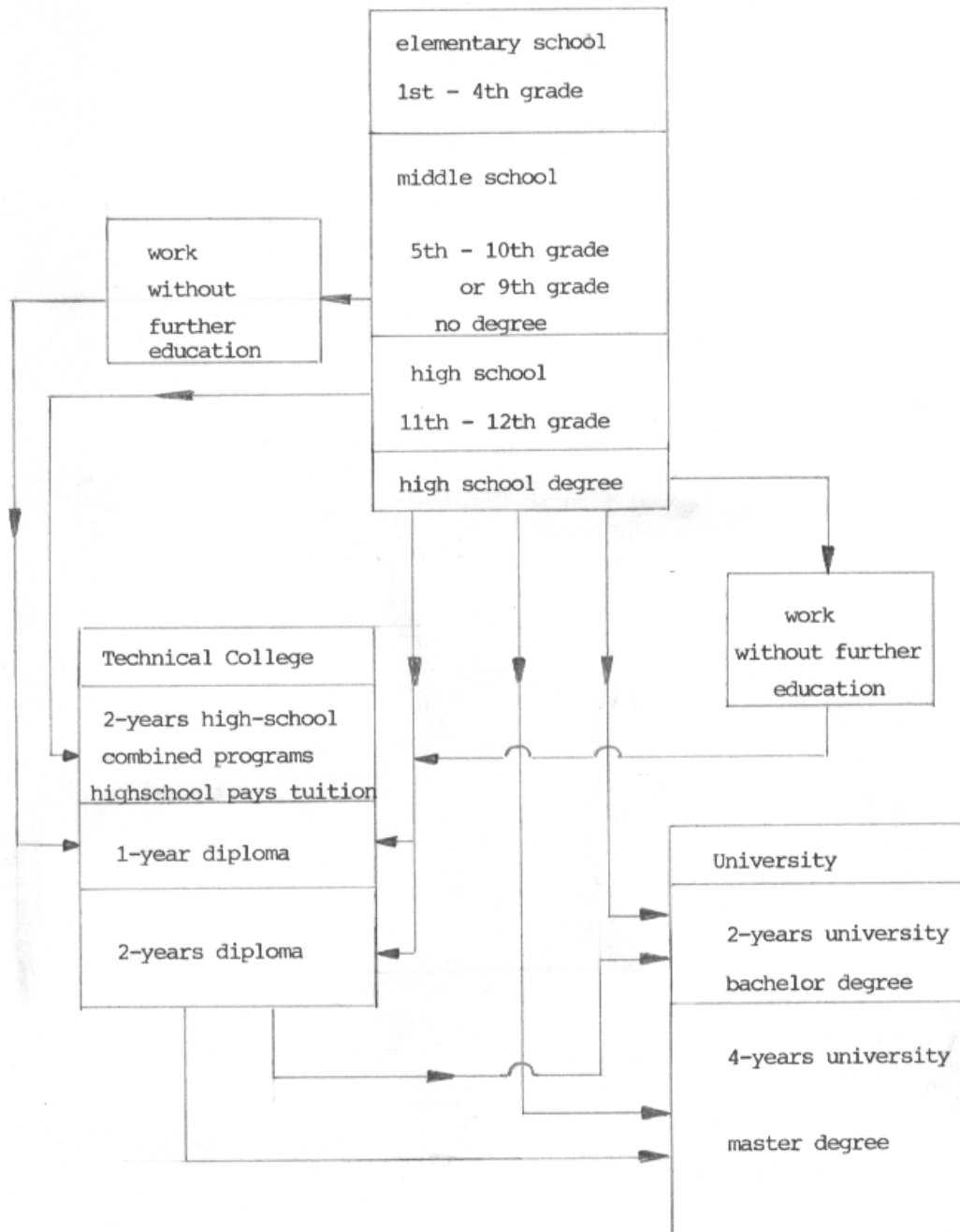
I explained to Dr. Ihlenfeld, that in my opinion the main advantages of the German apprenticeship-and education-system are based on the following facts:

- Most of the young people (more than 50 %) join apprenticeship at the age of 16 to 18 years after middle school degree. The average age of the students at a Technical College in Wisconsin is approximately 26 to 28 years and so almost 10 years more than in Germany. Additionally many pupils in Germany who get a subject- (*Fachhochschulreife*) or a common-high school degree (*Allgemeine Hochschulreife*) do an apprenticeship program before they go to university or subject-university (*Fachhochschule*). Only 30-40 % of all pupils in Germany achieve a common- or a subject-high school degree, while in Wisconsin more than 80% of all pupils get a high school degree. That causes in my conviction the fact, that nearly all young people in Wisconsin join after high school university and not apprenticeship at a Technical College. Some of them join apprenticeship later after they have failed at university and have earned their keep some years as unskilled workers. In the meanwhile they have reached the age of 25 to 30. At this age apprenticeship is perceptible less successful than at an age of 16 to 18, like in Germany.
- The apprenticeship-education in Germany is based on three independent institutions with individual programs (as I mentioned before), while apprentice-ship in Wisconsin and in the whole USA is only carried through at the Technical College.
- The apprenticeship at a Technical College is offered in 1 or 2 year-programs, this duration is in average more than 50% less than in the German apprenticeship-education, which normally takes 3 ½ years. The final test is very extensive and the exam-committee consists of members from all apprenticeship-institutions, which are involved in this education-program in Germany.
- In the German education system with its many ways it is possible to get also after apprenticeship-education the common- or the subject-high school degree and get so the permission to study at university or subject-university. This causes, that many high-qualified engineers in Germany have passed apprenticeship before they enter subject-university or university, so that they have an excellent practical background and not only theoretical knowledge.
- In Wisconsin as all over the USA there is no equivalent to the German Master Education, which is the most important foundation of the apprentice-ship-system in Germany.

Dr. Ihlenfeld admitted, that the German education- and apprenticeship-system has many advantages, but because of financial reasons, it would be nearly impossible to establish a system like that in Wisconsin. “Who should pay for that ?” he asked finally.

In my opinion it's necessary to compare both Education-systems, so I made also a flow-chart of the Education-system in Wisconsin, as I understood it:

Education-system in USA-Wisconsin



I'm not familiar with the Education-System in Wisconsin. The flow-chart above is the result of my two weeks exploration in Wisconsin at a Technical Collage and the central teachers program in Madison. So it might be possible that there are some details wrong.

02:00 – 06:00 p.m.

Together with Dan Sobota, a former instructor of CVTC in retirement, and Dean we traveled to a lake, where Dean owns a plot of land with a caravan and a motorboat:



Dean and I at the lake

It was a very nice afternoon at Dean's lake, I enjoyed it very much. Dean was a wonderful coordinator and I hope I'll be such an excellent coordinator too, when he comes to Germany next year.

***Saturday 12th of Oct.:***

I spent this day together with Steve Michaud. We first traveled to a farm, that belongs to an instructor of the Gateway-Campus. On his farm he's breeding up pheasants for hunting:



Steve and I on the pheasants-farm

After that we went on a sightseeing trip to Eau-Claire. We visited the old school house; these kind of houses are very famous in Germany, because of many television-series like “Our Little Farm” by Michael Landon.



In the old school house of Eau Claire

Then we went to the top-floor of the hospital to make some scenic pictures of Eau-Claire:



Eau Claire from the top-floor of the hospital

I had a very nice day together with Steve and I appreciated it very much.

***Sunday 13th of Oct.:***

This was my last day in Alan's house. Alan and his wife Ann were excellent hosts and I hope I'll be also such a good host, when he comes together with Dean to Germany next year.



My hosts Alan and his wife Ann together with me in front of their house

Then Alan, Dean, Steve and I met at the Gateway-Campus to take a farewell-photo:



Steve, Dean, Alan and I in front of the Gateway-Campus

Finally Alan and I picked up Stefan, a German teacher who also took part in the teachers exchange program, at a restaurant in Eau Claire. His hosts from Rice Lake brought him there and after lunch we traveled to Madison.

## **Phase 2: Education Seminar at Madison - October 13 –16, 2002**

All 24 members of the German delegation took part in the central stage of the Teacher Exchange Program, so it's not necessary to describe every item of the agenda. I already mentioned many details in my report that were part of this education seminar. My account on this part of the program is only a short general report.

First I want to express my thanks to Roe Parker and Nat Robinson, who were excellent coordinators and hosts.

The Education seminar program at the Madison Club, the Pyle Center - University of Wisconsin and MATC was very educational and instructive.

I think it would have been better, if the teachers from Germany could have got some of these information earlier, before they went on a tour to Wisconsin. I think it's necessary to know some important details about the Wisconsin Education system before you go there, like the very eminent meaning of the Board of Directors of a Technical College, that has no equivalent in the German education system. It might be easier to understand the differences between both systems that way.

I also think that the teachers from the Technical Colleges in Wisconsin, who will come to Germany next year, should get more information about the German education system at home than we got, before they come here. The German education system is much more complicated than that in Wisconsin as I already mentioned. Without preceding information they will have problems to understand it, mainly in the first week of their visit in Germany at the schools. In the appendix of my report I also attach a program-proposal, that includes the education-institutions, that the teachers from Wisconsin should visit in Germany next year, in order to get a full picture of the German education system.



Lunch room at the Madison Club



German teachers delegation in front of the Capitol in Madison



Presentation at the Pyle Center -  
University of Wisconsin:

Transitional Opportunities to the  
WTCS:

- Youth Options
- Youth Apprenticeship
- Tech Prep
- 2+2+2

Gabrielle Banick



2002 Debriefing, 2003 WTCS Exchange Planning and Closing/Wrap-up Session at MATC

Finally many details of the teacher exchange program were discussed, but all members of the German teacher delegation were in agreement with the overwhelming, wonderful experience of this tour.

In my view I want to mention one detail that should be changed in the future:  
The time for such a program is too short; you should have one more week time to explore the college and its facilities without agenda:

- First week: Introduction and program according to agenda
- Second week: Free exploration of the College and it's facilities
- Third week: Central education seminar

### **Phase 3: Stay in Chicago and return home - October 17 –19, 2002**

Chicago is a fascinating town with a lot of sights. It impressed me very much, that Chicago is such a clean town, I didn't expect.



German teachers delegation in front of Chicago skyline

It was a beautiful time in Chicago, but all teachers were happy, to arrive safely at Frankfurt airport on Saturday 19<sup>th</sup> October.



Arrival at Frankfurt airport

#### **Appendix:**

Agenda from CVTC for my visit

Program-proposal for Wisconsin College Teachers visit next year

## Tentative Agenda for German Tech. Ed. Instructor Visit 11/15/2002

Date	Sunday Oct. 6	Monday Oct. 7	Tuesday Oct. 8	Wednesday Oct. 9	Thursday Oct. 10	Friday Oct. 11	Saturday Oct. 12	Sunday Oct. 13
<b>a.m.</b>	*Travel from Chicago to WTC	*All school Presidents Reception Valley Rose 8:15-9:45 Dr. Ihlenfeldt *Tour Clairemont/Phillips Campuses and travel to Gateway. 9:45-11:45 Larry Doyle	*Visit HVAC program 8:00-12:00 Jim Bevins	*Travel to Menomonie *Tour local Industry-- 8:30-10:45 Frank Borg *Tour Menomonie High School Tech. Ed. Charter School and UW-Stout 11:00-3:00 Cindy Newcomb	Visit other programs not yet determined	*Open to meet Helmut's requirements	*Open	Open
<b>lunch</b>	*In transit	*Lunch with Gateway faculty and staff Steve Michaud	*Lunch with HVAC staff Jim Bevins	*Lunch with MHS staff, C Newcomb, Dean Tabor and Sue Brown	*Lunch with industry personnel Steve Michaud			*Travel to Madison Al Dohm
<b>p.m.</b>	*Pick up Helmut at WTC 4:00 Dean Tabor	*Visit Mech. Design program 1:15-4:00 Tom Vanderloop	*Tour Chippewa Campus, ESEC and Grudem 1:00-4:00 Mike Bower Al Johnson Marv Franson Al Dohm	*Tour Menomonie Campus 3:00-4:00 Sue Brown *Travel to EC	*Visit EC industries 1:00-4:00 Al Dohm			Inn On The Park NLT 4:00
<b>eve.</b>	*Drive time to Eau Claire	*Open with host family	* Tentative Evening meal		*Dinner with CVTC Board of Directors 5:00			

## **Program-proposal: Wisconsin College Teachers in Germany:**

In my opinion the teachers from Wisconsin should visit the following institutions, to get a full picture of the German Education system, especially with regard to Apprenticeship:

- Vocational school (naturally the host school) -  
***Berufliche Schule***
- Technician school (normally part of a vocational school) -  
***Technikerschule***
- Middle school (5<sup>th</sup> – 10<sup>th</sup> grade) -  
***Haupt- und Realschule oder Integrierte Gesamtschule***
- High school (5<sup>th</sup> – 13<sup>th</sup> grade) –  
***Gymnasium***
- Craftsman companies with educated master care for apprenticeship  
***Handwerksbetriebe mit Ausbildungsmeister für Lehrlingsausbildung***
- Industrial companies with educated master care for apprenticeship  
***Industriebetriebe mit Ausbildungsmeister für Lehrlingsausbildung***
- Chamber of craftsman  
***Handwerkskammer – Kreishandwerkerschaft***
- Chamber of Industrial and Commerce  
***Industrie- und Handelskammer***
- Nurse-Education at a hospital  
***Krankenpflegeschule an einem Krankenhaus***
- Subject-University  
***Fachhochschule***
- University – Technical University  
***Universität – Technische Universität***

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