Members of the Board of the University,
Members of the Board of Trustees of the University,
Commissioner of the King of the Province of Groningen Paas,
Commissioner of the King of the Province of Drenthe Van Aartsen,
Mayor of the City of Groningen Den Oudsten,
Mayor of the City of Assen Out,
Your excellencies,
Staff-members and students of the University of Groningen,
Ladies and gentlemen,

Introduction

Welcome to the University of Groningen. Today we celebrate the Opening of the Academic Year 2017/2018 and the 403^{d} *Dies Natalis*.

Digitalisation is all around us. It has impact on every *day life, on business, on society and therefore* on our research and education. Today all universities will adopt digitalisation as the main theme for their opening ceremonies. Digital means interactive - so interactive this session will be.

<< First question Mentimeter on the beamer>>

Before anything else, I would like to ask you to sit up straight - get your cellphone and go to the url which is on the screen right now. This is about Mentimeter: an interactive call and response platform with which we can share your answers and opinions.

If you are ready – and I will wait a few seconds - we will first do a test question.

“The main argument to come to this opening ceremony is that:

- I want to meet colleagues and friends at the reception;
- I want to hear the Rector’s speech;
- I want to hear the lecture by Google-CEO Pim van der Feltz.”

May we have your votes please?
If you are logged on, we can see the answers in a few seconds on the screen and adjust expectations if necessary!

Interaction is not just for fun. It also provides a great contribution to the effectiveness of the academic learning process. And is therefore highly relevant to the way we teach – now and in the future. I hope to give more detail in a minute.

<< Powerpoint on Ben Feringa>>

The past academic season 2016/17 has been a highly remarkable one for the University of Groningen. On December 10th - together with his colleagues Sauvage and Stoddard – our Professor Ben Feringa has received the 2016 Nobel Prize for Chemistry.

The Nobel Prize is the highest order an academic can be rewarded with. For the University of Groningen this Nobel Prize is the second one in its history. In 1953

Professor Frits Zernike was also rewarded for his groundbreaking work in Physics.

I recall that last year Professor Feringa has presented his Nobel lecture to many people including schoolchildren in the Aletta Jacobs Hall and citizens of Groningen in a sold out Oosterpoort. But on November 30, here in this Martini Church, which is such an historical place for our university, about one thousand people have attended his formal academic lecture and have made us feel a true academic community.

The past year has also been a year wherein the University of Groningen as taken the all-time high position 59 on the Shanghai ARWU-ranking of international universities. International rankings measure international reputation and productivity. In order to expand our international standing the opening of the branch campus in Yantai is of extreme importance and I hope and expect that we will succeed in the coming months to finalize our plans. This year we also have taken the leading position in the *Keuzegids Hoger Onderwijs* in the category comprehensive universities. I consider this to be a true recognition of our education policy and efforts of all our lecturers.

Unfortunately, last year a number of students and staff members have passed away. Right now we would like to pay our respects and commemorate them. May I ask you to rise please.

<< Powerpoint on Commemoration>>

Commemoration
Students
Joost Plegt, Medical Sciences

Wytze Pennink, Law

Roeline Geerts, Arts

Laurens Lo, Medical Sciences

Ben den Ouden, Theology and Religious Studies

Wouter Wissink, Arts

Staff members
Dr Schuil, Medical Sciences

Prof. Van Lookeren, Science and Engineering

Prof. Hofker, Medical Sciences

Prof. Booij, Law

Professor Reuijl, Economics and Business

Prof. Van der Meulen, Behavioural and Social Sciences

Prof. Van Zeist, Arts

Prof. Van der Vlerk, Economics and Business

Prof. Mulder, Behavioural and Social Sciences

Prof. Ashworth, Spatial Sciences

Prof. Van der Waaij, Medical Sciences

Prof. Dijkema, Science and Engineering

Prof. Lambers, Law

Prof. Aerts, Arts

Prof. De Pater, Medical Sciences

Prof. Dorlas, Medical Sciences

Dr Stelder, Economics and Business

Prof. Troelstra, Medical Sciences

Prof. De Bruyn, Science and Engineering

Prof. Hoekstra, Medical Sciences

Prof. Griffiths, Law

Prof. Engels, Arts

Dr Loek Engels has been a former Dean of the Faculty of Arts and Rector Magnificus of our university in the years 1981-1984 and 1988-1991

Prof. Van der Woude, Science and Engineering

<< no Powerpoint>>

Digital society and education

Today we will dive into the future. The main theme of today is the technological development that we all face. Technology has an enormous impact on all aspects of our lives and work. We live in a full-fledged digital society and I believe that we are only at the start of further digitilisation of everything that is either in or around us human beings.

Without any doubt technological progress will change our future society. Information systems, machine learning, artificial intelligence and large-scale data provision will have an enormous impact on our daily life, on employment, and on our research. It is still hard to imagine how fast technological progress proceeds. Looking at the recent past I illustrate this argument with an example of what Bill Gates has said back in 1998:

<< Powerpoint on Bill Gates remark in *The Economist* >>

“Eventually, everyone’s business card will have an electronic mail address”. This is 1998! Tech-guru Peter Hinssen - who speaks today at Delft University - uses this quote to illustrate that what we find normal today, using the Internet, was not so 20 years ago.

Peter Hinssen also states that the education sector probably has the most difficult time in managing with technological progress.

<< No Powerpoint >>

We are so used to the conventional model of schooling, the model that has emerged in Prussia in the 18th century. So far, alternatives have failed to teach so many students as efficiently.

Classrooms, hierarchy, year-groups, standardized curriculums and fixed time-tables are still the norm, even in universities. This Prussian model is focused on transferring knowledge and not so much on developing skills and competencies.

Nowadays we know that those personal skills and competences are key in future labour markets. Therefore, we need to update and adapt our educational model to prepare current- and next-generation students for their careers. We will not do so by a reducing the transfer of knowledge and problem-solving skills. No, instead, we will need to adjust our learning methods. Let me illustrate why skills might be handy by showing a very short video.

<< Youtube video on the secretary (Powerpoint) >>

Coping with digital progress can be complicated indeed. Firstly, we need to adopt our skills but secondly, and more importantly, we need to work on further progress and that is what we are good at. For centuries we have been exploring the unknown and trying to expand systematic insights into a broad spectrum of sciences.

<< no powerpoint>>

It is of pivotal importance that all our scientific work can take place in a societal context, which valuates and respects all outcomes of fundamental and independent research. In the Netherlands, we are quite fortunate. Our society appreciates the value of research and academic work. But the big threat to future development is the lack of sufficient, structural funding. Serious public and private investment in R&D is lagging behind.

The Netherlands has always been a country of early-adaptation of technology. The Netherlands is also known for its so-called knowledge economy. So if we want to stay ahead of others and be in the forefront of developments, our research needs a significant boost of investment. This is my message to our politicians in The Hague.
I now focus on one thing we as a university can do best in the field of technology: educating our students. We can improve our educational model and in this process we can benefit from ICT-development itself. This is what we call educational technology or ed-tech.

I will discuss ed-tech at our university by elaborating on our two strategic goals in education, inclusion and activation, and consider to add a third one: personalization. I first repeat the goals of inclusion and activation and next give you the feeling of what we mean by personalization.

<< Powerpoint on strategic plan >>

The city of Groningen is beautiful. Groningen is place to live and enjoy. In Groningen the city is our campus.

Groningen is a city for inclusion. An inclusive campus in which every-one must feel welcome. Over 120 nationalities are currently connected to our university. We value inclusion and do not accept any student or group to be excluded in any form. Learning is a social process and interaction can only be productive in a pleasant environment.

By activation we mean that students learn better if they are actively participating in class and class preparation.

We know that students learn more if they take control of what and how to study. If they take control over path and pace of their study.

ICT really helps here: video's, document sharing systems, voting systems and the like. Even in this setting we can learn from each other if we actively participate. So please go to your cellphone or tablet again.

<< Second question Mentimeter on the beamer>>

Give me your keyword describing your personal strongest learning experience: say a general lecture, a practical, a thesis, an internship or the like. Please give your answer in English.

Shortly we can see what are your most prominent answers.

A quick and highly subjective analysis learns that the educational experiences where you had more control and were more active give a better experience!

So now I come to personalization as our third new goal. In personalized education we try to tailor education to meet the different needs of students. Please take a look at the motivation by the American educational psychologist Benjamin Bloom.

<< Show the ppt Bloom's Two-Sigma Problem >>

You can observe three distributions of student achievements. One is the control group, say students that follow a traditional form of education. This curve is most to the left of the figure. The distributional curve in the middle describes the achievements of students who followed mastery learning: turning to the next item only if we know that one really understands the previous item. And to the right we see the distribution of student achievements where students enjoyed both mastery learning and one-to-one tutoring. Bloom's argument is that the latter student group performs significantly better (the mean exceeding the mean of the control group by at least two standard deviations - that is two sigma).

The reason that Bloom calls this issue the two-sigma PROBLEM, is that for universities this intensive model is by far too expensive. So subsequent research has focused on mimicking the mastery and tutoring styles in a cost efficient way and here comes ICT in place. ICT can help us in for instance personalizing feedback. We have so much information about our students, about

their past, about their study behavior, about their results, and about their preferences. Using what we call ***Learning Analytics*** we can use this information better to help the students in learning. We can provide feedback better than we did before. ICT can moreover facilitate student interaction and peer-group learning.

Box
The example is document-sharing. Suppose that the lecturer provides a text to the students and students read the pdf in advance. Maybe that they don't understand certain parts of the texts or that they want to comment on statements. They simply do so by annotation. Student X says: I do not understand this statement. A second student now can jump in and join the discussion and give a second statement. In this way students become active and give feedback on each other. The other point is that the lecturer can see which parts of the text lead to confusion and pay additional attention to those items in class.
End Box

<< Powerpoint on Feedback >>

In personalizing education ICT can be of enormous help. It helps us manage the learning process, give relevant feed back, and helps to keep learning costs low.

With further adaptation of ed-tech, we can take giant steps in activating students and personalizing education. And in doing so we constantly improve the quality of our educational system for over 30.000 students. My main

message to our students is that your educational programs will change to the better due to ICT and the message to our lecturers is that modern education will look different and nicer in the nearby future.

Honoured guest, the University of Groningen stands tall for the future. A solid reputation and 403 years of history give us the strength to take on the challenges of today and tomorrow.

We connect the past to the present as we do with people and their dreams, with lecturers and their students. Dealing with internationalization and ICT is one of the greater challenges for the academic world. And as you have probably noticed we like to be in the forefront of those developments.
I wish you students and scholars a very productive and successful academic year.
Thank you very much.

Pim van der Feltz
Dear guests, now it is time to introduce Mr Pim van der Feltz. Pim van der Feltz is CEO of Google Benelux and an alumnus of our Faculty of Economics and Business. In fact, he is a macro-economists with a strong interest in the theory of uncertainty. With Google he finds himself working in the centre of ICT developments and we have asked him to share his ideas on the impact of IT technology developments on society, how Google looks at the digital society and what kind of opportunities digitalization offers. Pim, please, the floor is yours!

Musical Intermezzo

It is time to introduce the Groningen Student Big Band. The Big Band – led by one of our professors Kristin McGee - began in 2013 after a student saxophonist began looking for a local big band designed for students of Groningen. Since the initial auditions, GSBB has developed into an expert young band with students from both the Prins Claus Conservatory and the University with other newly graduated students who are seeking both social interaction with young people and a creative artistic outlet.

Names:
David Rosenstock - drums
Esat Ekincioglu - bass
Kelsey Breure - vocals
Kirill Dumchenko - guitar
J.T. Hwang - piano
Hyewon Jung - vocals
Tjeerda Wierda - trombone
Niels Weijermars - bari sax
Yasar Kan - tenor sax
Rob Petri - trumpet

University of Groningen Alumnus of the Year 2016

Each year the University of Groningen awards one of its alumni with the honorary title ‘Alumnus of the Year’. The Alumnus of the Year award is both a recognition of past achievements and a stimulus for future activities. It is a great pleasure to announce that Ms Merel Rumping, a 2010 graduate of our Master programme International Relations and International Organization, has been awarded with the title of Alumnus of the Year 2016 of the University of Groningen.

Our jury, consisting of former winner Jeroen Smit, Ubbo Emmius Fund board member Jan Willem Baud, Professor Peter Barthel and myself, was unanimous in selecting Merel.

In 2014 Merel started Legbank, a company that helps to produce and facilitate the production of artificial legs. Inspired by what she has seen and experienced in a country like Colombia and with the help of researchers at Strathclyde University in Glasgow she centralized the production and helps and trains local social entrepreneurs to produce.

Merel's goal is to expand Legbank into Rwanda and Ghana. LegBank has won the ASN Bank Worldprize in 2015. Google has invested in the company and in 2016 Merel had the opportunity to present her company at a meeting where Bill Gates was one of the participants.

The University of Groningen is proud to present Merel Rumping as Alumnus of the Year 2016. Legbank is a great example of entrpreneurship that supports sustainable societies. Merel, may I present you this honour? The Alumnus of the Year Award has been designed for the first time by artist Wia van Dijk. It is a pure and powerful bronze figure that stands for wisdom, curiosity and pride. Personalized by the color of the eyes that reflect her bright look on society. May I ask you to say a few words?

University Poet

It is a real honour to introduce Rachel Raetzer as this year's University Poet. Each year a jury – this year

consisting of Mathijs Sanders, Lotte Dunselman and last-year's University Poet Esmé van den Boom – decides on who will be the new University Poet. By this nomination we hope that Rachel will contribute to our university's activities and of course to support her career as a poet. The jury notes that Rachel's poets contain humoristic elements and make us think about daily issues. Rachel, please the floor is yours. The title of your poet is: "Wij zijn de lettervreters".

Hanna Berretz

May I now invite Hanna Berretz to give a short speech about life as an international student in Groningen? Hanna completed her bachelor program in Economics and Business Economics and has been a university council member for Calimero in the past season. Hanna, please the floor is yours.

Closing

Thank you very much Hanna. It is time to close now. I invite all of you for drinks and snacks at the back of the church. After our invited guests have left their seats please use both entries at the left and right to enter the reception. I want to thank you for coming and showing interest in our university and wish you all a productive and pleasant academic season.