



# JOURNAL OF THE EUROPEAN HONORS COUNCIL

Volume 1

No. 1

2017

## **Journal of the European Honors Council**

This Journal is published by the European Honors Council (EHC): a council for all involved in talent development in higher education in Europe. The aim of the Journal of the European Honors Council is to share research results, knowledge and good practices related to talent development and honors programs in European higher education.

*The inaugural issue of the Journal is devoted to papers and notes related to the International Honors Conference 'Honors Futures', held in Utrecht, the Netherlands, in June 2016.*

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The Journal of the European Honors Council is published online and uses article numbers instead of unique page ranges. On each page of each contribution you can find the number of pages for the specific contribution. It is customary to cite the page range.

For example, to cite the third contribution in this issue in APA style, this would mean:

Van Gorp, B., De Jong, N., Kamans, E. & Buttner, S. (2017). Identifying a Culture of Excellence. *Journal of the European Honors Council* 1(1), 3, 1-4.  
<http://www.honorscouncil.eu/jehc/JEHC20170103VanGorpEtAl.pdf>

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## **Design and printing**

Cover design: Steyn van Scheppingen

Cover photo: public domain - CCO

Printed by: Marne Drukkers, Leens, Netherlands

ISSN (print version): 2543-2311

[www.jehc.eu](http://www.jehc.eu)

**Journal of the European Honors Council, Volume 1, No. 1**  
*Special Issue: Honors Futures*

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## Instructions for authors

We invite you to submit research papers, as well as notes on good practices or preliminary research results to the Journal of the European Honors Council. Contributions can be sent to the Editorial Board through e-mail: [journal@honorscouncil.eu](mailto:journal@honorscouncil.eu)

There are two options for contributors: peer-reviewed papers or edited notes.

### 1. Peer-reviewed paper

This is a contribution of at least 1,500 words and at most 5,000 words. After receiving your paper, the editorial board will send it to two reviewers who remain anonymous to the authors. The reviewers can indicate if they accept the paper (with minor changes), ask you to submit a new version with major changes, or reject the paper. Major considerations are:

- The paper is written in English, in a clear and concise language that will help editors and reviewers concentrate on the scientific content of your paper.
- The paper is relevant in the context of the EHC goals (see below).
- The paper is not published elsewhere or submitted to a journal or book.

### 2. Edited note

This is a contribution of at least 500 words and at most 1,500 words, briefly summarizing findings or good practices. Notes are edited by the editorial board. They need to be written in English, in a clear and concise language that will help readers to concentrate on the content, which should be relevant in the context of the EHC goals (see below).

In all cases, authors should send in their manuscripts following the template which can be found through [www.jehc.eu](http://www.jehc.eu). Contributions are considered in the order they are received. Once accepted, we aim to publish as quickly as possible. Online publishing is in pdf-files.

In case of questions, the Editorial Board of the Journal of the European Honors Council can be contacted by e-mail: [journal@honorscouncil.eu](mailto:journal@honorscouncil.eu).



The European Honors Council pursues the following goals:

1. Supporting and stimulating development of honors education and its structural embeddedness in the education system
2. Creating a common language
3. Supporting teacher professionalization (within honors)
4. Creation and exchange of knowledge about honors programs
5. Stimulating and facilitating research about honors
6. Enabling networking for people involved in honors
7. Stimulating spin-off of successful honors practices to regular education
8. Promoting an easier flow of talented students from secondary to higher education
9. Stimulating professional development of honors students and connection to working life / research career
10. Stimulating collaboration and inspiring student exchange at honors level

Note

## Introducing the Journal of the European Honors Council

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Published: 5 May 2017

The Board of the European Honors Council is honored to present the inaugural issue of the Journal of the European Honors Council. With this Journal, we aim to share knowledge and good practices regarding honors programs and talent development programs in higher education around Europe. To facilitate this exchange, we proudly publish this journal in full open access. In this short introduction we present the scope of the Journal, relating this to the general aims of the European Honors Council.

### 1. Background

How can we help talented young people to reach their full potential and equip them for a future where they can solve societal problems? This is the main question that started the founding process of the European Honors Council (EHC), a new European network around the subject of talent development in European higher education. The EHC was opened for membership in 2016 to stimulate talent development programs at European Higher Education Institutions (HEIs). The network brings together people who are involved in or interested in offering special programs for talented students in higher education (often known as honors programs). As the term 'honors programs' is not yet fully established in Europe, we could also indicate them as talent development programs in higher education.

In the EHC, we work with the following definition: 'Honors programs are selective study programs linked to higher education institutions. They are designed for motivated and gifted students who want to do more than the regular program offers. These programs have clear admission criteria and clear goals and offer educational opportunities that are more challenging and demanding than regular programs' (Wolfensberger, 2015, p. 12).

Even though there is plenty of knowledge on this issue around Europe and beyond, there is an apparent lack of knowledge exchange between European HEIs. Solving this 'information

gap' has been a driving force in founding the EHC. The urgency of this issue is linked to the realization that Europe is facing an increasing number of multi-faceted problems. The young people of today will have to lead the way in facing and solving the challenges of tomorrow. But in our current education system, many talented and motivated students are not sufficiently challenged and supported.

## 2. Founding process

The European Honors Council was formed following the first results of the research project *Honors in Europe*, led by Marca Wolfensberger at Hanze University of Applied Sciences Groningen, the Netherlands.

In this project, the first-ever inventory of honors programs and the national culture towards excellence in eleven northern European countries was compiled. This led to the book *Talent Development in European Higher Education: Honors Programs in the Benelux, Nordic and German-speaking countries* (Wolfensberger, 2015). The book was published in open access at the publisher Springer and has been downloaded over 50,000 times in the two years since its publication.

In the research for this book, it turned out that people involved in honors and talent development were very eager to get to know colleagues working on the same subjects in other countries. However, there was no structure of any kind to support this kind of exchange. Therefore Marca Wolfensberger joined up with Ron Weerheijm (Rotterdam UAS). They decided to invite a select group of key persons to a conference in June 2015, to discuss possibilities of formation of a European network. The idea was met with great enthusiasm and immediately afterwards, a steering committee for the European network-to-be was formed. The European Honors Council was created. The EHC was launched officially on June 3rd, 2016.

## 3. Network goals

In the year following the first meeting, the committee's ten members agreed on ten network goals (European Honors Council, 2016).

1. Supporting and stimulating development of honors education and its structural embeddedness in the education system
2. Creating a common language
3. Supporting teacher professionalization (within honors)
4. Creation and exchange of knowledge about honors programs
5. Stimulating and facilitating research about honors
6. Enabling networking for people involved in honors
7. Stimulating spin-off of successful honors practices to regular education
8. Promoting an easier flow of talented students from secondary to higher education
9. Stimulating professional development of honors students and connection to working life / research career
10. Stimulating collaboration and inspiring student exchange at honors level

These goals are all related to four main themes: education, research, student affairs and/or international affairs. Therefore the EHC set up committees on these themes, which further

pursue the network goals related to their subject. At the international conference ‘Honours Futures’ in Utrecht in June 2016 (an event on the official agenda of the Dutch EU Presidency) the EHC was officially introduced and opened for individual membership. The steering group was turned into an acting board.

#### **4. Added value and plans**

The added value of the European Honors Council compared to existing networks is evident in two main distinguishing features:

- The focus of this network on talent development and honors in higher education (including the links from secondary to higher education and from higher education to working life / Ph.D)
- The focus on programs that are designed for students who can and want to do more than the regular program offers (not necessarily gifted individuals).

For its members, the EHC offers opportunities for the exchange of knowledge and good practices, new insights, possibilities for student and teacher exchange at honors level, joint research projects and a platform to support the development of honors programs in national education systems and their structural embeddedness. At this stage, membership is free and open to all involved in honors education.

Prospective members can visit the EHC website and fill in the membership questionnaire, providing the EHC with basic information personal and institutional information, as well as information on honors programs one is involved in or plans to be involved in. The EHC asks members to share this pivotal information with other members. In order to create a dynamic network, in which more and more people will reach out to each other. We agree with Lovink (2011) that ‘in the information age, networking is key. Network cultures are here to stay. However self-evident it is, collaboration is a foundation of network cultures.’

All members are inscribed on the EHC mailing list and kept up-to-date on EHC activities and other relevant information regarding their chosen committee(s).

#### **5. The Journal**

The European Honors Council is a work in progress and maybe always will be – just like honors education. Establishing the Journal of the European Honors Council is an important milestone. This allows the sharing of research results on honors education, as well as good practices. It also helps to create a common knowledge base. Therefore we chose deliberately to publish in open access, so all interested educators and stakeholders can take advantage of findings published in the Journal. This also means that we can publish relatively fast to share new results and good practices with our audience.

You are very welcome to submit your work to the Journal of European Honors Council (JEHC). The JEHC has an editorial policy for two kinds of publications: a blind peer-review process for longer scholarly articles on honors education (papers) and a review system for shorter notes. More information can be found in the guidelines for authors on the website.

The Editorial Board’s introduction (note 2) will delve deeper into the contents of this inaugural issue. We hope you find the Journal as valuable as we do and look forward to receiving your contributions.

On behalf of the Board of the European Honors Council,

Dr. Marca Wolfensberger, President  
Dr. Astrid Fritz, Research Commissioner  
Dr. Maarten Hogenstijn, Secretary

## References

European Honors Council (2016). *Aims of the European Honors Council*.  
<http://honorscouncil.eu/aims.html>

Lovink, G. (2011). *Networks without a cause: A critique of social media*. Polity Press

Wolfensberger, M.V.C. (2015). *Talent development in European higher education. Honors Programs in the Benelux, Nordic and German-Speaking Countries*. Heidelberg: Springer.  
<http://link.springer.com/book/10.1007%2F978-3-319-12919-8>



Note

## An introduction to the first issue of the JEHC: Honors Futures

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Published: 5 May 2017

The members of the editorial board of the Journal of the European Honors Council (JEHC) wish you a warm welcome to the inaugural issue of this new journal. In this note, we present an introduction to the content of the first issue.

### 1. Honors Futures

This first issue is dedicated to contributions related to the International Honors Conference that was held in Utrecht (The Netherlands) in June 2016. With the theme 'Honors Futures', some 400 participants brought their visions and experiences together in intense discussions about the future of honors programmes in higher education. What are the opportunities and challenges? How to design and evaluate challenging honors programmes? What are the experiences of honors students and teachers in these programmes? How can we make honors trajectories anchored stronger in the institutions of higher education all over Europe?

The programme of the conference involved seven themes:

1. The honors learning experience
2. The honors teacher
3. Honors impact; honors & career honors and society
4. Quality assurance of honors
5. Personal and social growth & honors
6. Sustainable honors
7. Open student forum

A large number of contributions was brought to the conference from around Europe and the United States, providing a wide range of ideas and experiences. At the conference lots of sparkling ideas, experiences and insights were shared with participants in conference sessions. But how to share this knowledge with other interested people? After a conference often most of this highly interesting information will fade away, while other honors educators could benefit from this information.

## **2. Selecting for the Journal**

To keep this knowledge available for everybody, the Research Committee of the European Honors Council (EHC) has taken the initiative to select the most interesting contributions to the conference and ask contributors to develop these into papers and notes. In order to make this available for the participants of the conference and all other persons who are interested in the main issues of the meetings, we took the initiative to provide a platform for these papers and notes from this conference. This resulted in a decision of the board of the EHC to start a new journal and to publish a selected set of papers and notes in the inaugural issue of the JEHC.

The editorial board aims to publish the contributions as soon as they are ready and comply to our quality standards. In this process the editorial board and the reviewers support the authors to publish their work in the best way. The journal is 'open access', so the contributions will be available to a large audience.

In this issue of the JEHC you will find two types of contributions:

1. Peer-reviewed Papers: longer contributions (up to 5000 words) on experiences in honors programmes, development of programmes and courses, research on student and teacher factors and effects, policies (e.g. quality assurance) and good practices.
2. Edited Notes: short contributions about new ideas and developments on the seven themes mentioned above.

## **3. Final preparations**

At the time of writing, most peer-reviewed and edited contributions are already published. Some contributions are still in the process of revision and finalizing. We finish this first issue with contributions from the Utrecht Honors Conference 2016 before the next International Honors Conference at Windesheim University of Applied Sciences in Zwolle in June 2017.

Together, the notes and papers will provide a substantial body of knowledge about teaching, learning and organizing honors programmes. It will provide a good start to share knowledge and good practices regarding talent development in higher education. It will support the aims of the European Honors Council to have a European network of participants of talent development in higher education in Europe.

We are proud about this beginning of a new development and hope that it will inspire students, teachers and administrators of honors programmes in many countries to share their visions and experiences in the forthcoming issues of this journal. Your contributions on your experiences, research and ideas about honors education in higher education are very much welcome!

We wish to thank all organizers of and contributors to the Conference of 2016 and all authors in this journal for their efforts and ambitions to make this first Journal of the European Honors Council possible. We wish honors education and this new journal a bright and enduring future, supporting the continuous development of talent in the dynamical changes of the 21st century.

The editorial board,

Albert Pilot, Pierre van Eijl, Annelies Riteco, Marca Wolfensberger, Astrid Fritz, Maarten Hogenstijn



Note

## Identifying a Culture of Excellence

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Received: 30 January 2017; Accepted: 24 February 2017; Published: 12 April 2017

Keywords: Culture of Excellence, Ambitious school culture, Higher Education

### 1. Introduction

Over the last decades, the attention paid to excellent student performances in higher education has increased in many European countries, including traditionally egalitarian societies such as The Netherlands. By means of selective study programs, termed honors programs, gifted students who are motivated to do more than the regular program offers, are enabled to excel (Wolfensberger, 2015). The growing number of honors programs offered at institutes for Higher Education (ITS, ROA & CHEPS, 2015; Wolfensberger, 2015), the emerging literature on characteristics of honors students and the effects of honors programs on their development (Banis-den Hartog, 2016; Kool, 2016; Kolster et al. 2016; Scager et al. 2012; Scager et al. 2013), and the foundation of the European Honors Council stand testimony to this growing attention for excellence.

The Sirius Program (a government initiative) proved important in fostering honors education in The Netherlands. It aimed not only at meeting the needs of talented students who are able and willing to excel, but also at creating an ambitious school culture in Higher Education in general (Janssen & Gramberg, 2014). By establishing honors programs, so it was expected, a focus on excellent student performances would devolve to the entire institute, creating a 'Culture of Excellence': a school culture in which excellence is considered both norm and normal. Although the concept 'Culture of Excellence' has become common parlance in Dutch policy documents, an unambiguous conceptualization of it lacks to date. To explore whether honors programs have the assumed transformative power, a clear definition of the concept is asked for.

## 2. Culture of Excellence

To define the concept of 'Culture of Excellence', the present study started with a broad literature review, which included both policy papers and academic publications on 'school culture' and 'excellence'. We found one study that attempted to measure culture of excellence in Higher Education (Tiesinga & Wolfensberger, 2014). It focused on the culture within honors programs as measured by attitudes and characteristics of honors students. Based on our extensive literature review, we propose a more encompassing definition.

We define 'Culture of Excellence' as a part of school culture that is created by students and faculty. School culture is something that is not visible and difficult to define, but is manifested in the behavior of people within a school (Pol, 2005). Schein (2010, p. 23) discerns three layers in school culture: artifacts, espoused beliefs and values, and basic assumptions. Hence, a culture of excellence implies that excellence is included in convictions, values, norms, and practices in school. We thus define 'Culture of Excellence' as: *"A school culture in which students who want to excel are challenged, allowed and enabled to deliver outstanding performances by using pedagogies geared at outstanding performances"*. Allowing students to excel implies that there are no repercussions towards ambitious students and that outstanding performances are appreciated and stimulated.

This definition leaves the term 'excellence' undefined. The concept 'excellence' is socially constructed and related to general notions of students, learning and teaching (Dai & Chen, 2013). Researchers differ on conceptualizations of talent, giftedness and explanations of outstanding performances (Harder et al., 2014; Ambrose, 2010 in: Laine et al., 2016). Authors such as Matthews and Foster (2006), Johnson (2005) and Dai and Chen (2013) introduce paradigms of giftedness.

In line with these overviews we identified four key questions that together mold perspectives on excellence in higher education: *Who, What, How, and Why?* *Who* deals with the characteristics of excellent students: is every student able to deliver excellent performances or only a small, selective group of students? *What* is concerned with the recognition of excellent performances: what characterizes an excellent performance? *How* refers to pedagogies that empower students to deliver excellent performances. Lastly *why* deals with the societal relevance of education geared at excellence. Positions differ between neoliberal claims about international competition in the knowledge economy and a focus on individual learning needs (Cross & Cross, 2005). The answers to these four questions form a perception of excellence in Higher Education, which shape one's attitudes, norms and behaviors.

At the Utrecht Honors Conference (2016) workshop participants were invited to share their ideas about 'Culture of Excellence'. These honors educators mentioned a plethora of ideas that reflect the variety of perceptions on excellence. They talked about talent development "using all talents" and differentiation (*who*); about critical thinking, creativity, innovation and making each other great (*what*); about learning community, self-regulation and culture of learning (*how*). They also mentioned that a definition of excellence should always relate to the goals and terms a program has set.

### 3. To conclude

This research note addressed the assumed transformative power of honors education: investing in an honors program is said to create a Culture of Excellence in the entire educational institution: an ambitious school culture where excellent performances are norm and normal. Following the longstanding debates on excellence in education, we feel that this transformative power can only take place if faculty and students have insight in their beliefs about excellence. If (opposing) views on excellence are not made explicit, the new focus on excellent student performances which is created by honors programs may leave both faculty and students disappointed: students who see good grades for tests as a mark of excellence will struggle with 'out of the box' assignments, and teachers who expect good students to excel in all subjects may complain about the amount of instruction these students require. Having insight in the (diverging) views on excellence may help members of a school culture (students and faculty) to create common language on who or what is excellent and define shared, attainable goals for the future to stimulate a Culture of Excellence in their institution.

### Acknowledgements

This presentation was prepared by members of the Exchange project, a NRO-funded (grant 405-15-603) research on transfer and cultural change through excellence education. The authors would like to thank the workshop participants for their participation and useful comments.

### References

- Banis – den Hartog, J. (2016). *X-factor for innovation: Identifying future excellent professionals* (dissertation Universiteit Twente).
- Cross, J.R., & Cross, T.L. (2005). Social dominance, moral politics, and gifted education. *Roeper Review*, 28(1), 21-29.
- Dai, D.Y., & Chen, F. (2013). Three paradigms of gifted education in search of conceptual clarity in research and practice. *Gifted Child Quarterly*, 57(3), 151-168.
- Harder, B., Vialle, W., & Ziegler, A. (2014). Conceptions of giftedness and expertise put to the empirical test. *High Ability Studies*, 25(2), 83-120.
- ITS, ROA, & CHEPS (2015). *Het beste uit studenten. Onderzoek naar de werking van het Sirius Programma om excellentie in het hoger onderwijs te bevorderen*. Nijmegen: ITS, Radboud Universiteit Nijmegen.
- Janssen, M., & Gramberg, E. (2014). *Manifest voor het excellentieonderwijs van de toekomst*. Amsterdam: Hogeschool van Amsterdam en Sirius Programma. Retrieved from <https://www.siriusprogramma.nl/publicaties/manifest-voor-de-toekomst-van-het-excellentieonderwijs#.WE5ExbLhDIU>

- Johnson, A. (2005). Caught by our dangling paradigms: How our metaphysical assumptions influence gifted education. *The Journal of Secondary Gifted Education*, 16(2-3), 67-73.
- Kolster, R., Dijk, L. & Jongbloed, B. (2016). *Excellence in higher education: Educational preferences of honours students in the Netherlands*. CHEPS working paper 01/2016. Enschede: CHEPS.
- Kool, A. (2016). *Excellence in higher education: Students' personal qualities and the effects of undergraduate honors programs*. (dissertation Utrecht University).
- Laine, S., Kuusisto, E., & Tirri, K. (2016). Finnish teachers' conceptions of giftedness. *Journal for the Education of the Gifted*, 39(2), 151-167.
- Matthews, D.J., & Foster, J.F. (2006). Mystery to mastery: Shifting paradigms in gifted education. *Roeper Review*, 28(2), 64-69.
- Pol, M., Hlouskova, L., Novotny, P., Vaclavikova, E. & Zounek, J. (2005). School culture as an object of research. *Online Submission, New Educational Review*, 5(1), 147-165.
- Scager, K., Akkerman, S.F., Keesen, F., Mainhard, M.T., Pilot, A. & Wubbels, T. (2012). Do honors students have more potential for excellence in their professional lives? *Higher Education*, 64(1), 19-39.
- Scager, K., Akkerman, S.F., Pilot, A. & Wubbels, T. (2013). How to persuade honors students to go the extra mile: Creating a challenging learning environment. *High Ability Studies*, 24(2), 115-134.
- Schein, E.H. (2010). *Organizational culture and leadership*. New York: John Wiley & Sons.
- Tiesinga, L. & Wolfensberger, M. (2014). De cultuur van honoursstudenten en de mogelijke invloed op de reguliere studiecultuur. *Tijdschrift Voor Hoger Onderwijs*, 4(2), 5-20.
- Wolfensberger, M.V.C. (2015). *Talent development in European higher education. Honors Programs in the Benelux, Nordic and German-Speaking Countries*. Heidelberg: Springer.



*Note*

## **The Tuition Pentagon: students choose an option within a course which matches their motivation, competence and ambition**

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Received: 30 January 2017; Accepted: 13 March 2017; Published: 2 May 2017

Keywords: honours, student engagement, personalized learning, student types

### **1. Introduction**

In redesigning its curriculum and learning environment, the HU Business School focuses on improving student engagement. In its turn, this should improve the academic success rates. Moreover, challenging honours students in regular courses is also an aim of the redesign.

With this in mind, we developed a pilot course in which students are offered five different options of coaching and tuition from the lecturer. This approach was called “The tuition Pentagon”. The five options are designed to match different levels of motivation, competence and ambition. Students reflect on their motivation, competence and ambition and choose their preferred option. An option with extra assignments offers a challenge for honours students.

### **2. Method**

In order to understand the differences in motivation, ambition, needs, study attitudes and study behaviour of our students, we developed a motivational and social segmentation model (De Boer, Kamphuis & van der Veen, 2016). This model is used for the design and evaluation of the courses in which students choose from the five options of tuition offered.

Over a period of three years, we run a pilot course. The pilot developed over time. About 300 students were involved. The pilot course (Accounting Information Systems) offered the following five options to choose from:

1. self-study: no classes, only study at home;
2. crash course: consisting of one kick-off lecture, exam preparation and a question hour for the exam of the course, so in total three lectures;
3. regular course: students attend the lectures every week for seven weeks, plus the question hour mentioned above;

4. regular course with additional individual diagnostic tests and additional counselling;
5. regular course with additional individual diagnostic tests, additional group assignments and additional counselling

All students make the same written exam.

Ad 1 and 2. The options self-study and crash course are suited for students who want to follow the course with minimal class attendance. This may be because of time-limitations due to other study- and private activities, high competence level, or because their interest in the subject is low. It requires good planning skills and self-discipline to be successful.

Ad 3. This option is suited for students with modest motivation, ambition or planning skills.

Ad 4. This option with individual diagnostic tests and counselling is attractive for students with an active study attitude who want to do well and feel the need for extra support and structure.

Ad 5. The option with group assignments is attractive for students who are intrinsically interested in the subject and who are challenged by an extra assignment and intend to perform well.

In order to enable students to make the right choice and to create tutor insight in what drives his students, at the start of the course students are asked to indicate their professional aim in life and their business experience in the subject of the course. Additionally they are asked to explain their motivation for the course and their study attitude and discipline. On the basis of this reflection, each student chooses one of the five options. Then teams are composed of students who choose the same option.

At the end of each lecture, feedback is asked and if possible implemented directly in the next lecture. In this way, the tutor gains trust resulting in open feedback which gives him profound additional insight in student preferences.

### **3. Conclusion**

The effectiveness of this pilot is evaluated by assessing the type of student (according to our segmentation model) and the option he has chosen, his study attitude, behaviour during the course, pass rates and student evaluations.

Preliminary results indicate that the exam pass rates have risen from 30% to 70% compared to classes that followed the regular course. Exam pass results increased from 6 to 7 out of 10. Not surprisingly, the best exam grades are obtained by the students that choose option 5.

Another important observation is that students experience less negative peer pressure in the classroom from students who can be qualified as “cinema-goers”: the cinema-goer sits in the back of the classroom with an attitude “make it a nice time for me and then I’ll decide what I think of it”. Firstly, their number, and hence their influence, decreases because a part of them chooses self-study or crash course. Secondly, the tutor confronts these students with

their own choice “not to actively make one”. In the realization that it is their own choice to be a cinema-goer, which by no means is a compliment, they start behaving in a more modest way, and that helps. Students who do not opt for the regular course, show more commitment and persistence.

Last but not least this approach offers a challenge for honours students within the standard curriculum.

#### **4. Discussion**

The ultimate challenge for the tutor is to engage all students by offering them the right didactic approach in order to make them experience autonomy and the possibility to work on their own intrinsic goals. This will increase engagement, persistence and academic success rates (Vansteenkiste et al., 2004).

After the pilot other tutors became involved. New tuition experiments offer either differentiation within classes (as explained above) or, as a new development, between classes (for instance a regular class and a motivation-plus class). These new experiments are currently systematically executed and evaluated.

#### **References**

De Boer, M.J.M., Kamphuis, A. & van der Veen, G. (2016). *Working with student personas: engaging students through personalized education*. Presentation at the EDINEB conference, Nice, June 8-10, 2016.

Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K.M. & Deci, E.L. (2004). Motivating learning, performance and persistence: the synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87, 246-260



Note

## Honors education in France – preliminary research results

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Received: 30 January 2017; Accepted: 15 March 2017; Published: 17 April 2017

Keywords: honors, higher education, talent development, excellence, France

### 1. Introduction

This note discusses study opportunities for the most motivated and talented students in the French system of higher education. Preliminary results of the Honors in Europe research project of the Hanze University of Applied Sciences Groningen (Netherlands) show that talent development in France is mainly stimulated through the hierarchical structure of the higher education system, although the number of additional, selective study programs for the best-performing students has substantially increased in the past decade. This note first examines how excellence is embedded in the French system of higher education, after which the preliminary results from the Honors in Europe research project are discussed.

### 2. Excellence in the French system of higher education

As opposed to many other continental European education systems, the concept of excellence is clearly ingrained in the hierarchical structure of French higher education. Higher education is mainly provided by public universities and CPGE/*grandes écoles*, which both complement and compete with each other (Cremonini et al. 2013, pp. 106-108). A relatively clear hierarchy exists between these two types of higher education: in most disciplines, obtaining a degree from a prestigious, highly selective (and often elitist) *grande école* is the highest possible achievement from an academic and career point of view. Universities, on the other hand, are generally unselective and provide higher education for ‘the masses’ (Cremonini et al. 2013, p. 106). The reputations of universities and *grandes écoles*, which are often historically rooted and can be different for specific disciplines, play an important role in these hierarchies. Excellence is thus embedded in the French higher education system through the strong differentiation between types and reputations of institutions.

Students are admitted to programs at *grandes écoles*, which generally cover the third year of undergraduate degree level and the two years of graduate level higher education, after a highly competitive examination process (*concours*). Students usually partake in the *concours*

after following two or three years of so-called preparatory classes (*classes préparatoires aux grandes écoles* (CPGE)) (Vrignaud, Bonora, and Dreux 2005, pp. 218-219). The CPGE expose their students to a heavy workload and tough examination under high pressure. Admission to the CPGE is based on a pupil's secondary school results, motivation, the type of courses the pupil has followed and (sometimes) the school's reputation.

### 3. Preliminary results

The Honors in Europe research project aims to map and explore talent programs of European higher education institutions. These 'honors programs' are defined as 'selective study programs linked to higher education institutions. They are designed for motivated and gifted students who want to do more than the regular program offers. These programs have clear admission criteria and clear goals and offer educational opportunities that are more challenging and demanding than regular programs' (Wolfensberger, 2015, p. 12).

Desk research has been done to find and explore possible talent programs at French higher education institutions. The websites of 69 French universities and 24 *grandes écoles* have been analyzed in order to find information on talent development programs, after which each university has been contacted to gather further information. Considering the hierarchical structure of the French higher education system (as discussed above), priority was given to exploring universities (*universités*) rather than *grandes écoles*, as the latter already have highly selective admission procedures.

#### 1. Limited number of programs

Although the process of contacting institutions is still ongoing, first results have found only a very limited number of programs that match (or come close to) the definition of an honors program. Many universities offer their students the opportunity to obtain additional certificates in addition to the regular program, but these are mainly related to a specific skill in the field of languages or IT (such as an English language proficiency certificate). French universities are also increasingly starting new bachelor's and master's programs for which they can select their students (in contrast with the non-selectivity principle the university system follows in general) (Abdoul-Maninrouline, 2017). These programs, including 'double degrees' and international exchange programs, are sometimes dubbed 'excellence degrees' (*formations d'excellence*), but generally cannot be considered as specific, additional talent development programs for a certain group of students.

#### 2. Excellence tracks (*filières d'excellence*)

Some universities do offer 'excellence tracks' (*filières d'excellence*) in some of their undergraduate degrees (*licence*). These tracks are selective, additional study programs, consisting of extra courses and seminars (De Tricornot, 2015; Deumier & Teyssié, 2012; Stromboni, 2015). Some programs run during the entire course of an undergraduate degree, while others start later, for example in the second year. Students are selected on their grades and motivation. These tracks are particularly common in law departments, where they are used to create selective 'law colleges'. The first 'law college' (*collège de droit*) was founded at Pantheon-Assas University (Paris 2) in 2007, mainly to compete with the well-known *grande école* Sciences Po (Franceinfo, 2014). Departments in other fields have also announced that they are considering or planning to create 'excellence tracks' (Stromboni, 2015).

### 3. *Magistère degrees*

A number of universities offer *magistère* degrees for certain disciplines (L'Étudiant, 2014; Sitbon, 2014). The degrees aim to offer their students 'excellent' education through additional courses and seminars, which are often strongly linked to academic research or the professional field. The *magistère* diploma was created in 1985 to enable universities to compete with *grandes écoles*. The programs run from the third bachelor year throughout the two-year master phase and admit high-performing students from CPGE and regular university programs based on their grades and motivation (sometimes complemented by special exams).

### 4. Discussion

The French system of higher education approaches the concept of 'excellence' in a complex, ambiguous way. On the one hand, the system's hierarchy between universities and CPGE/*grandes écoles* aims to facilitate a meritocratic 'race to the top' in higher education. Interestingly, attention for excellence within the public university system is increasing too, exemplified by the growing popularity of excellence tracks and selective bachelor's and master's programmes in addition to the existing range of *magistères*. On the other hand, there is a strong commitment to equality in French educational culture, which may complicate the development of excellence initiatives (Cremonini et al., 2013, p. 106). Student unions, for example, have raised strong objections against the recent development of excellence tracks and selective degrees at universities (*filières d'excellence*) (Abdoul-Maninroudine, 2017; De Tricornot, 2015; Stromboni, 2015). Further research within the Honors in Europe project should clarify how these different opportunities for talented students complement or compete with each other (universities with *grandes écoles*, for example) and how new excellence initiatives are positioned within France's hierarchical structure of higher education and the cultural and political contexts.

### References

- Abdoul-Maninroudine, A. (2017, February 10). Université : la sélection gagne du terrain. *L'Étudiant*. Retrieved from <http://www.letudiant.fr/etudes/fac/universite-la-selection-gagne-du-terrain.html>
- Cremonini, L., Benneworth, P., Dauncey, H., & Westerheijden, D. F. (2013). Reconciling Republican "Egalité" and Global Excellence Values in French Higher Education. In J. C. Shin & B. M. Kehm (Eds.), *Institutionalization of World-Class University in Global Competition* (pp. 99–123). Dordrecht: Springer Science+Business Media. [http://doi.org/10.1007/978-94-007-4975-7\\_7](http://doi.org/10.1007/978-94-007-4975-7_7)
- De Tricornot, A. (2015, June 24). Polémique sur les « parcours d'excellence » en droit. *Le Monde*. Retrieved from [http://www.lemonde.fr/campus/article/2015/06/24/polemique-sur-les-parcours-d-excellence-en-droit\\_4660626\\_4401467.html](http://www.lemonde.fr/campus/article/2015/06/24/polemique-sur-les-parcours-d-excellence-en-droit_4660626_4401467.html)
- Deumier, P., & Teyssié, B. (2012). Les filières d'excellence en droit dans les universités. *La Semaine Juridique - Édition Générale*, (14), 649–651.

Franceinfo. (2014, May 9). Filières d'excellence à la fac. Retrieved from [http://www.francetvinfo.fr/replay-radio/modes-de-vie/filieres-d-excellence-a-la-fac\\_1732537.html](http://www.francetvinfo.fr/replay-radio/modes-de-vie/filieres-d-excellence-a-la-fac_1732537.html)

L'Étudiant. (2014, March 19). Le magistère : un bac+5 boosté. Retrieved from <http://www.letudiant.fr/etudes/3es-cycles-et-masters/du-magisteres-drt-des-3es-cycles-hors-des-sentiers-battus-13394/le-magistere-un-bac-5-booste.html>

Sitbon, D. (2014, July 31). Focus sur des filières d'excellence en droit : les Magistères et DJCE. *Carrières-Juridiques.com*. Retrieved from <http://www.carrieres-juridiques.com/actualites-et-conseils-emploi-juridique/focus-sur-des-filieres-dexcellence-en-droit-les-magisteres-et-dice/685>

Stromboni, C. (2015, July 15). Université: ces filières où la sélection est possible. *L'Étudiant*. Retrieved from <http://www.letudiant.fr/educpros/enquetes/pourquoi-l-universite-a-parfois-le-droit-de-selectionner.html>

Vrignaud, P., Bonora, D., & Dreux, A. (2005). Counselling the gifted and talented in France: Minimizing gift and maximizing talent. *International Journal for the Advancement of Counselling*, 27(2), 211–228. <http://doi.org/10.1007/s10447-005-3182-6>

Wolfensberger, M. (2015). *Talent Development in European Higher Education. Honors programs in the Benelux, Nordic and German-speaking countries*. Heidelberg, New York, Dordrecht & London: Springer International Publishing. <http://doi.org/10.1007/978-3-319-12919-8>



*Paper*

## **Dealing with diversity – An honors program for students of teacher training starting in Muenster**

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Received: 31 January 2017; Accepted: 29 March 2017; Published: 19 April 2017

Keywords: Giftedness, Honors Program, Teacher Training Students

### **1. Introduction**

Dealing with diversity is a main topic in teacher education in Germany. One aspect which is often inadequately represented is gifted education in this context. Often dealing with diversity starts with a negative point of view: which difficulties does the student have? Another point of access in classroom could be a focus on the individual potentials. The idea of giftedness and talents gives another point of view to this topic.

First a short overview about Giftedness and Learning is given. The leading idea of diversity in school is following. With the Challenge and Support Project, a best practice example is given for illustration.

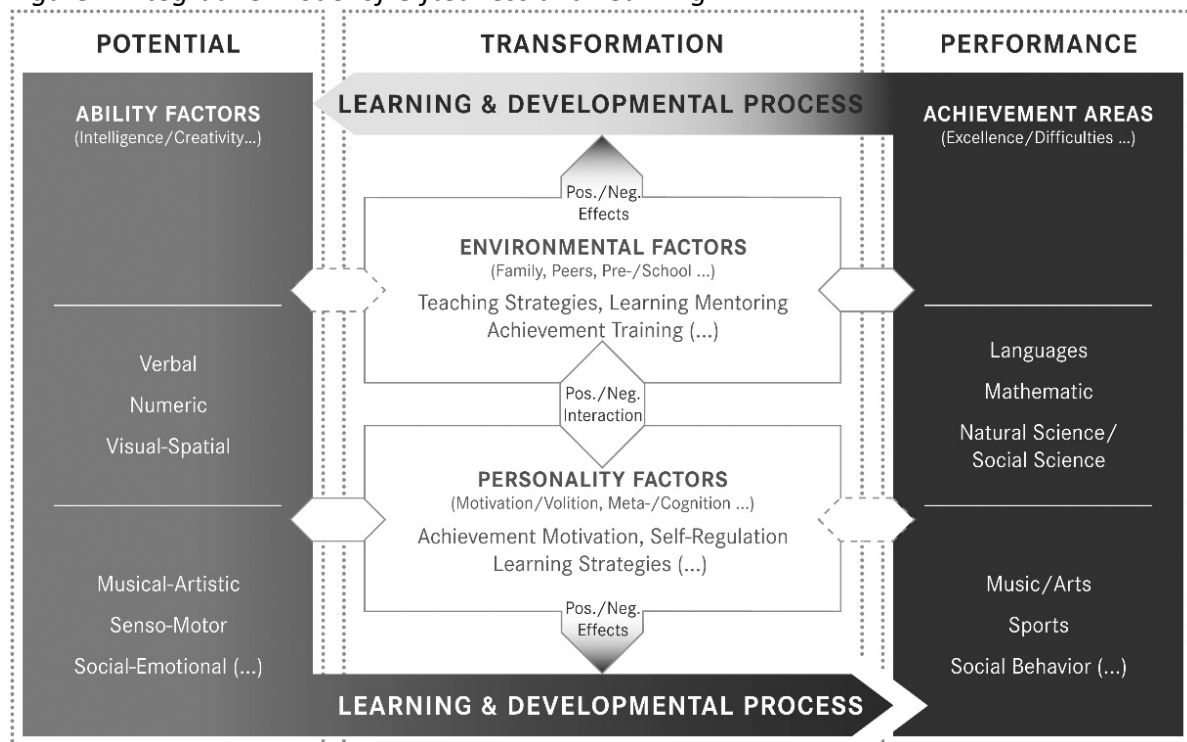
### **2. Giftedness and Learning – an Overview**

First individual giftedness and gifted learner promotion will be outlined. On the basis of the fundamental structure of the models by Heller et al. (2005) and Gagné (2005) the "Integrative Model of Giftedness and Learning" (Fischer, 2008) focuses on the key aspects of strategies of successful learning processes in personality factors, achievement motivation, self-regulation and learning strategies, which interact with the environmental factors (fig. 1). The environmental factors are mainly founded on the "Multifactor Model of Giftedness" (Mönks, 1992) and the factors of giftedness based on the "Theory of Multiple Intelligences" (Gardner, 1991).

The personality factors mentioned above may lead to successful learning processes as a condition for excellence in achievement, but it can also lead to unsuccessful learning processes as a cause of learning difficulties. The same applies to the environmental factors mentioned above so that the success or failure of individual learning processes also depends on the adaptation of teaching strategies, the efficiency of learning coaching and the intensity of achievement training (Whitmore, 1980). These inter- and intra-personal factors exercise a direct as well as an indirect influence on the individual learning and developmental process, caused by the individual interaction of environmental and personality factors (Fischer, 2006).

Various strategies of successful learning are also of great significance for the different models of self-regulated learning (SRL). Simons (1992) defines SRL as the extent to which a person is capable of managing and directing the learning process without support from other sources. According to Cronbach and Snow's (1997) "Aptitude Interaction Theory" (ATI) SRL models have proved to be adequate for the learning style of (highly) gifted children as regards their general cognitive, meta-cognitive and motivational-volitional characteristics of learning. (Highly) gifted underachievers, however, are frequently in need of being made familiar with strategies of autonomous learning via direct instruction so that they can then profit from useful forms of SRL, such as self-directed and project work (Griggs, 1984).

*Figure 1 Integrative Model of Giftedness and Learning*



*Source: Fischer, 2008*

Following Boekaerts' (1999) "Three-layered model of SRL" the strategies of SRL may be differentiated as follows: 1) cognitive strategies of information processing (e.g., reading and writing strategies), 2) metacognitive strategies of self-regulation (e.g., time management, self-control) and 3) motivational- volitional strategies of achievement motivation (e.g., goal development, interest orientation). Similarly Weinstein and Meyer (1986) make a difference between primary cognitive strategies (e.g., repetition, elaboration and organizational strategies), metacognitive control strategies and motivational-emotional support strategies. In this model learning strategies comprise all forms of internal and external behavior which assist the learners in trying to influence the different aspects of their learning (motivation, attention, gathering and processing information; Weinstein & Meyer, 1986). The basis of these measures is the principle of individual promotion, i.e., to adapt the challenge and support offers of the environment to the children's cognitive, socio-emotional and psycho-motoric challenge and support needs (Fischer, 2008).

### 3. Inside school: Limits & possibilities

Diversity in this school's context means the appreciation of social characteristics in groups or in persons. Taking these varieties positive could evolve personal developments as well as those of learning groups (Walgenbach, 2017).

Nevertheless looking in school there are some increasing challenges for teachers dealing with diversity. For example, there are more students coming to school as refugees. This means that there are more problems with language or maybe handling traumata or comparative challenges in classroom than before (Adam und Inal, 2013). Another point is the growing number of pupils getting included from the special-needs-school into regular schools (Klemm, 2015). One political reaction is the expansion of schoolwide full-time school offers (StEG, 2016). This should help to include all students in one system not just pointing out one category like disabilities vs. abilities but teach them in their holism.

This means that students with difficulties as well as students with special gifts and talents should be the aim of school changes towards individual support. Studies revealed to this topic show that there is a lack of support for gifted and high achieving pupils in German schools (for example Bos et al., 2012; Wendt et al., 2013; Klieme et al., 2010; Prenzel et al., 2013; Fischer et al., 2014).

### 4. Best Practice: The Challenge and Support Project

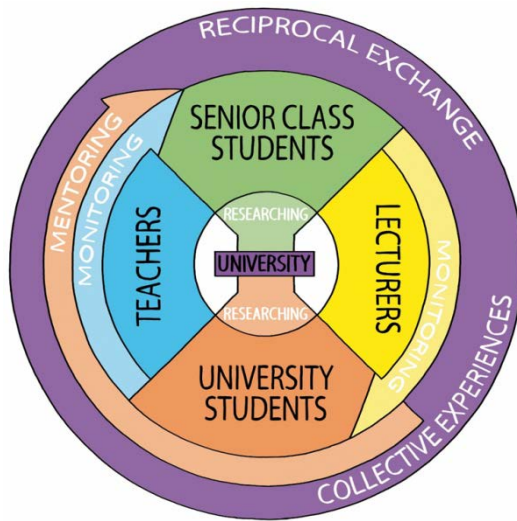
The „Challenge and Support Project“ (Forder-Förder-Projekt - FFP) in the Revolving Door Model (FFP-Drehtür) tries to fill this gap and therefore, in particular aims at (highly) gifted children. In primary school (years 3 & 4) as well as in secondary school (years 5 & 6 (FFP-D) as well as 8 & 9 (FFP-Advanced)) the gifted pupils have the possibility to attend to the Challenge and Support Project. In both FFP versions (as advanced and as a revolving door model) a small group of six pupils attend a special weekly double period (90 minutes) instead of their regular lessons, tutored by three university students. The FFP is divided into four learning strategy oriented phases: 1) choice of topics (focus on motivational strategies), 2) information-search (focus on reading strategies), 3) project documentation (focus on writing strategies), 4) project documentation (focus on presentation strategies).

The project begins with a phase of support diagnostics and ends with a phase of project evaluation to which parents and teachers also contribute special information. In all phases learning diaries with a focus on self-management strategies are used. The pupils can choose an own topic, working it out into a thesis and present their results. Their choice is not only depending on their personal interest but also on the project type and age. Due to its advanced version, the pupils in the FFP-A focus even more on a research process. Based on the individual abilities, interests and learning competences, special strategies using a scientific methodology to bear on an individual problem will be taught in the FFP-A project. These strategies include the basic spectrum of scientific working and research methods, i.e. the development of a question compiling literature and planning, realization, evaluation, documentation and presentation of one's research results.

The FFP is not only focusing on pupils. During the regular FFP the university students showed a huge interest and motivation to enlarge their activities beyond the horizon of their regular academic program. Therefore, in September 2016 a subsequent program started which tries to cover those demands. The FFP Plus (Research-Based Learning – Research on Learning) is

designed as an Honors Program which enables teacher training students to foster individual needs of gifted and talented pupils in a special enrichment setting.

Figure 2: Structure of the FFP-Plus



The FFP-Plus is designed as an enrichment project for highly gifted senior class students as well as for high talented and motivated university students. Both target groups get the chance to do active research on individual learning processes.

It focusses on an additional group of pupils at the age of 16 to 18 years who are close to reaching the permission to enter higher education.

Based on a research question, for example “what happens in the brain while learning?”, they build different research groups on the topic of learning, working together on a thesis regarding their specific research question. Unlike the regular FFP the university students do not only mentor the pupils but also get the chance to do active research on the topic of learning. Pupils and students learn together, expanding their knowledge and research skills equally. Instead of organizing the sessions at schools, the lessons of the FFP Plus will take place in the facilities of the university. On a monthly basis it is organized in a special combination of seminar and lecture, where different experts are invited to lecture about topics of learning (for example differences in learning styles) and the pupils work with the students on their research topics. This is one of the main contrasts to the already existing program in which the pupils are free to choose a topic of interest in any field they want and come together in their own schools. Depending on their topic some of the pupils sometimes choose to interview experts (for example interviewing a biology professor on terms of bacteria), but they are not working together as groups with their mentoring teacher trainings students.

## References

Adam, H. & Inal, S. (2013). *Pädagogische Arbeit mit Migranten- und Flüchtlingskindern. Unterrichtsmodule und psychologische Grundlagen*. Weinheim: Beltz.

Boekaerts, M. (1999). Self-regulated learning: Where we are today. *International Journal of Educational Research*, 31, 445-475.

- Bos, W.; Wendt, H., Ünlü, A., Valtin, R., Euen, B., Kasper, D. & Tarelli, I. (2012). Leistungsprofile von Viertklässlerinnen und Viertklässlern in Deutschland. In: W. Bos, H. Wendt, O. Köller & C. Selter (Hsrg.). *TIMSS 2011 - Mathematische und naturwissenschaftliche Kompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich*. (pp. 269 - 301). Münster: Waxmann.
- Cronbach L.J. & Snow, R.E. (1997). *Aptitudes and instructional methods: A handbook for research on interactions*. New York: Irvington.
- Fischer, C., Rott, D. & Veber, M. (2014). Diversität von Schüler/-innen als mögliche Ressource für individuelles und wechselseitiges Lernen im Unterricht. *Lehren & Lernen. Zeitschrift für Schule und Innovation aus Baden-Württemberg* 40, 8/9: 22-28.
- Fischer, C.; Mönks, F. & Westphal, U. (Eds.) (2008). *Individuelle Förderung: Begabungen entfalten - Persönlichkeit entwickeln. Allgemeine Förder- und Förderkonzepte*. (1. Aufl). Lit Verlag.
- Fischer, C. & Ludwig, H. (Eds.)(2006). *Begabtenförderung als Aufgabe und Herausforderung für die Pädagogik*. Münster: Aschendorff-Verlag.
- Gagné, F. (2005). From gifts to talents: The DMGT as a developmental model. In: Sternberg, R.J. & Davidson, J.E. (Eds.), *Conceptions of giftedness* (pp. 98-119). New York: Gibbs.
- Griggs, S.A. (1984). Counseling the Gifted and Talented based on learning styles. *Exceptional Children*, 50 (5), 429-432.
- Heller, K.A., Perleth, C., & Lim, T.K. (2005). The Munich model of giftedness designed to identify and promote gifted students. In: Sternberg, R.J. & Davidson, J.E. (Eds.), *Conceptions of giftedness* (pp. 147-170). New York: Gibbs.
- Klemm, K. (2015). *Inklusion in Deutschland. Daten und Fakten*. Gütersloh. Available online: [https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/Studie\\_IB\\_Klemm-Studie\\_Inklusion\\_2015.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/Studie_IB_Klemm-Studie_Inklusion_2015.pdf) (accessed 24/1/2017).
- Klieme, E., Artelt, C., Hartig, J., Jude, N., Köller, O., Prenzel, M., Schneider, W. & Stanat, P. (Eds.). (2010). *PISA 2009*. Münster: Waxmann.
- Mönks, F.J. (1992). Ein interaktionales Modell der Hochbegabung. In: Hany, E.A. & Nickel, H., *Begabung und Hochbegabung. Theoretische Konzepte–Empirische Befunde–Praktische Konsequenzen* (pp. 17-22). Bern: Huber
- Prenzel, M., Sälzer, Ch., Klieme, E. & Köller, O. (Eds.) (2013). *PISA 2012: Fortschritte und Herausforderungen in Deutschland*. Münster: Waxmann.

Simons, P. R. J. (1992). Lernen selbständig zu lernen - ein Rahmenmodell. In H. Mandl & H. F. Friedrich (Eds.), *Lern- und Denkstrategien. Analyse und Intervention* (pp. 251-264). Göttingen: Hogrefe.

StEG (Das Konsortium der Studie zur Entwicklung von Ganztagschulen) (2016). *Ganztagschule: Bildungsqualität und Wirkungen außerunterrichtlicher Angebote. Ergebnisse der Studie zur Entwicklung von Ganztagschulen 2012 –2015*. Available online: [http://projekt-steg.de/sites/default/files/StEG\\_Brosch\\_FINAL.pdf](http://projekt-steg.de/sites/default/files/StEG_Brosch_FINAL.pdf) (accessed 24/1/2017)

Walgenbach, K. (2017). *Heterogenität - Intersektionalität - Diversity in der Erziehungswissenschaft*. 2., durchgesehene Auflage. Leverkusen: UTB.

Wendt, H., Willems, A.S., Tarelli, I., Euen, B. & Bos, W. (2013). Ausreichend geförderte Talente? - Zu den deutschen Ergebnissen von leistungsstarken Viertklässlerinnen und Viertklässlern in IGLU 2011 und TIMSS 2011. In: Fischer, C. (Ed.), *Schule und Unterricht adaptiv gestalten. Fördermöglichkeiten für benachteiligte Kinder und Jugendliche*. (pp. 23-34). Münster: Waxmann.

Weinstein, C. E. & Mayer, R. E. (1986). The teaching of learning strategies. In: Wittrock, M. C. (Ed.), *Handbook of research in teaching* (pp. 215-327). New York: Macmillan.

Whitmore, J.R. (1980). *Giftedness, Conflict and Underachievement*. Boston: Allyn & Bacon.

*Paper*

## Different views on assuring the quality of honours programmes

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Received: 27 January 2017; Accepted: 5 April 2017; Published: XX April 2017

Keywords: quality assurance, honours programmes, certification, annual report, Sirius compass, assessment framework

### Abstract

Can we match formal procedures for quality assurance with the creativity and individuality that defines honours? In a session at the Utrecht Honours Conference 2016: Honours Futures we discussed experiences in quality assurance of honours programmes in the United States of America, the Netherlands and Belgium. To illustrate the possibilities, a case study of using an external audit for honours education and two case studies of the use of internal quality assurance tools in an honours programme were presented. It is concluded that a form of quality assurance is needed to continuously improve. So honours educators must at least care for internal quality control. Student involvement is stimulating for the engagement of all participants in the process of quality control. Internal quality control may result in an annual report. Annual reports can be used both internally and in external quality control.

### 1. Introduction

This paper is based on a session at the Utrecht Honours Conference 2016: Honours Futures. During the workshop session, participants were invited to share their own experiences and insights on quality assurance in honours education. One participant shared her experience with an internal certification programme at Utrecht University. Because it enriched the seminar, it was included as the third part of this paper, which thereby consists of five parts:

1. Quality assurance versus freedom in honours?
2. Case study of Hanze University of Applied Sciences - Hobéon Quality Certification; an example of external quality assurance
3. Example of internal certification at the Utrecht University
4. Case study of incorporation of regular quality assurance tools in an honours programme at the University of Antwerp; an example of internal quality control
5. Concluding remarks

## 2. Quality assurance versus freedom in honours?

High quality honours programmes, cherished by students, teachers and management, are what everyone is looking for. How can we ensure students' freedom and creativity without relying on elaborate checklists by obligatory quality assurance procedures? With the recent increase in honours initiatives all around Europe and especially in the Netherlands, the question of quality assurance of honours programmes begins to rise.

In the last six years the Sirius programme in the Netherlands (governmental support for higher education institutions who wanted to develop honours programmes) was a strong catalyst for the development of honours education. During 2010-2015, an audit committee of Sirius visited the participating universities to discuss the self-study of the honours programmes as 'critical friends' which helped the institutions to gain more insights in their programme's strengths and weaknesses and to implement improvements. It became apparent that external credibility is as important as internal feedback for the programmes to learn and improve. Because honours programmes are often frontrunners in educational change which can also result in innovative changes in regular programmes, they may reflect the quality of tomorrow's education.

### 2.1 Finding common ground for a definition of an honours programme

In the discussion about quality assurance we need to keep in mind that honours programmes require quite some effort and time. Therefore it is important that these programmes are considered to be worthwhile. The programme quality, number of students and added value of the honours programmes are therefore important in this context. The diversity of honours programmes is enormous: disciplinary/multi-/interdisciplinary; academic/professional, different size and duration, regular/extra-curricular, fulltime/part-time, bachelor/masters, programme/college. This is another complicating factor that needs to be taken into account to set quality assurance criteria and procedures. To proceed, we need more common ground about what defines an honours programme. The "Basic Characteristics of a Fully Developed Honours Program" of the National Collegiate Honours Council (NCHC) of the USA can be a source of inspiration since it is a worthwhile series of characteristics which have been updated to new insights over time. An example in the Netherlands is the 'ten key points for an honours programme' (Van Eijl, Pilot & Wolfensberger, 2010, p. 47):

1. Mission-statement as point of entry for an honours programme.
2. Selection of students, also with respect to potential talent.
3. Teachers as source of inspiration for the students.
4. Honours pedagogy: challenge, authenticity, complex issues and discovery learning.
5. Programme with depth and broadness and diversity of skills and contact with employers.
6. Excellence is valued, space for new ideas and initiatives are facilitated.
7. Throughout the programme teacher feedback, peer feedback and coaching for individual talent development and personal development are important.
8. Students stimulate each other by teamwork, honours communities and extra-curricular activities.
9. The programme is sufficient in size and duration, so talent can develop.
10. The programme has a dedicated organization with sufficient institutional influence and means and with co-operation of students.



To arrive at this common ground about honours programmes we need a joint effort of honours teachers, students and their institutes to discuss this and come to (inter)national cooperation. This common ground will facilitate the exchange of experiences around honours and lead to an agenda for publications, activities and the development of peer reviews. Good contacts between Dutch honours teachers and NCHC exist already for more than ten years. New networks of contacts around honours are now being established both nationally in the Netherlands and on a European level (European Honours Council). Also, honours students in the Netherlands are forming their own networks.

## **2.2 Quality assurance tools in American, Dutch and Belgian honours programmes**

Since the USA already has a long lasting tradition in honours, they use a spectrum of possibilities (Van Eijl, Pilot & Heemskerk, 2013) to assure quality control in honours programmes. These are for the USA:

- A system of course approval within an institution
- Internal evaluation of honours courses and programmes
- Annual reports of an honours programme
- Possibility of a site visit by NCHC trained site visitors. The “basic characteristics of a fully developed honours programme” are starting point for these site visits.
- Experiments with certification (Smith, 2015)
- National and local conferences
- Handbooks, other publications, discussions on the internet and a website to share knowledge and experience.

We can find similar quality assurance tools being used in the Netherlands and increasingly in Belgium as well:

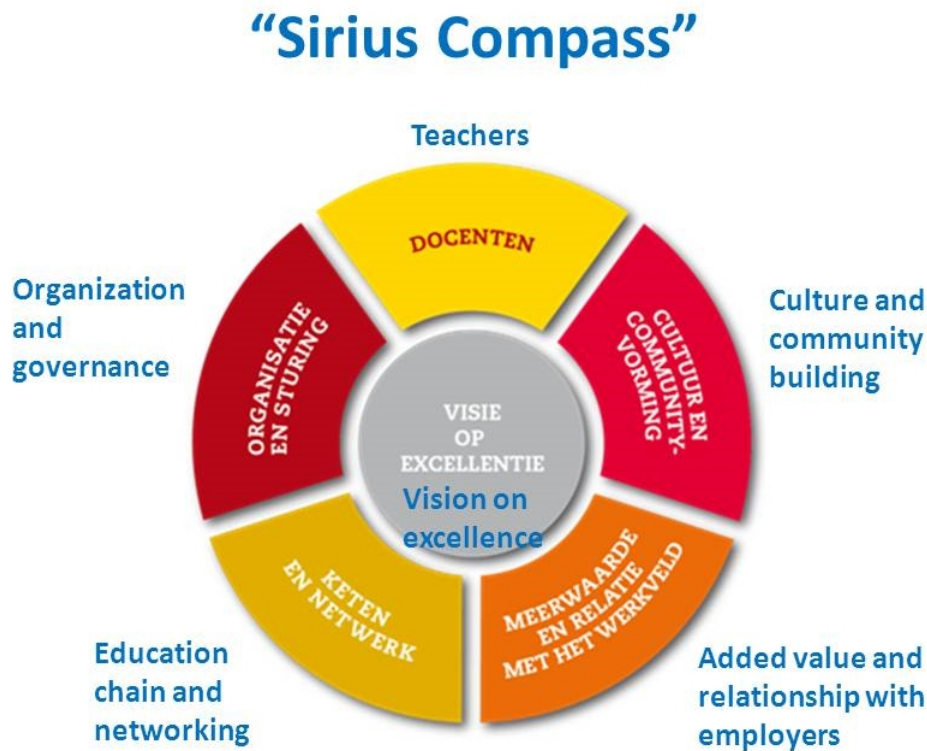
- Internal approval of courses
- Internal evaluation of courses and programmes for feedback, learning about the programme and improvement (e.g. University of Antwerp in this paper)
- Honours conferences & publications (books and articles) as a help to arrive at a common ground for an approach for quality assurance
- Experiments with internal audits (e.g. at Hanze UAS in this paper)
- Experiments with internal certification (e.g. at Utrecht University all honours programmes have just been internally certified based on a set of characteristics the university wants to be present in all their honours programmes)
- Experiments with external certification (e.g. Hanze UAS & Hobéon in this paper)
- External audit with the “Sirius Compass” regarding design and implementation of honours programmes. Auditors were ‘critical friends’ who gave also lots of constructive feedback (Sirius Programma, 2016).

In the Sirius Compass (see figure 1), important elements for the audit are grouped: Teachers, Culture and Community building, Added value and Relationship with employers, Educational chain (honours programmes aren’t isolated but part of a larger educational chain) and Networking and Organization and Governance.

The audit committee of the Sirius project has a lot of experience in auditing honours programmes in nearly twenty Dutch universities, both research universities and universities of applied sciences. In their last report, named “Don’t regulate, but challenge: many roads

lead to excellence” (Auditcommissie Sirius, 2014), they emphasize the importance of diversity in honours education. The use of the Sirius Compass turned out to fit this diversity.

Figure 1: The Sirius Compass for auditing honours programmes in The Netherlands



### 2.3 The dilemma between quality assurance and freedom and creativity in honours

Usually quality assurance, certification and accreditation come with extensive standardised checklists and a set of rules that may form a serious limitation for an honours programme, because one of the key honours features is facilitation of great ideas of students. Flexibility for students is important but a form of quality control is also important as feedback for the organizers of the programme and for stakeholders.

Therefore freedom and flexibility are a necessary component in an honours programme.

This dilemma has been described by John Zubizarreta (2013) of the NCHC as follows: ‘With certification we have to navigate between what we value in honours (risk taking, creativity) and standardization (bureaucracy). In the spirit of honours, making mistakes is part of a personal development process and just part of the game. This ‘option to fail’ should be maintained in order to keep the spirit of honours creative and happy.’

### 2.4 Some other points of attention concerning quality assurance:

- Be sure to involve honours students in evaluations, programme reviews and certification: they are in a certain way the experts and they make the feedback richer. Students want to address opportunities to improve their programmes and are therefore a driving force in the field of quality assurance.
- Input of external partners in quality assurance/control is useful, however, you should think about how you can properly work together, use their feedback and keep an open communication.

- Whatever you do, make it visible! An annual report on results, progress, and quality assurance activities, shows an external audience what is happening in honours and makes it more transparent.

## 2.5 Points brought up during discussion

- In some honours programmes, students have lots of freedom and can make contracts with individual teachers on an individual basis, which makes it very difficult to assure the quality of these contracts. One of the participants explained that they work with an Honours council which consists of members of departments/schools with a relation to an honours programme or honours college and administrative members. This Honours council reviews all honours thesis proposals and all programme and course content. They have worked out basic checklists to help guide students and teachers to make a proposal and to help the Honours council to assess the quality at the same time. The Honours council works year-round in a continuous process for improvement.
- At Windesheim University of Applied Sciences in Zwolle (Netherlands), the quality is evaluated after every course. The students discuss the possibilities to improve the course with the teacher. The influence of students is high, things change according to their suggestions. Talking informally with students can sometimes be confronting for teachers but can also help to discover why something is great or isn't working. In the same University of Applied Sciences, students evaluate the entire programme, have a counselling meeting three times a year and can join panel discussions.
- Student satisfaction is one part of quality assurance, but isn't the only important factor to take into account. At Utrecht University, they heavily invest in the quality of the teachers engaged in honours programmes. There is a very strict selection based on a list of criteria. 50% of teacher applications are declined. It is very nice to have such an interest of teachers to become an honours teacher.
- A pitfall of having quality assurance tools in place is the amount of time a teacher needs to work on quality assurance in the honours programme (according to a participant of the session). Understaffing wasn't the reason for this problem but the administrative workload for quality assurance means less time for teachers to spend on their honours teaching.
- What is honours quality? How can you see if honours learning competences are achieved and how do you define the honours level? For some disciplinary programmes, regular learning goals are 'topped' or 'extended'. However, for the majority of programmes, we claim that they are 'different', not 'more of the same'. In interdisciplinary programmes, other learning goals are defined, for instance focusing on personal and skills development. In an honours bachelor thesis, an extra learning goal (often across different modules or disciplines) should be defined by the supervisor and the honours student.
- No fixed goals. It is important to let the honours student know that some honours courses are regularly changing because students' needs are changing over the years. Students can help in improving the programme. If, on the other hand, you let your honours students choose between all courses in the institution, be aware that they might not have the quality you are looking for or the honours student could have different expectations about the course. The learning gain is in that case more about

the personal development the course brought to the student or the complexity of new things learned or other things students gained in the course.

- It is always a good thing when members of departments/schools interact with each other and learn and engage in quality assurance together. Not only students but also teachers form an honours community.

### **3. Case study of Hanze University of Applied Science - Hobéon Quality Certification (an example of external quality assurance)**

At the Hanze University of Applied Sciences (Hanze UAS), all 17 schools have honours programmes. They use an internal certification process which is certified externally. This setup was chosen to externally validate the process of internal certification. The external validation is done by an organization specialized in quality assurance: Hobéon.

At Hanze UAS there are different types of honours programmes: most programmes have a semester of 30 ECTS in addition to the regular bachelor programme as an extra-curricular honours talent programme. A third of each honours talent programme of a student is interdisciplinary. Hanze UAS offers a mix of several interdisciplinary themes and projects. Other honours programmes at Hanze UAS are intra-curricular. In these programmes, for instance, students can do an honours internship or graduate with an honours thesis project. Besides the above mentioned forms of honours programmes, Hanze UAS has a number of honours minors which are open to all students who meet the requirements.

The quality assurance procedures are quite elaborate at Hanze UAS. Every honours programme applies for admission to the Hanze Honours College before it can be implemented. By using an extensive assessment framework, the Hanze Honours College audits its honours programmes once students have graduated from the programme (for a minor this will be after half a year, for a talent programme after three years). A successful audit leads to an internal certification of that honours programme. In preparation for the audit, a self-evaluation is written for the honours programme. At the audit day an audit team speaks with teachers, students, alumni and management. The audit team consists of a representative of the Hanze Honours College, an honours teacher from a different honours programme, an experienced auditor, an honours student and a writer for the audit report.

#### **3.1 Assessment framework**

The assessment framework uses six aspects of assessment:

1. Is there a mission defined and what is the proposed end level of the programme? It should address a complex problem, it should thrive on own initiatives of students, it should be deepening (specialized) but mostly widening (interdisciplinary).
2. In what way does the programme use honours pedagogy and methodology and how are teachers selected?
3. Are students selected in a fair way?
4. Are there activities to establish or maintain the honours community?
5. How is quality assurance organized within the programme?
6. In what way is the end level assessed? Students' end products are reviewed.

This whole process is developed together with Hobéon, which is a well-known quality agency in the Netherlands. Hobéon has awarded Hanze Honours College a Quality Label for their certification process; it is focussing mostly at the process of certification, thereby assuming

quality of individual honours programmes is assured by the above mentioned audits. It is an external validation of the internal certification process of honours programmes at Hanze UAS. Hobéon sits in on an internal audit every three years. The internal audits follow the same time frame of six years as the regular accreditation cycle with a lighter midterm review.

Hanze UAS applied at NVAO (Dutch Flemish accreditation organization) for a special recognition (a so called “Bijzonder kenmerk”) for the entirety of the quality assurance process and was awarded this recognition in March 2016.

### **3.2 Points brought up during discussion**

- Is a quality assurance system needed to secure the quality of honours programmes? Could it be argued that the honours environment doesn't need a formal quality check?
- Make sure that the internal audits aren't full blown accreditations: they require a lot of administrative paperwork and paperwork does not always reflect reality. It would be great to have the programme show itself in a free format form balanced with some limited common assessment framework as a way of having 'bounded freedom'. The very detailed framework sometimes falls back on being just a checklist. The amount of paperwork should be kept limited. A site visit is always very valuable because there is conversation about the value of the programme and an exchange of ideas.
- The atmosphere in the institute stimulates teachers to act in a certain way. If you want your students to take responsibility and have the possibility to be creative, you need an open atmosphere. The teachers also need this atmosphere to bring openness to the students (including the freedom to fail).
- Sometimes having an external certification can give a sort of 'protection' during budget cuts. A good communication with your own management/executive board is very important.
- The goal is to improve your programme so if the incentive of having a good quality assurance system comes from inside the institute as a result of wanting to do your job the best way you can, it gives a different perspective than just having quality assurance systems in place because it is an obligation.
- There are institutions thinking about developing certain internal certification processes themselves. Credibility increases if quality assurance is taken seriously. Developing a common ground is a first step.

### **4. Example of internal certification of honours programmes at Utrecht University, The Netherlands**

Utrecht University, a research university, has a long standing tradition in honours. The first honours programmes started in 1993 in Geosciences and Veterinary Sciences. This was followed by the University College Utrecht (1998) and other departments/schools of the university. After an experimental period of diversity in honours the university agreed upon some basic requirements for departments/schools to provide an honours certificate to honours students who completed their honours programmes successfully (Van der Vaart & Zunderdorp, 2016). Point of entry is that honours programmes are diverse because of

different cultures in departments/schools, differences between bachelor and master and the principle of demand-drivenness by students.

#### **4.1 Criteria for internal certification**

A university committee for certification decided upon a set of criteria for bachelor honours programmes, which are summarized as follows:

- Students can start in the beginning of their first (freshmen) year, or during their first year or at the beginning of their second (sophomore) year. This is different in each department/school.
- Students participate at least two years in the honours programme and its honours community.
- Students can only participate and stay in the honours programme if their study results belong to the top 20% of their year.
- Students can graduate based on their study results as described in the credit point registration system of the university or/and their honours portfolio. In both cases active participation in the honours community is compulsory. An honours coordinator can in individual cases deviate from these rules.

Students who meet the requirements will receive an honours certificate. Also, all honours courses are included in their transcript of records and are clearly marked as such.

- Besides these requirements, the committee for certification has additional requirements for the content of the honours programmes such as (Zunderdorp, 2016):
- Student demand-drivenness is a key requirement.
- A combination of discipline oriented and interdisciplinary activities is required.
- 45 ECTS (European Credits) on honours level of which 15 ECTS at most is extra-curricular and the rest of the credits is imbedded in the degree programme (total credits required for the bachelor is 180 ECTS).
- International study activities can be realized in different ways (participation in an exchange programme, undergraduate research in a foreign country, excursions with the honours community, etc.).

#### **4.2 Internal audit**

The committee organized an internal audit of the honours programmes in the departments/schools (Zunderdorp, 2016). Based on the outcomes of this audit the committee gave advice to the board of the university. This board decided on the certification of the honours programmes (and receive extra money and the right to hand over a certificate to the students who had completed the honours programme satisfactory). The committee acted as a 'critical friend' and gave all honours programmes recommendations. Later, the honours dean visited the departments/schools to monitor the state of the honours programmes and checked if support was necessary for the implementation of the recommendations.

The regulations for the honours programmes became part of the standard regulations for exams (model OER). Regular meetings between the honours dean and the directors of the honours programmes are organized to align the honours programmes between departments/schools. The deans of the departments/schools have the final responsibility for the quality of the honours programmes. The quality assurance of the interdisciplinary honours activities is under development.

### **4.3 Benchmark audits**

The national network of honours deans of Dutch research universities is looking into the possibility of organizing benchmark audits in which they visit each other, as has been done by the audit committee of the Sirius programme (2014) with a minimum of bureaucracy. Departments of Utrecht University have to involve honours programmes in the cycle of quality assurance of their programmes (with honours committees of teachers and students, evaluation panels, standard course evaluations etc.). In the coming two years, meetings between honours teachers within the university will be organized to exchange their experiences in the honours programmes.

## **5. Case study of incorporation of regular quality assurance tools in an honours programme at the University of Antwerp (an example of internal quality assurance)**

At the University of Antwerp in the Faculty of Pharmaceutical, Biomedical and Veterinary Sciences, the honours college was first organized in 2011 and focusses mainly on a quick engagement in scientific research. The students are selected at the start of their second bachelor year based on grades, motivation letter, a selection interview and on how they can critically look at a scientific paper. One of the limitations of the programme is the fact that only 12 students are allowed to enter the programme each year. Once selected, students start exploring the research lab by following a tour, sitting in on lab meetings and other activities. They write about their experiences, are more familiar with a lab environment and gain ideas for their own research internship. Next, they propose a lab for their research internship and start drawing up a plan for it as well. The internship itself is about three weeks lab work guided by a talent coach appointed in the research lab. The internship is mostly performed during summer break to avoid interference with their regular programmes as it is an extra-curricular programme of around 18 ECTS. As for reporting, the students present their preliminary results to each other and the new candidates and they write a research article about their subject. During this year, they work on their communication and writing skills as well as their research skills.

Finally, since we aim for our students to be interested in more than science alone, they follow a lecture cycle with debate and write a paper about a non-scientific subject. As a teambuilding moment, the students organize an honours day trip for both years of honours college students during the Easter break. When they are successful, they receive an honours certificate signed by the dean and their talent coach.

### **5.1 Now, what went wrong and how did we fix it?**

Our first Honours College group of students diminished after the first semester from 10 to 3 students. This massive dropout wasn't really what the organizers expected, so a focus group discussion with the students was organized. Since the programme at that time started with the interdisciplinary part of the programme, the students felt really out of their comfort zone, they didn't know where to start and had put ten times more effort in the assignment than was expected; they were just lost. On top of this, they didn't have alumni to fall back on, there wasn't a clear contact person or real guidelines and overall, the communication was lacking in efficiency. Students were left with too much freedom and it became uncomfortable for them.

As a result of this first focus group discussion and the ones in the following years, a lot has changed:

- A website with information, clear goals and contact details was developed.
- The current programme starts with the disciplinary part and gives different interdisciplinary possibilities.
- Students were invited to an extended information session where they are informed about the goals and outcomes of the programme. A large part of this information session consists of presentations of honours college projects by the students who are in their second year of the programme. This immediately gives the new candidates a great view on the possibilities of the programme and what they can achieve in one year.
- Students have a designated talent coach during their internship and a coordinator of the programme was assigned. The coordinator is the first contact point for the students when they have questions. The coordinator supplies the students with guidelines and feedback. Evaluation criteria are defined for their internship in the research group. The talent coaches use rubrics to score the honours students.
- Students are asked to organize an Honours college day, a trip to an interesting company with all honours college students.
- The study success of the students is checked and the students are regularly informed about their progress in the programme.
- Students are able to give individual feedback besides the informal contact moments after a year and participate in a focus group discussion at the end of the programme where changes, difficulties and opportunities are discussed. They also get the possibility to give feedback about the coordinator to a neutral party.

These changes make it more clear for the students what the expectations of the programme entail and who they can address if they have questions: it is easier for them to find the right information. As a consequence, the dropout decreased immediately following these changes which indicated the importance of a good communication and good information flow. In the coming years, the programme will keep on evolving whilst incorporating feedback from the participating students.

## **6. Concluding remarks**

Some general conclusions can be drawn from the discussions:

1. Most honours programmes are very articulate about the fact that they are 'different', stimulate creativity and offer the freedom to fail and to learn from failure. However, one way or another, a form of quality assurance is needed to continuously improve. So honours educators must at least care for internal quality control.
2. Honours programmes are very diverse in structure, content and organization. For those involved in honours programmes, common ground is necessary to make explicit what the key characteristics of an honours programme are. This can also help outsiders to get a better picture of the value of these programmes.



3. Student involvement is stimulating for the engagement of everybody in the quality control and development process of an honours programme.

4. It is a challenge to find an external certification method that doesn't discourage the honours spirit and is able to capture the essence of the programme with a limited amount of preparations for the staff involved. If, for instance, efficient annual reports are made and goals are defined, an external audience can inform themselves about the honours programme and its outcomes. An annual report describes the goals of the honours programme, the programme activities and whether the goals have been reached as well as some quantitative data like the number of students who started the programme and the number of students that successfully completed the programme. Other topics could be the way students were selected for the programme, special accomplishments and the profile of the teachers involved.

5. Being involved in honours initiatives is like a warm bath, a great learning climate for students and teachers. Honours students do remarkable things and capture the interest from outside and inside the institution. This exposure is important for the sustainability of an honours programme. For a teacher, it is the most wonderful experience to have students sitting in the front row, to have them continuously ask questions and to be engaged. This is what higher education is meant for. It would be great if more teachers were able to take part in this highly enjoyable form of education. The authors really feel that the honours programmes may reflect the quality of tomorrow's higher education.

## References

Auditcommissie Sirius (2014). *Niet reguleren, maar uitdagen: de vele wegen die leiden naar excellentie. Overall auditrapport Sirius Programma 2008-2014*. [Translation: "Do not control but challenge: the many roads to excellence. Overall audit report of the Sirius Programme 2008 – 2014"]. Den Haag, The Netherlands: Platform Bèta Techniek.  
[https://www.siriusprogramma.nl/media/files/publicaties/Def\\_%20webversie%20Overall%20audit%202014.pdf](https://www.siriusprogramma.nl/media/files/publicaties/Def_%20webversie%20Overall%20audit%202014.pdf)

Eijl, P.J. van, Pilot, A. & Heemskerk, R. (2013). Kwaliteitszorg voor honoursprogramma's. [Translation: "Quality assurance for honours programmes"] In: R. Coppoolse, P.J. van Eijl & A. Pilot, *Hoogvliegers, ontwikkeling naar professionele excellentie*. [High flyers, development towards professional excellence] (pp. 195-208 ). Rotterdam: Rotterdam University Press. In Dutch (full text): <http://hr.surfsharekit.nl:8080/get/smpid:60567/DS3/>  
 English synopsis: [https://www.researchgate.net/profile/Pj\\_Eijl/contributions](https://www.researchgate.net/profile/Pj_Eijl/contributions)

Eijl, P.J. van, Pilot, A, & Wolfensberger, M.V.C. (2010). *Talent voor morgen* [Translation: Talent for tomorrow]. Groningen: Noordhoff Uitgevers.

NCHC (National Collegiate Honors Council) (2016). Basic Characteristics of a Fully Developed Honours Program. Available online: <http://nchchonors.org/> (accessed 4/7/2016)

Sirius programma (2016). Het Sirius Kompas voor de audit van honoursprogramma's in Nederland. [Translation: "The Sirius Compass for auditing honours programmes in The Netherlands"]. Available online: <https://www.siriusprogramma.nl/publicaties/het-sirius-kompas#.V3pXJ03VziU> (accessed 4/7/2016)

Smith, P.J. (2015). A Quality Instrument for Effective Honors Program Review. *Honors in Practice - Online Archive. Paper 242*. Available online: <http://digitalcommons.unl.edu/nchchip/242> (accessed 4/7/2016)

Vaart, R. van der & Zunderdorp, K. (2016). *Werkprogramma honoursonderwijs 2016-2018*. [Translation: "Policy for honours education, 2016-2018"]. Utrecht, The Netherlands: Universiteit Utrecht, Nota Universiteitsraad, UR nummer 16.070.

Zubizarreta, J. (2013). Private communication, June 2013.

Zunderdorp, K. (2016). Private communication, October 2016

Note

## Discussion Facilitation Techniques for Honors Peer Educators

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Received: 27 January 2017; Accepted: 18 April 2017; Published: 28 April 2017

Keywords: discussion-based teaching, peer education, honors

### 1. Introduction

In the Virginia Tech Honors College, honors peer educators are students who apply to be the sole instructors for discussion-based classes, such as first-year seminars and reading seminars, for academic credit (Smith, 2016). This research suggests that discussion-based teaching is an effective way of meeting honors students' needs, and it describes discussion-based teaching techniques that are accessible and beneficial to honors peer educators.

### 2. Characteristics of Honors Students

My initial research summarizes characteristics of honors students to determine what kind of personal and academic support honors seminars should provide. That information is summarized in the following diagrams (figures 1 and 2) based on the work of Cuevas (2015), Lancaster (2014), Scager et al. (2012), Shepherd & Shepherd (2014), and Shushok (2002).

Figure 1. Characteristics of Honors Students: Common Strengths



Figure 2. Characteristics of Honors Students: Common Risks



From this information, we have drawn several conclusions about the academic and personal support that honors seminars should provide. To support students academically, we can offer real challenges that result in deep learning, but we should free students to work creatively, connect them with faculty and peers, and ideally enable them to make a positive real-world impact. These practices will maximize student engagement and satisfaction. For personal support, honors seminars should strive to become communities. Classroom communities can help students adjust to college, make friends with similar academic values, and even reduce destructive behaviors, such as avoiding tutoring or counseling out of the fear that needing these services undermines their identity as high achievers. We seek to accomplish these goals in part by training our peer educators in discussion-based teaching.

### 3. Discussion-Based Teaching

Discussion-based teaching amplifies the collaborative nature of peer learning and fosters academic community by valuing all voices. Brookfield & Preskill (2005) identify 15 benefits of discussion, many of which address honors students' needs, such as the need for diverse perspectives or a community of academic peers. Discussion also complements and enhances honors seminars that are exploratory, reflective, self-guided, and based on relationships and skills rather than disciplinary content.

However, discussion can cause harm when practiced without thorough training. Some common pitfalls include lectures disguised as discussions, domination by a few voices (often the discussion leader!), competitive quantity-over-quality participation, and reinforcement of societal injustices (Brookfield & Preskill, 2005). For example, the latter can occur if peer educators recreate their own educational experiences without accounting for diversity, thereby promoting classroom lingo, behavioral norms, and activities that reflect mainly majority groups. Then in order for students outside of those groups to be perceived as smart or normal, they may feel pressure to suppress their cultural differences—a personally and

academically destructive consequence (Brookfield & Preskill, 2005). Again, thorough peer educator training can mitigate these risks so that honors students can benefit from critical, inclusive discussions.

#### **4. Fundamental Discussion Skills**

To facilitate effective discussions, peer educators need training in fundamental discussion skills: questioning, listening, and responding.

##### *Questioning*

Certain types of questions typically lead to stronger critical thinking, engagement, and student confidence; these types include requests for evidence or clarification, “how” or “why” questions, cause-and-effect questions, summary and synthesis questions, sincere questions, and the students’ own questions (Brookfield & Preskill, 2005; Heilker, 2007).

##### *Listening*

Strong listening skills can create a sense of continuity and community while focusing discussion on student contributions. Peer educators should listen to absorb what students share, how they share it, and how it fits into the overall discussion (Brookfield & Preskill, 2005). They can then use this information to illuminate connections and challenge or support students as individuals.

##### *Responding*

To help students develop knowledge for themselves, peer educators should resist the urge to answer all questions; instead, they should redirect questions back to the students to encourage collaborative learning and to demonstrate that students are cocreators of knowledge (Heilker, 2007). Responding with sincere and specific praise can build student confidence while also rewarding desirable participation habits (Brookfield & Preskill, 2005). Finally, responding with silence can help students absorb important or complicated information, take time to develop higher quality answers, or honor someone’s significant or emotional contribution (Brookfield & Preskill, 2005). To be more comfortable and effective, silence should be structured through requests such as “I’m going to ask a question, and I’d like everyone to wait a minute or two before responding so that everyone has time to develop an answer” or “Take five minutes to jot down your thoughts on this topic, and then we’ll discuss it.”

#### **5. Small Group Activities**

One of the best and most accessible ways to enhance a discussion-based class is to incorporate goal-directed small group work. These activities can help develop critical thinking skills, build confidence, form classroom communities, renew engagement, and improve subsequent full-class discussion (Bean, 2001).

The most versatile and effective activity that we use is Think-Pair-Share (Lyman, 1981). The intent of this sequence is to deeply explore a topic in a way that enables all students to participate. The “think” component is individual: students brainstorm, free write, or otherwise digest information alone. Next, they share their thoughts in pairs, each seeking to understand the other’s perspective and refine their own. Finally, the pairs report the main points of their discussion to the class as a whole.

Think-pair-share discussions are useful for challenging, complicated, or sensitive topics. Every student has to come up with an idea or argument of their own, every student gets to share it out loud but privately, and then the class benefits from a variety of perspectives that have been collaboratively refined without being as highly influenced by group think. This sequence improves student participation, enables greater depth and diversity of discussion, and helps students bond with their peers.

For more discussion-based small group activities, please refer to the work by Bean and Brookfield & Preskill.

### Acknowledgements

I would like to thank Alyssa Noble, Paul Heilker, Sara Vandyke, Paul Knox, Shelley Reid, Jason Crafton, and the Virginia Tech honors peer educators for their support of this research.

### References

Bean, J. C. (2001). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. San Francisco, CA: Jossey-Bass.

Brookfield, S. D. & Preskill, S. (2005). *Discussion as a way of teaching: Tools and techniques for democratic classrooms*. 2nd ed. San Francisco, CA: Jossey-Bass.

Cuevas, A. E. P. (2015). *Thriving in college: Predictors of honors student academic, psychological, and social well-being* (Order No. 3715833). Available from ProQuest Dissertations & Theses Global. (1708942472). Retrieved from: <http://login.ezproxy.lib.vt.edu/login?url=http://search.proquest.com.ezproxy.lib.vt.edu/docview/1708942472?accountid=14826>

Heilker, P. (2007). Creating active citizens: Fostering effective student writing and speaking. In E.S. Geller & P.K. Lehman (Eds.), *Teaching Excellence at a Research-Centered University: Energy, Empathy, and Engagement in the Classroom* (pp. 131–138). Boston, MA: Pearson Custom Publishing.

Lancaster, D. L. (2014). *Using psychosocial development theory and personality typology in identifying at-risk characteristics of college honors students* (Order No. 3682287). Available from ProQuest Dissertations & Theses Global. (1657428425). Retrieved from: <http://login.ezproxy.lib.vt.edu/login?url=http://search.proquest.com.ezproxy.lib.vt.edu/docview/1657428425?accountid=14826>

Lyman, F.T. (1981). The responsive classroom discussion: The inclusion of all students. In A.S. Anderson (Ed.), *Mainstreaming Digest* (pp. 109–113). College Park, MD: University of Maryland Press. Retrieved from: <https://archive.org/details/mdu-univarch-027524>

Scager, K., Akkerman, S., Keesen, F., Mainhard, M., Pilot, A., & Wubbels, T. (2012). Do honors students have more potential for excellence in their professional lives? *Higher Education*, 64(1), 19–39. Retrieved from:

<http://www.jstor.org.ezproxy.lib.vt.edu/stable/41477917>

Shepherd, G. & Shepherd, G. (2014). Civic tolerance among honors students. *Journal Of The National Collegiate Honors Council*, 15(1), 85–113.

Shushok, F. X., Jr. (2002). *Educating the best and the brightest: Collegiate honors programs and the intellectual, social and psychological development of students* (Order No. 3070562). Available from ProQuest Dissertations & Theses Global. (305592680). Retrieved from:

<http://login.ezproxy.lib.vt.edu/login?url=http://search.proquest.com.ezproxy.lib.vt.edu/docview/305592680?accountid=14826>

Smith, A. Z. (2016). Supporting peer educators in first-year honors seminars at Virginia Tech. *Honors in Higher Education*, 1. Retrieved from:

<https://journals.psu.edu/heru/article/view/60067>





*Paper*

## Promoting talent development in honours: The Honours Experience

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Received: 30 January 2017; Accepted: 29 March 2017; Published: 25 April 2017

Keywords: circle of talent development, honours programme, higher education, meeting challenges, 21st century skills, teacher dilemma

### 1. Introduction

In recent years many honours programmes were introduced at universities and colleges in the Netherlands (Van Eijl, Pilot & Wolfensberger, 2010). An important goal of these programmes is to stimulate students to more fully develop their talents. To get more insight in the process of talent development from the perspective of honours students, we started a project. Forty honours students and honours alumni from eleven different universities and eight of their teachers were interviewed about the development of their talents, why they participated in an honours programme and what their experiences were in those programmes (Van Eijl & Pilot, 2016). These interviews gave an in-depth picture of students' honours experiences and thereby gave insight into the process of talent development. This process is represented by the Circle of Talent Development. In the second part of this paper (step 9b of the Circle) we focus on the use of honours as laboratory for 21st century skills and the dilemma of teachers between "control and letting go" are discussed.

### 2. What do we mean by talent?

Before we go deeper into talent development, we consider the question of what we mean in this project with talent. When we talk about talent, we mean "qualities" anyone has that can be further developed and can lead to exceptional results and outstanding performance.

These qualities can relate to many domains. In education, students can achieve good results in a particular domain, both in practical ("they have golden hands") and theoretical ("they have brains") terms. For example, they can learn to work very systematically or learn to recognize and use their creativity. Furthermore, an individual can develop further in communication, problem solving and teamwork skills. Sometimes students in an honours programme discover the importance of taking the initiative and seizing opportunities.

Some of these qualities are also called 21st century skills, because it is expected that graduates need those skills in this century. The following quote from Ton Peeters, coordinator of the honours programme Biology (Utrecht University), already gives an idea of the development of 21st century skills in an honours programme: ‘The honours programme stimulated a group of students to write a book together. It is important that they are responsible for the whole process, from the initial brainstorming to the final publication. They are creative, they work together and are critical about themselves, each other and about the product. Students in this setting have ownership of their learning: it works better than when a teacher dictates what and how to learn. The fun of learning is many times greater’ (Ton Peeters, lecturer and teaching fellow, 21st century skills, Utrecht University, 2014). Analysis of the interviews showed striking similarities with 21st century skills, such as opportunity recognition, benefit from multiple perspectives, multidisciplinary collaboration, creative and innovative thinking, solving complex multidisciplinary issues and intercultural skills.

### 3. Outcomes of the interviews

The interviews were collected and analysed. The analysis showed a wide variety of experiences of students in the honours programme; both students and honours programmes differed. We identified patterns in the answers of students in connection with themes from literature. These patterns were organised in “the Circle of Talent Development” (see figure 1).

Figure 1: The ten steps into the Circle of Talent Development



We also identified ideas and tips for talent development in honours programmes and other programmes. A series of similarities of honours experiences with 21st century skills were noted.

A book was written of the outcomes of this project and workshops were carried out. The book was written for both students and teachers and is available for everybody in the Dutch language with a synopsis in English (Van Eijl & Pilot, 2016).

#### **4. The Circle of Talent Development**

The process of talent development in an honours programme is key in the outcomes of the interviews. This process has several steps, from the start to the completion of the honours programme and beyond. Not every student goes through these steps in the same order, but they are often revealed in the interviews. For clarity, we have therefore arranged the steps in the "Circle of Talent Development" (see Figure 1), which was partly inspired by "The hero's journey", a book of the well-known anthropologist Joseph Campbell (1949).

We first describe the steps in the circle and illustrate them with brief quotes from students' interviews.

##### ***Step 1: Identifying your drive***

The start of the process of talent is shown in Step 1: identifying your own passion and drive; the students identify what they want to do more than their regular curriculum provides. An example: 'Looking for a little extra, a chance I could grab to distinguish myself from the rest' (honours student Amsterdam UAS). Sometimes it is not only doing more but also doing study activities in a different way, which gives the student an extra challenge. Some students are not yet aware of their talents but sometimes their teachers are. For these students with 'latent talent' (Verbiest & Dijk, 2010), teacher intervention can help them to do the step for extra talent development.

##### ***Step 2: Choosing a trajectory for talent development***

Students who need more challenges, look for new opportunities. Following an honours programme is an opportunity that comes on the student's path. An example: 'Do not stop and go for your dreams, because these efforts will be recognized and so you will always produce something' (honours student Saxion UAS). One way in which a student can get acquainted with an honours programme is to get information from a student who is already an honours student. Some schools ask honours students as ambassadors for the programmes, and ask them to provide information to their fellow students. The choice to participate in an honours programme may be a part of the development of a student's personal leadership. This is the ability to make decisions that impact their lives in a positive way.

##### ***Step 3: Crossing the threshold: choosing and being chosen***

The choice to participate in an honours programme must come from both sides: the student must choose, but the teachers of the honours programme must also allow the student to be admitted, students must meet the selection criteria. They often have to write a motivation letter and sometimes there is an admission interview. An example: 'Finally, I was invited to an admission interview' (honours student Windesheim UAS). The teachers also consider the study results and consider especially whether the student is really interested in the honours programme, has a proactive attitude and a capacity for growth. Sometimes the principle of 'giving and taking' plays a part: both the teacher and the student are expected to contribute actively. At Utrecht UAS students sometimes have to write a proposal for their honours track. An honours teacher decides about the quality and feasibility of the proposal, and if it is

good, the student can start. No high grades as selection criteria but the quality of their idea. This is an alternative way of selection (see step 4 about students that can bring in their own projects).

#### **Step 4: Meeting Challenges**

Once in the honours programme, the challenge and the actual learning really start. Students get complex, authentic assignments and projects (see figure 2) that are often linked to real (societal) problems and real clients. Sometimes students can bring in an own project.

*Figure 2: Students in an honours project*



*Photo: Hems Zwier, Windesheim University of Applied Sciences, [http://www.hemswzier.nl/Hems\\_Zwier.html](http://www.hemswzier.nl/Hems_Zwier.html)*

An example: ‘We had a lot of guest lectures, which were not all equally interesting. But then came the team assignment for the police organisation and that was really cool’ (honours student Windesheim UAS). In the honours programme students sometimes work together with students from other disciplines, teachers or even external clients. This differs from the approach in mainstream education and provides a challenge for the student and the supervisor. The teacher must include dealing with the differences between students and this may pose dilemmas for the teacher as well.

#### **Step 5a, b: Developing talent together in a community and culture of excellence**

Most students study not only individually but together with other motivated students and usually are remarkably positive about this in the honours programme. By working together, they come to an exchange of new ideas, give each other feedback, coach each other and stimulate their personal development. An example: ‘The way we work and the atmosphere within the honours programme are worlds apart from the regular education’ (honours student Windesheim UAS). The networks of contacts within the programme often grow into an ‘honours community’. In the interviews many students speak with great appreciation

about their community. A characteristic of these communities is the culture of excellence: encouraging each other, working together and achieving a result that matters!

### ***Step 6: Getting coaching***

Coaching can make the difference in talent development. The teacher can help a student to get on track and ensure that his or her talent development is really successful. To achieve this, the coach helps the student to get out of his or her comfort zone and enter into the 'zone of proximal development', thus doing new activities. An example: 'The coaches did not tell us what to do, but they encouraged us to make our own decisions and to develop ourselves. If necessary, we could always consult the coaches. Because I got a lot of freedom I worked more focused' (honours student Amsterdam UAS).

### ***Step 7: Experiencing flow, dips and perseverance***

An important experience in the talent development process is to get the feeling of 'flow': everything seems to go without saying, and the student is studying in an optimal state of development. An example: 'Almost the entire period of the honours programme it felt like a flow! In the beginning however I had some anxiety whether I would be able to handle this programme' (honours student Utrecht UAS). But dips may also occur, which may constitute a serious obstacle. The identification of a dip and overcoming these dips, requires resilience and perseverance. Learning to identify and overcome a dip is considered an important learning experience by these students.

### ***Step 8a: Inspiring and Creating***

Some assignments require new solutions, for which creativity is important. The use of one's own creative ideas and moments of inspiration is important to progress. Courage is indispensable for creativity to flourish! Aspects of the creative process, such as problem finding, the design challenge and fostering a creative atmosphere are important. But if new ideas are put forward not everyone will be positive, so students have to learn to deal with 'resistance to change'. An example: 'Everyone has ideas, but you should be able to explain exactly what this entails, even to people from other disciplines who do not immediately see the benefit of a product' (honours student Utrecht UAS).

### ***Step 8b: Innovating and entrepreneurship***

Some ideas can be turned into something that has concrete practical value: an innovation. An example: 'In the "Future Search course" I was part of a group developing an app that was related to injury prevention in sports' (honours student Utrecht UAS). In this honours course the process of developing an innovation is discussed. The aim is to generate new ideas and to convert these into something that is relevant in practice; it requires entrepreneurial behaviour of students. As an example Vincent Gelink, an honours alumnus, gives his view on innovation in boxed text 1.

**Boxed text 1. "From challenge to innovation", a view from an honours alumnus by step 8 (Vincent Gelink)**

In many situations in our lives we meet challenges that we have to overcome. These challenges can be found in several aspects of our lives. It is good to understand that not every challenge will lead to innovation. The challenges that lead to innovation are mostly based on a situation that irritates or where one starts thinking 'there must be an easier way to do this'. That moment can be the start to think about new ways to handle the same situation and a stimulant to start combining knowledge already present. This can lead to the realisation of something new, or as we would say: 'innovation'.

*Learning how to innovate*

Having a new idea or a new combination of existing ideas isn't immediately a new business with which one can make a living. The question about 'How to develop your idea into a service or product' will be the start of your journey of owning a scalable business. During this journey you will learn different lessons about entrepreneurship and what you need to do to keep your business alive. This process is part of learning how to innovate. Every step in your journey and business should help you make it better, more effective or easier to use for the user/buyer. At the end of this process you can start thinking about your own start-up.

*Start-ups*

Nowadays everybody knows the term start-up. A start-up is a company that is in the starting phase of its existence, therefore it has limited resources. In this phase, the owner of the start-up is still gathering information for the company and learning how to run, expose and develop its business. Most entrepreneurs know tools that can be used during this phase, such as the canvas business model (Osterwalder & Pigneur, 2009), the golden circle (Sinek, 2009) and many others. With these tools they determine if the start-up has a chance to make it. They will also analyse their prospective market position, through for instance the blue and red ocean analogy (Kim & Mauborgne, 1997). When your company is in the red ocean the competition is great and you are doing something that other companies are doing as well. If you are operating in the blue ocean you are more unique and more likely an innovative entrepreneur as there are few businesses that provide a similar service or product or have a similar business proposition. The combination of business and innovation can have many different forms and strategies. Two types of innovation that have impact on society and the existing market, are discussed here.

*Social innovation*

Social innovation is addressing a societal problem and deciding to do something about it. Because it often concerns several levels of society it can grow rapidly and combine a broad set of possibilities. For instance you can think of a company that works with self-employed workers and volunteers to develop a certain solution for a local issue. In the end, society benefits the most from social innovation. For a start-up this can be a real game changer. Because a diverse group is experiencing the same situation which can yield a possibility to expand your resources. By working together with companies, the government and other institutions on a national or international basis one can accelerate the growth of their business and expand their network.

*Disruptive innovation*

Disruptive innovation is more focused on changing the standard that companies are used to. It can be a threat to existing companies and their market. The start-ups that makes it to be a 'disrupter' are known by almost everyone like Tesla and Airbnb. But comparing the real disrupters to the actual market, there are only a few who made a difference. Disruption is hard to accomplish but it can give you a platform to change the way business 'is' to how you envision it should be.

**Step 9a: Achieving excellent results**

Efforts in an honours programme can lead to excellent performance. When and in what ways is an achievement excellent? An example: 'I definitely feel I have delivered an excellent performance. When I look at my thesis, it contains all five honours competencies of Rotterdam UAS' (honours student Rotterdam UAS). The contribution of students to organizing the programme and producing products for external clients can be part of these 'excellent' achievements.

### **Step 9b: Achieving personal development**

Equally important is the personal development that was often mentioned by the interviewed students. An example: 'There is a lot of freedom allowing you much more to come to personal development, because there is much room to get to know yourself and figure out how you learn best' (honours student Saxion UAS). Personal development skills are about knowing yourself and your relation to the other and the world around you and what kind of meaning you want to have for the world around you. These skills are also mentioned as important in so-called 21st century skills (see D in boxed text 2).

#### **Boxed text 2. Honours programmes provide inspiring examples for teaching 21st century skills**

During interviews with honours students we typically found learning experiences such as meeting challenges, developing innovative initiatives, crossing borders and adopting a proactive stance. We can identify many of these experiences as the development of 21st century skills. These are the skills that would be expected to become more important in the course of the 21st century. An international team of researchers have formulated these 21st century skills especially for use in primary and secondary education in the KSAVE model (Knowledge, Skills, Attitudes, Values and Ethics) (Binkley et al, 2010). A model that was further developed in the Netherlands by Boswinkel and Schram (2011). Four groups of skills are formulated:

- (A) methods of thinking;
- (B) methods of working;
- (C) instrumental skills; and
- (D) citizenship and personal development.

In each group a number of skills is identified.

In the interviews with honours students, these 21st century skills from the KSAVE-model were repeatedly mentioned. The multidisciplinary work (D) for example, is often mentioned as important, which means that a group of students (B) of several different disciplines tries to tackle a problem by using knowledge and skills from different disciplines. This often leads to unique solutions. In this way students will develop a multi-disciplinary frame of reference and often also an international and multicultural orientation (D). The teamwork and the culture of excellence in an honours programme can give the development of other 21st century skills a huge boost. An honours student says she missed this stimulant in her regular programme: 'If you miss the academic challenge in your studies, then an honours programme is incredibly valuable. Because you are surrounded by people who have a similar mentality, you also get additional energy to develop yourself and to get the best out of yourself. This honours climate I missed in my regular programme.'

ICT (B and C) is an increasingly important tool which is reflected in all facets of society and business. This trend will only continue to go out and this means that it is a must for an honours student with ICT to cope in the 21st century. It turned out in the interviews that the use of ICT seems self-evident for the students in the honours programmes, but it should be noted that new ICT applications like digital intelligence, robotics and big data are continuously being developed and influence disruptively the labour market for graduates

Writing and presentation skills (B) have an important place in honours programmes, however these may get a new and contemporary face, for example in the form of an elevator pitch, virtual reality or exposure live or on the internet.

Some honours programmes stimulate opportunity recognition (D). This is the recognition of an entrepreneurial challenge, a creation or a discovery of something new which may have value for potential clients or society and which may generate revenue for the entrepreneur.

### **Step 10: Continuing talent development in the growth mindset**

If a project or task is completed within an honours programme, then a new project starts, which again, follows (parts of) the Circle of Talent Development. This relates in particular to step 4 to 9 of this circle. Talent development does not simply stop after the honours programme, but grows into a 'way of life' as the honours alumnus continues to develop himself or herself. An example: 'The honours programme has had great influence on my further study and work. I decided, instead of immediately going to work and to start with a

house and garden, to first search for more adventures' (honours student Utrecht UAS). To identify opportunities for growth and to address a growth mindset is important. Ninib Dibo, honours alumnus gives his view on this topic in boxed text 3.

**Boxed text 3. *The growth mindset, challenge yourself after the honours programme, a view from honours alumnus Ninib Dibo***

Stanford professor Carol Dweck (2015) did extensive research about mindsets of children and students in relation to their development. An individual with a growth mindset believes that talent and abilities can be improved and developed upon. The antithesis of this being a fixed mindset, where one believes talents and abilities are fixed or cannot be changed. An individual student does not need to hold one of the extreme views, both mindsets can appear to a greater or lesser extent within a single individual. For example, a student might believe that he will never be able to play the piano because he simply lacks the talent while simultaneously this student believes that he can improve his understanding of neurology through effort and study.

The flexibility the growth mindset suggests, may correlate with neuroplasticity. This is a term used in neurology to describe the fact that our brains are capable of constant change throughout our entire life. Learning can result in anatomical changes in the brain (Draganski, Gaser, Busch, Schuierer, Bogdahn & May, 2015) as new connections between brain cells (neurons) are made in order to adapt to the new demands of one's environment. The very idea suggests that after reading this text intensively and repeatedly applying its content, your brain will have changed, creating new neural connections as a response to processing new information.

*Honours programme, a growth mindset and what comes after*

Honours programmes apply the idea of a growth mind set, as can be seen through the application of the Circle of Talent Development. Self-development stands at the very core of honours programmes including the idea that this development is a constant, never-ending process. As long as one is willing to learn, he or she will be able to improve. The environment created during honours programmes is essential for this learning process. Honours programmes allow one to make mistakes in the understanding that it is part of the learning process. You are allowed to search for what inspires you and learn through theory as well as trial and error. In other words: 'Learn from failure, don't be afraid!' Developing oneself after the honours programme might require you to recreate this philosophy to a greater extent in your professional and personal life. It may ask you to search for environments that allow for talent development. There are career programmes such as traineeships that, just like honours programmes, understand that an individual must learn many new skills in order to function optimally. These programmes allow you the tools and time to find out what inspires you, find your passion and pursue it within the organisation involved. Such traineeships also understand that one must sometimes learn from failure, that learning is a constant process and that those who follow their passion are more likely to go above and beyond expectations to deliver excellent results. The drive to be better than you were yesterday is what truly shows the honours mind set.

## **5. The teacher and the Circle of Talent Development**

For the student activities in the Circle of Talent Development teachers are of great importance (Wolfensberger, 2012). Different student activities in the Circle of Talent Development require different teaching activities. Teachers are the ones who design the activities in the honours programme, often in co-creation with the students, and create opportunities for the students to achieve the required talent development, without 'setting plans in stone'. They are also the ones who guide the student, encourage them, give them feedback and review them. There is need for the preparation of the honours teacher. In an interview, Ron Weerheijm, coordinator of the honours programme at Rotterdam University of Applied Sciences, said that he therefore requires new teachers to make a scenario in advance: 'What could happen and what should I be prepared for? Otherwise, the teacher falls back on old teaching behaviour and the dynamism of talent development is lost. The teacher must be prepared for the problems he may encounter.' In addition, in various universities nowadays courses on honours teaching are organized for new honours teachers. Attention is paid to both the design, the intervention in the process of talent development



and evaluation of honours programmes (see for example Coppoolse et al., 2013, p. 127). A focal point in the design of an honours programme and the guidance of students is the tension between 'control' and 'letting go', see boxed text 4.

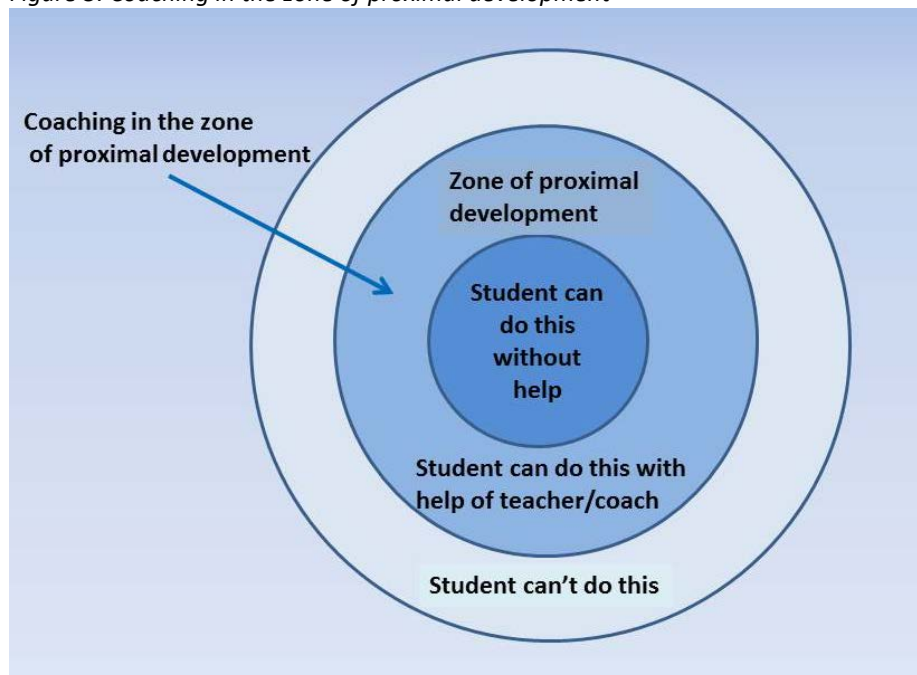
**Boxed text 4. Teachers dilemma: balance between "control" and "letting go"**

One of the interviewed teachers said that this dilemma was 'the most difficult question for me in the honours teaching'. To be more specific: the dilemma between the aims and structure of the programme and the diverse goals of individual students (see also Scager, Akkerman, Pilot & Wubbels, 2016). Teachers and students gave examples for both sides of this dilemma in the interviews. For example a teacher: 'The teacher creates space for the students and facilitates the process in order to come up with new ideas.' Another teacher: 'It is a challenge for teachers, to allow students to explore their passion.' A student: 'The special thing about this programme is that you get much freedom to propose projects yourself. The programme is largely determined by your own creativity and assertiveness.'

Another teacher brought up his role in coping with the dilemma: 'In the honours programme, I am a facilitator, and constantly try to bring the students into the zone of proximal individual development.'

This zone of proximal development (Vygotsky, 1978, 1934) has been visualized in figure 3.

Figure 3: Coaching in the zone of proximal development



The zone of proximal development refers to challenges that are so new for a student that he or she needs some form of coaching to find his or her way. About this coaching role a student says: 'The coaching was primarily to support. There was a lot of room for your own initiatives and discussion. In the honours programme there is much freedom for your own projects and approaches.' Another student: 'The coaches did not tell us what to do, but they encouraged us to make our own decisions and develop our ideas.' A teacher emphasizes how different the coaching role is from the teaching role: 'As teachers we have the idea that we can control the learning process and the outcomes to a large extent, but that is a misconception, I think. Facilitating is really different from controlling and organising.'

The freedom that is often present in honours programmes, may also lead to more personal development for the student: 'There is a lot of freedom allowing you to come to personal development, because there is much room to get to know yourself and figure out how you learn best.' However, a lot of freedom may also be a problem for an honours student: 'The freedom and independence also have a downside. Many, including myself, didn't know what we had to do, during our first year.' A teacher has experienced that 'a number of new honours students have to get used to their new freedom and the uncertainty that comes with this freedom.'

## 6. Key points of the Circle of Talent Development

We can summarize the essence of the Circle of Talent Development with a few statements:

- Talent development begins by addressing a challenge (a long term goal) and is continued in working persistently on that challenge (grit; see Duckworth, 2016).
- Talent development requires not only individual study but also exchange with others. Social interaction with fellow students and coaches provides inspiring input to develop new perspectives and insights.
- Opting for talent development is entering into an adventure of which the outcome is still uncertain. This asks much from a student's proactivity, dedication and ingenuity and often leads to unusual and surprising results.
- The process of talent development is, for most students, not only a flow experience but also requires hard work, perseverance and overcoming dips. Overcoming a dip however can be a major learning experience.
- The learning experience of many honours students refers not only to content but involves also a major gain in personal development.
- Honours programmes offer many opportunities to acquire 21st century skills.
- Teachers have to find a balance between 'control' and 'letting go' and coaching is, in this respect, considered an important task for honours teachers.

## References

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M. & Rumble, M. (2010). *Defining 21st century skills*. Melbourne: University of Melbourne.

Boswinkel, N. & Schram, E. (2011). *De toekomst telt*. Enschede: SLO/Ververs Foundation.

Campbell, J. (1949). *The hero with a thousand faces*. 1st edition, Bollingen Foundation, 1949. 2nd edition, Princeton University Press. 3rd edition, New World Library, 2008.

Coppoolse, R., Eijl, P.J. van & Pilot, A. (2013) *Hoogvliegers, ontwikkeling naar professionele excellentie*. [High flyers, development towards professional excellence]. Rotterdam University Press. English synopsis:

[https://www.researchgate.net/profile/Pj\\_Eijl/contributions](https://www.researchgate.net/profile/Pj_Eijl/contributions)

Dutch full text: <http://hr.surfsharekit.nl:8080/get/smpid:60567/DS3/>

Draganski, B., Gaser, C., Busch, V., Schuierer, G., Bogdahn, U. & May, A. (2004). Neuroplasticity: Changes in grey matter induced by training. *Nature* 427, 311-312 (22 January 2004). doi:10.1038/427311a

Duckworth, A. (2016). *Grit*. Amsterdam: Bruna.

Dweck, C. (2015). Carol Dweck revisits the 'Growth Mindset'. *Education week*.

<http://www.islandtrees.org/main/curriculum/rgm.pdf>

Eijl, P.J. van, & Pilot, A. (Eds.) (2016). *The Honours Experience, talentontwikkeling door de ogen van de honoursstudent*. [The honours experience, talent development through the eyes of honours students] Rotterdam: Hogeschool Rotterdam Uitgeverij

English synopsis: [https://www.researchgate.net/profile/Pj\\_Eijl/contributions](https://www.researchgate.net/profile/Pj_Eijl/contributions)

Dutch full text: <http://hr.surfsharekit.nl:8080/get/smpid:61232/DS1>

Eijl, P.J. van, Pilot, A. & Wolfensberger, M.V.C. (2010). *Talent voor morgen, ontwikkeling van talent in het hoger onderwijs* [Talent for tomorrow, development of talent in higher education]. Noordhoff Uitgevers.

Kim, W.C., & Mauborgne, R. (2015). *Blue Ocean Strategy, Expanded Edition: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Boston: Harvard Business School Press.

Osterwalder, A., & Pigneur, Y. (2009). *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons.

Peeters, T. (2014). Teaching fellow Ton Peeters bereidt studenten voor op onvoorspelbare arbeidsmarkt (interview). *DUB (Digitaal Universiteitsblad Universiteit Utrecht)* 24 oktober 2014. Retrieved from: <http://www.dub.uu.nl/artikel/achtergrond/teaching-fellow-ton-peeters-bereidt-studenten-voor-op-onvoorspelbare.html>

Scager, K., Akkerman, S.F, Pilot, A. & Wubbels, T. (2016). Teacher Dilemma's in challenging high-ability students in higher education. *Teaching in Higher Education*. DOI: 10.1080/13562517.2016.1248392.

Sinek, S. (2009). *Start With Why - How Great Leaders Inspire Everyone to Take Action*. USA: Penguin Group.

Verbiest, C. & Dijk, M. (2010). *Oog voor talent*. [An eye for talent]. Amersfoort: CPS

Vygotsky, L.S. (1978, 1934). *Mind and Society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wolfensberger, M.V.C. (2012) *Teaching for excellence. Honours Pedagogies revealed* (PhD thesis). Münster, Germany: Waxmann.



Note

## Honours Graduation Day; Measuring Success of Recruitment and Awareness of the Honours Star Programme

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Received: 3 February 2017; Accepted: 29 March 2017; Published: 21 April 2017

Keywords: honours certificate, honours star system, graduation

### 1. Introduction

The Faculty of Applied Science and Technology (FNT) at HU University of Applied Sciences Utrecht in The Netherlands offers various challenging honours tracks additional to the regular bachelor programmes. How do we inspire (new) students and teachers to join these honours tracks, and get familiar with the procedure and diversity of the honours tracks that are gathered under the official name 'Honours Star System' at HU University of Applied Sciences?

Of course, we can explain the honours star system and show students and teachers our information booklet and websites with nice examples and ask them to read it. With one of Benjamin Franklin's quotes in mind 'Tell me and I forget, teach me and I may remember, involve me and I learn', the University has chosen a different approach. In 2014 the University initiated two yearly events to which all students and teachers are invited:

- the Honours Graduation Day (HGD) in autumn, and;
- the Honours Information Day (HID) in spring.

The main focus of the Honours Graduation Day is on handing out the HU honours certificates to the participating students from the past college year who received five stars. Note that this is a ceremony apart from the Bachelor degree graduation, during which students receive their Bachelor certificate. The Honours Information Day focuses on the HU honours system itself (Unck, 2016) and on handing out the 'HU honours star certificates', to officially confirm successful completion of one of the tracks. During the events, students and teachers will feel the honours experience and can get in contact with current and former honours students.

### 2. Methods

A dedicated event manager is appointed to organise both events in a professional way, e.g. by using a detailed event script. All participants are asked to fill in an evaluation form.

### **2.1 Event Preparation**

An attractive email invitation is sent to all students and teachers. Flyers, posters and honours booklets are distributed, information is tweeted and announcements are being displayed on digital screens in college buildings. Some students and teachers receive a personal invitation and the events are integrated in the timetables of both students and teachers.

### **2.2 Event Programme**

During the events, we celebrate honours. Students receive their HU honours certificates and/or star certificates in a festive ambience. The honours students tell their own personal stories and share their learning experiences and achievements. Students and teachers can meet with the honours students, the audience is invited to speed date with honours committees and present their own ideas. Immediate feedback is given. Keynote speaker at each event is an Executive Board member, relating honours to the overall institutional vision of education (HU University of Applied Sciences Utrecht, 2015). The employers' perspective is not forgotten. Employers are present to give their view on honours and the qualities they are looking for in young employees. Challenging questions are asked in a lively and creative setting. The programme also includes an honours market with information, food and drinks.

### **2.3 Event Follow-up**

All students and teachers receive a thank you mail with a link to the website with the event photos, videos and the results of the evaluation forms. The organisers evaluate the events as well, list the key success factors and lessons learned, and update the event script.

## **3. Results**

The evaluation form scores, the number of attendees and the number of evaluation forms handed in are presented below in Table 1.

*Table 1 Evaluation Results*

	Honours Graduation Day 2014	Honours Information Day 2015
Attendees	146	280
Evaluation Forms handed in	56	74
Event Score (1-10)	7.8	8
Better Understanding Honours - Yes	65 %	99 %
Immediate Registration Honours – Students (intake for new start courses)	17	34

Additional comments - Honours Graduation Day 2014:

- More personal stories students welcome
- More information about content / time spent needed
- Too long

Additional comments - Honours Information Day 2015:

- Inspiring!
- Everything is more clear now
- Video did not work in one of the rooms

The Honours Graduation Day 2015 was attended by 120 people and unfortunately no evaluation forms were distributed. Compared to the previous events, it can be said that more honours students were present, but fewer teachers. Nine students received their HU honours certificate, whereas 30 students received one or more HU honours star certificates. For the first time, parents were present as well.

#### **4. Discussion and conclusions**

What has been the inspirational impact of these events? Did students feel inspired to participate in honours as a result of their attendance? How did teachers respond?

The evaluation form scores show that attendees highly appreciated the events and that they gained a better understanding of honours. A number of students immediately joined honours tracks during the events. From 2014 the event focus has gradually changed from informing students and teachers to more sharing personal stories ('We are curious to find out what the students have done and what they have learned').

Some general conclusions can be drawn while evaluating our experience. Below we list the most important key success factors and lessons learned.

Key success factors are:

- Students and teachers feel inspired by personal student stories.
- Honours students appreciate sharing experiences and receiving certificates.
- Students want to get as much practical information as possible, i.e. time needed, number of courses, teachers involved.
- Students and teachers appreciate employers presenting their view on honours.

The most important lessons learned are:

- Integrate these events in the timetables.
- Teachers would like to have more information on how and when they can offer more (honours) challenges to the students.
- Measuring the inspirational impact of the events should be improved.
- Continue to organise these events in a professional way using evaluation forms.

In the coming years, the Honours Graduation Day and the Honours Information Day will be continued. General feedback like attendance and satisfaction will be monitored. The intention is to correlate the growth of the honours programme to this feedback.

#### **References**

HU University of Applied Sciences Utrecht (2015). *Our world of tomorrow – Vision of education*. Unpublished document, HU University of Applied Sciences Utrecht, Utrecht.

Unck, S. (2016). *HU Honours 2015 – 2020 Onderwijsconcept voor ambitieuze studenten*. Unpublished document, HU University of Applied Sciences Utrecht, Utrecht.



*Paper*

## **Honours and (re)design of the curriculum: How to bridge the gap between honours and bachelor programmes**

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Received: 15 February 2017; Accepted: 17 April 2017; Published: 9 May 2017

Keywords: talent development; personalized learning; co-creation; educational innovation; honours programmes; honours tracks; value creation

### **Abstract**

Since 2016 the University of Applied Sciences Utrecht (Hogeschool Utrecht, HU) has been implementing a new HU Honours vision with *value creation* as the core element. Honours students realize value creation on several levels: personal growth and professional identity, and they deliver products or services that add value to professional practice and wider society. HU Honours education, which is accessible for all ambitious and talented students, offers five types of honours tracks. In order to bridge the gap between honours education and the bachelor programmes, new honours tracks are designed at the same time the regular courses are (re)designed. Honours is structurally embedded in the educational innovations and vice versa: honours is an excellent stimulus for curriculum (re)design because there are more innovative opportunities to set up learning and teaching in different ways. This integration of curriculum renewal and honours programme development has given a boost to new honours tracks and to talent development of all ambitious and talented students.

### **1. Introduction**

HU University of Applied Sciences Utrecht (Hogeschool Utrecht, HU), as one of the hosts of the Utrecht Honours Conference *Honours Futures*, organized the preconference on June 1, 2016. The visit at the HU started with a short presentation of the renewed vision on honours and educational concept that has been implemented since 2016.

From its inception HU Honours education has been accessible to all gifted and ambitious students. Different honours tracks are offered for different types of students: for students who want an in-depth grasp of a subject or a broader view of the matter, for students who prefer to learn more about a subject over an intensified or longer period using a highly structured or completely unstructured setup. Students follow honours programmes in addition to their bachelor programme and do not receive credits for this.

The focus of this paper will be the opportunities that arise to bring honours programmes closer to bachelor curricula while implementing curriculum design. The design or redesign of educational programmes is an excellent opportunity for the development of new honours tracks, especially the tracks which are in line with the regular courses (the so-called 'star courses' at HU are the regular courses providing students the option to participate in an honours track).

We start with a short introduction on the educational context of HU, where a huge innovation is going on for all educational degrees, covering already more than 60 bachelor programmes in total. In the first section we will elaborate on the HU Honours vision and educational concept. Then, we will illustrate how the bachelor programme International Communication and Media implements honours in light of the redesign, to fit ideas of co-creation, personal development, and to truly create a community of excellence. In the last part, we will show how driven students are encouraged to further explore a topic of their interest from a regular course and to deepen and broaden their learning, thus exceeding the courses' regular attainment levels.

## **2. Educational innovation at HU**

In 2014 HU started with a large-scale curriculum renewal of its Bachelors and Masters programmes, including a redesign of its honours programme. During this curriculum development, the HU draws on its educational vision, based on the ideas of hundreds of HU lecturers and students. The HU's vision of education has been elaborated in the pamphlet *Our world of tomorrow* (HU University of Applied Sciences Utrecht, 2015).

Lifelong learning is the main principle: the HU wants to offer education for new and more experienced professionals. The HU vision of education has five principles: 1) lifelong learning, 2) education in co-creation with professional practice, 3) education based on practically-oriented research, 4) personalized learning as a framework for talent development (including honours), teaching methodology, and 5) blended learning which is a combination of face-to-face education, workplace learning, and online and team learning.

Based on the vision of education, fourteen design dimensions have been formulated that provide both direction and space to (re)design the education. Teams of lecturers are invited to give their own interpretation, shape and meaning to these dimensions. One of the dimensions is personalized learning. With personalized learning we mean that students devise their own learning process, in terms of pace, time, sequence, interest, content, goals and level. Honours is the ultimate form of personalized learning, because the students can decide themselves what topics they want to study, what kinds of projects they want to do, and what kind of issue they want to research. Personalized learning on content, goals and levels, beyond the curriculum borders of the bachelor programme, is possible for all ambitious HU students who want to get the best out of themselves and their study.

### 3. Honours renewed

#### 3.1. Honours for all

Honours education at the HU started in 2009 with the Sirius Programme, the national incentive programme that gave a boost to excellence in the context of Dutch higher education.

From the beginning the guiding principle for the HU was that everyone has talents, so everyone can excel at the HU! Honours programmes should be accessible to all students at the HU, not only for the high achievers. The HU has chosen to give the opportunity to all students to excel if they want and if they can. HU Honours is for the inquisitive students who are interested in the world around them and who want to have a larger impact on society.

However, these driven students differ a lot. That is the main reason for offering a broad palette of honours education. The HU offers five types of honours tracks, with different opportunities, in order to reach as many students as possible. The tracks are designed to reach different types of students depending on what they want to learn and achieve, how much time they can spend, what their learning style or preference is, and whether they want to deepen or broaden their knowledge and skills.

During the Sirius Programme, Honours Education occurred next to and usually outside regular education. It was a special project and despite the precondition that honours programmes should be accessible for all students, it was hard to reach many students and also teachers.

In 2014 the HU started with a major curriculum development in which honours was embedded and that has been very important to make honours education more accessible and to integrate it with other educational innovations. Honours is not a separate project anymore, but is connected to other educational and organizational developments.

This was also the moment to renew the honours concept. It is not a totally new approach of honours, but we have improved and changed some elements in our way of thinking. The HU already had a Star System that gave students a star for each honours achievement. In the renewed Honours concept the Star System will remain, but more opportunities for students to excel have been created.

#### 3.2. Value creation

The core element in the renewed HU Honours vision is value creation, which means adding value in one or more of these four areas:

1. for themselves, to give meaning to their learning process, personal and professional development and career;
2. professional practice;
3. their specialist field;
4. society taken in the widest, most imaginative sense.

Value creation is derived from *creatio*, that means “creating something new”. Honours students deliver products or services that add value to themselves, professional practice, their field or society. They want to make a difference in their environment, which can be

very broad: a child at school, a parent, a patient, the director of an agency, a local organization, an interested party, an individual or a relevant target group.

As value creation is at the heart of honours education, an important function of honours is to educate honours students into being 'leading professionals in value creation'. But what makes a student a leading professional in value creation? A group of honours lecturers have made a general profile of this professional.

*Figure 1: Profile of the leading professional in value creation*

Area of development	Qualities / competences
Learning: personal growth	Proactive personality
Learning: professional identity	Learning professional
Value creation for professional practice	Innovative ability
Value creation for wider society	Integral thinking and acting

At the end of their study and honours programme students apply for a final honours assessment where they demonstrate how they have developed themselves into a professional who shows leadership qualities in value creation.

### **3.3. Types of honours tracks**

As explained before, the precondition is that HU honours education has to be accessible to all motivated and ambitious students. As honours students have different needs and wishes, we offer five different kinds of honours tracks:

1. Pre-honours: a multi-disciplinary honours track in a series of ten evenings. The pre-honours trajectory facilitates self-development and self-exploration in terms of identity and compassion within a framework of personal development, collaboration and regional project work. It is also an orientation programme in order to know the possibilities of honours. The programme was co-created together with a group of highly motivated second, third and fourth year honours students.
2. Complete, integrated honours programmes, for students who want to excel at the highest level. These programmes have been especially designed for students who want to work in a stimulating team with other honours students. Within the honours programmes students are able to choose their own path by creating their own projects. The time that students need to spend at an honours programme is similar to a minor, so 30 credits. But they do not get credits for honours, they can achieve stars for their honours achievements. Each honours activity represents an investment of 5 credits, 100 - 140 hours for each star. In a complete HP students do five different honours projects, assignments, activities, or courses, so they can obtain five stars and

after obtaining five stars, they can apply for the final honours assessment in order to achieve the honours certificate.

3. Star courses. Honours students follow the regular bachelor course but they make extra assignments in line with the course or they do assignments at a more complex level. The predesigned star course provides a framework for further broadening or deepening in the topic of the regular course. Students can follow the course on two levels: regular and honours level. Each course of 5 EC can lead to one star. Either lecturers who like to take on challenges with their students or the students themselves can take the initiative for this option.
4. Extra Honours – extra-curricular projects often with a direct cooperation with the work field. Lecturers often take the initiative for these kinds of projects or the stakeholders from professional field. It is about complex issues that can be solved by honours students or a team of honours students.
5. Personal track – students can work out their own idea, plan. This is the most free form of honours education. The students can get coaching or support from an honours coach. The student has to organize that. Every HU institute has many honours coaches and the students can consult them on demand. They write a proposal about their plan and if it has been approved, the student can start with his activities. The approval is a kind of “go”, so the student knows that his plan has potential. If a plan is rejected, the student gets some suggestions on how to improve the proposal.

### **3.4. Honours assessment**

How do we evaluate, assess the honours achievements, the contributions of honours students? We have developed our “Star System”: students can acquire a star or a star certificate for his product, service, intervention or method with added value.

The stars are in line with the competences or the profile characteristics of the beginning excellent professional. The student can acquire a star for each demonstrated competence based on an honours achievement.

The five profile characteristics or stars are:

1. Reflective practitioner: the student possesses a high level of expertise, he has a good knowledge base and applies this in practice. And he reflects on professional action.
2. Innovation and dissemination: the student demonstrates the ability to innovate and makes a contribution to further development of professional practice.
3. International perspective: the student puts the profession and the activities in an international perspective and recognizes the consequences of different environments and cultures for the working fields.
4. Professional drive: the student is highly motivated to optimize his own qualities, makes conscious choices and has a clear vision on his profession.
5. Leadership qualities: the student leads and possesses the skills to plan and to collaborate with others. The student shows leadership.

Before the renewal of honours education students had to achieve all five different stars, but it has been decided to skip that, because the characteristics are too different and in this way incomparable. Now the honours student can opt for the same star twice or three times. In order to create even more freedom for the students to choose their own path we have invented the so called 'free star'. Students can choose their own honours activity, have it assessed and gain the 'free star'. They devise their own star and can give it a name like 'entrepreneurship'. For the free star, the student has to demonstrate how he has created added value for the professional practice or society.

Once five stars have been acquired, students can apply for the final honours assessment during which they demonstrate that they have characteristics of a forward-thinking professional capable of value creation. Once they do so, they obtain an honours certificate. The existing star system and the new element of value creation come together in the final honours assessment for 'graduating with honours'.

#### **4. Integrating Honours in Curriculum Design**

We focus in this section on honours as connected to the redesign of the programme International Communication and Media (ICM) as a case study of how honours can be integrated within a wider educational landscape. This international bachelor programme has a truly international student population and staff from a wide range of countries both within and outside of Europe. The programme is currently undergoing a thorough redesign (2016-2020) to fit the needs of the professional field and categorize itself as a Creative Business bachelor.

This redesign is an opportunity to create a more thorough competence-based programme which focuses on higher impact learning. Courses are redeveloped to allow lecturers to teach in a blended way (Bersin & Bersin, 2004; Vaughan, Cleveland-Innes & Garrison, 2013), which bridges online and offline environments, and creates space for new classroom activities where students also participate in massive open online courses (MOOCs). Moodle is our primary tool in this redesign, to accommodate for large open courses, as well as smaller intimate ones.

In the redesign, ICM focuses on several key competences which align with honours well, such as lifelong learning and personal branding. Honours functions as both an innovator for existing courses and a space to creatively try out ideas. We find that honours has great merit as an excellence programme which is co-created. By emphasizing the individual student, the HU honours concept allows for innovative, personal ways of teaching.

The vision of ICM is emblematic of that of the HU in general. The merit of honours lies in the student's personal development, which is matched closely to ICM's vision at a micro level – a vision which emphasizes a personalized learning approach, co-creation, intercultural awareness, and the need to keep on learning to become an apt and forward-thinking professional. In this section we will illustrate how ICM implements honours in light of the redesign, to fit ideas of co-creation, and to truly create a community of excellence.

##### **4.1. Implementation of Honours at Programme Level**

To truly educate for the professional field of creative business, the honours research at ICM is envisioned both disciplinary and interdisciplinary. Students may want to deepen

competences and subjects in their honours journey, but may also want to see this trajectory as an opportunity to go beyond the familiar disciplines (Wolfensberger, 2015, p. 157). The interdisciplinary aspects of honours are connected to the HU's institutional context, where honours students are encouraged to go beyond institutes and disciplines, and are invited to go on an "expedition" to find new qualities within themselves.

We encourage students to not only explain their honours project, but also focus on its international aspects, its relation to the ICM curriculum, and its value for the professional field. ICM is a truly interdisciplinary and intercultural programme, and we see honours as an opportunity to dive deeper into cultural competences. As an extra honours project, students can choose to for instance reflect more on their study abroad, and create a network based on their exchange. For this fixed project, we created a rubric which lists different competence levels for intercultural awareness and tests students based on a report and presentation.

#### **4.2. Walk the Talk**

In *The Honours Experience*, Van Eijl and Pilot (2016) describe that a growth mindset is a necessary quality for excellence – a mental disposition to seek new challenges and opportunities, instead of avoiding them (p. 17). Having such a mindset creates personal development. Both lecturers and students need to acquire that growth mindset, and keep learning and developing themselves. Co-creation, then, is integral in our vision of excellence. To truly excel at a University of Applied Sciences, undergraduates need to be professional and truly learn to collaborate and become leaders.

When discussing the practice of honours, recruitment cannot be overlooked. By connecting honours recruitment more actively to study coaching, we hope to identify suitable honours students sooner, and coach them in their personal learning paths. In their study Van Eijl and Pilot (2016, p. 81) emphasize that creating a culture of excellence is fundamental to identifying and developing excellence. This culture also implies that study coaches have to be able to spot excellence, and actively recruit students (*ibid.*, p. 89). In our previous curriculum design, coaching focused on students who were delayed, or who had special needs. This has the danger that excellence is not recognized or valued as much, when in fact it can be nurtured and enrich students' education tremendously.

In our current redesign, much attention is paid to personalized learning trajectories of all students, and to the excellence of students and staff. Our vision for redesign is our explicit ambition to create an honours community which is driven by students, and coached by inspiring staff members. Like all HU institutes, lecturers are inspired to "walk the talk" and engage students by giving the right example as role-models, who also keep learning themselves. This idea of co-creating honours as a dialogue of students and staff is integral to the ICM vision. This also implies that excellence within staff should be encouraged. As a University of Applied Sciences, we may reward this differently than many other modern universities who emphasize research.

In our vision of honours, we see honours as aligned to didactical methods (e.g. coaching, teaching), and as added value to the professional field. Co-creation is central in this notion, both connected to the professional field as well as to didactics. Our idea of co-creation is

perhaps best visualized when considering a recent COIL (collaborative online international learning) course developed with an Australian partner university, RMIT College of Business, Melbourne. COIL is best described as: ‘...courses, projects and other “virtual exchange” or ‘telecollaboration’ activities that bring university students and academics together across borders. Integrating it into the curriculum enhances the intercultural competence of students who might not otherwise have the opportunity to study abroad’ (European Coil Conference, 2017).

Connecting honours with COIL has proven valuable at our programme, where it is considered an opportunity to educate intercultural competence at a high level. Lecturers give much room for students to follow their interests. While a rudimentary rubric was designed, and some assignments were described, developers left much space for students to initiate their own projects with their Australian peers. As we are now in the pilot phase, the learning outcomes have not been evaluated yet, but a constant dialogue with students and our foreign partners was crucial in the development and vision overall.

#### **4.3. Innovation and Play**

Within the curriculum, we also use honours as innovator to experiment with new didactic visions, which do not only include co-creation, but also more interactive learning activities. Specifically, we want to use honours education as a way of experimenting with more blended activities, including games and play in education.

For education, gaming has clear merits. Digital and non-digital games function as valuable vessels for identity formation and social grouping (Pearce, 2009). Games are effective educational tools, because they provide a space where conventions of the everyday world cease to exist. Games suspend disbelief, and also create immersion within educational activities.

In education, temporarily reforming the group through play can be a powerful tool. Role-playing and other activities can create a more dynamic, engaging and emphatic way of learning activities, skills and knowledge. Through play, students can also experiment with different attitudes, making all of these elements suitable for competence-based learning. Within honours, games can be a way to playfully master learning goals and key competences. For instance, one of the competences of the excellent professional is “leadership”, which can easily be activated within the context of gaming. As a game design method, we can create a state of play or simulation which relies on complex, social role-playing. This simulation can be developed into more full-fledged games of several hours, such as live-action events where management strategies are played out in the flesh. Here, the safe space of the game can give students a feeling of security, and experimentation to try out different leadership strategies.

Casting our students in the role of playful learners is something that we value at ICM, and at HU level in general. This resonates with our honours vision, which is envisioned like a heroic journey (e.g., Van Eijl & Pilot, 2016) or expedition. Overall, honours functions as an innovator at ICM. It tests our competences, but also allows students to go beyond our fixed programme. We see honours as an opportunity to implement new didactic methods, and to truly co-create content with our students. The honours programme is as much student-



driven as it is facilitated by staff members. We leave much room for students to find and create their own projects or courses which meet their needs and help them flourish as professionals.

### **5. Honours as an option in regular courses**

In this section we will illustrate how motivated students, willing to add value to themselves personally and professionally, the work place or wider society, can choose for an extra honours option in a regular bachelor course. The English Department for Teacher Education at HU currently provide a series of star courses in the Methodology curriculum. Based on regular Bachelor Methodology courses and learning goals, keen students have the opportunity to deepen and broaden their learning, thus exceeding the courses' regular attainment levels.

In the Methodology courses students study concepts such as Communicative Language teaching and learning, language skills, collaborative work, engaging activities, digital learning tools, differentiation, Task-Based Instruction, use of target language, dual language education, formative and summative assessment and curriculum design. Driven students are encouraged to further explore a topic of their interest and become competent with its practical application, and in doing so, earn Honours stars according to the HU Star system: reflective practitioner, innovation and dissemination or professional drive. The predesigned star courses provide a framework, yet allow students to determine the success criteria of their final product. The outcome is noteworthy as is demonstrated by the following two examples:

1. A driven part-time trainee English teacher noted that, although her vocational internship college claimed to provide an authentic learning environment for students, their summative assessments were far from it. She decided to enrol in the Methodology star course with the objective to create authentic and relevant learning opportunities with the focus on natural learning processes and general practical application that would motivate the vocational students. After a process of research, creation, evaluation and improvement, her newly developed authentic summative assessments have been embedded in the curriculum at the college which resulted in two Honours stars for reflective practitioner and innovation and dissemination. Boosted by this achievement the student has decided to continue with the Honours Programme and is presently doing research into early school leaving at vocational colleges in order to establish a bespoke support plan.
2. An enthusiastic full-time English student was eager to further explore the use of digital learning tools in order to enhance teaching and learning in the Modern Foreign Language classroom. Her aim was to inspire teachers and fellow students to apply innovative online digital learning tools in their teaching practice. Her research into the added value of engaging ICT tools on learning outcomes has resulted in the creation of [todaysteachingtools.com](http://todaysteachingtools.com), a website with categorised lists of trialled online digital learning tools, the publication of weekly blogs and two Honours stars for innovation and dissemination. Thanks to her social media platform the project has evolved ever since with her regularly conducting workshops on digital learning tools and creating digital learning environments at schools and companies for which

she has been rewarded with two additional stars; professional drive and reflective practitioner.

Star courses grant motivated students access to the Honours Programme and allow them to be self-initiating and creative within a framework. The aforementioned projects demonstrate the endless opportunities that may arise when students, once aware of their possible impact on their surroundings, are willing to add value to themselves personally, professionally, to the workplace and the wider society. Stars creating stars.

## 6. Concluding remarks

In this paper we have elaborated on the HU Honours vision and educational concept, with value creation as the core element. Despite the precondition that honours programmes should be accessible for all ambitious and talented students, it was hard to reach many students, probably because of the gap between honours programmes and the regular bachelor curriculum. In order to bridge this gap, new honours tracks have been designed at the same time the regular courses were (re)designed. Honours is structurally embedded in the curriculum innovations and vice versa: honours is a perfect stimulus for curriculum (re)design because of its innovative character. We have shown this for one bachelor programme in particular: International Communication and Media. We have also illustrated how students can choose for an extra Honours option in a regular bachelor course, another opportunity that arises to bring honours programmes closer to bachelor curricula.

## References

- Bersin, J. (2004). *The Blended Learning Book*. San Francisco: John Wiley and Sons.
- European Coil Conference (2017). *About COIL*. Retrieved from: <https://eurocoilcon.nl/>
- HU University of Applied Sciences Utrecht. (2015). *Onze wereld van morgen. Visie op Onderwijs*. Retrieved from: <http://www.huontwikkelt.nl/onderwijs-onderzoek/hu-onderwijsvisie/>
- Huizinga, J. (1970). *Homo Ludens: A Study of the Play Element in Culture*. London: Maurice Temple Smith Ltd.
- Pearce, C. (2009). *Communities of Play: Emergent Cultures in Multiplayer Games and Virtual Worlds*. Cambridge; London: MIT Press.
- Vaughan, N., Cleveland-Innes, M., & Garrison, R. (2013). *Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry*. Edmonton: AU Press.
- Van Eijl, P. & Pilot, A. (2016). *The Honours Experience*. Rotterdam: Hogeschool Rotterdam Uitgeverij.

Wolfensberger, M. (2015). *Talent Development in European Higher Education: Honours Programmes in the Benelux, Nordic and German-Speaking Countries*. Heidelberg; New York; Dordrecht; London: Springer. <http://link.springer.com/book/10.1007%2F978-3-319-12919-8>



Note

## Relating secondary school to higher education honours programmes

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Received: 17 January 2017; Accepted: 20 April 2017; Published: 27 April 2017

Keywords: secondary education, enrichment, science and mathematics

### 1. Introduction

Many talented and motivated secondary school students feel a need for more in-depth and challenging learning activities than the regular curriculum can offer them (Renzulli, 2005). The U-Talent Academy in the Netherlands is a programme that aims to meet these needs for 11th and 12th grade vwo (pre-university level) students interested in science and mathematics. U-Talent Academy is part of the U-Talent programme, a collaboration between Utrecht University (UU) and Utrecht University of Applied Sciences (HU) in the Netherlands (see [www.u-talent.nl](http://www.u-talent.nl), in Dutch). The aim of U-Talent is to strengthen science and mathematics (STEM) education in secondary school and in the bachelor phase of higher education by the valorization of scientific research and the building of a strong, sustainable secondary-higher education network. Important goals are talent development for all students, professional development of secondary and tertiary science and mathematics teachers, and the improvement of study success and transition. Schools can opt for three different levels of participation: ambition, connection or open. In the 2016/17 course, 26 schools from the Utrecht region participated at the ambition level, with about 2000 students taking part in a one-day or longer student activity. At the connection level, 14 schools participated with 900 students taking part in a one- or two-days student activity. The number of schools participating at the open level is variable. In this contribution, the focus is on the intensive U-Talent 'honours' programme.

### 2. U-Talent Academy

The U-Talent Academy (former name: Junior College Utrecht, Van der Valk, 2014) is the U-Talent STEM programme for talented and motivated 16-18 year-old students from the ambition schools. It forms a community of like-minded students, promotes academic competences in students, informs them about recent developments in science research and orients them towards future studies. It also has aims for the schools: to stimulate the ambitions of students, to improve the quality of teaching and to keep their teachers connected with the developments in their subjects.

Started with 21 students in 2004, the U-Talent Academy now welcomes 150 grade 11 and 150 grade 12 students a year from the ambition schools (Van der Valk, Tromp & Kleijer, 2015). The students are carefully selected. First, grade 10 students are informed about the programme and they can participate in an orienting two-day university course. Then, they can apply for one of the limited number of U-Talent Academy places the school is granted. The schools select and enlist the applicants to the U-Talent Board, which decides about admission.

The programme is partly carried out at the schools, partly at the Utrecht University campus. The U-Talent school programmes are determined by the schools, but agree in including differentiation in science lessons, additional enrichment projects and school community activities. Moreover, students get assignments, preparing for the lessons at the university. In the campus programme, students come to the university campus for two days a month. The programme includes enrichment modules, an excursion e.g. to CERN in Geneva, Switzerland, community activities and writing a 'U-Talent thesis'. The enrichment modules are about recent developments in science research. They are developed and taught by secondary school teachers in cooperation with university researchers. Some module titles are 'Ice and climate', 'Membranes', 'Microtubuli' and 'Simulation and games'. Students do their 120 hours 'thesis research' in a research group of Utrecht University and present the results to their teachers, fellow students and parents.

At the end of secondary school, U-Talent students get a U-Talent certificate that gives entrance to the honours programmes of the Faculty of Science of Utrecht University.

### **3. Results of the programme**

Students appear to highly appreciate the U-Talent Academy campus programme: a yearly mean score of 7.5 to 8 on a 10-point scale (from very bad to very good). The school programme is appreciated less high (mean 6.7), but the appreciation is very much school-dependent.

Since its start, all but one U-Talent Academy students passed the national examinations with good to excellent grades. More than 80% of the alumni chose a STEM study in natural sciences or life sciences (including medicine). 30-40 % opted for studying at Utrecht University (Van der Valk and Pilot, 2012).

Tromp et al. (2014) analysed the study success of U-Talent Academy students studying at Utrecht University and matched them with non-U-Talent Academy students. The U-Talent students accomplished better in the number of EC's accomplished, in marks and in the duration of their study.

### **4. Concluding remarks**

The U-Talent Academy is successfully implemented since 2004. The results show that honours education already can start in secondary school, satisfying its students by offering them an additional learning challenge.

For the selected U-Talent Academy students, the gap between secondary and higher education is narrowed or even closed, especially with respect to honours. That is not the case for other students, even if they are very talented. The broader U-Talent programme sees it as its mission to work on a continuous learning trajectory from primary to tertiary education in science and mathematics for all students, the very talented ones as well as the regular ones.

## References

Renzulli, J.S. (2005). The three ring conception of giftedness. In: R.J. Sternberg and J.W. Davidson, *Conceptions of giftedness*, pp. 246-279. Cambridge University Press.

Tromp, S., Oomen, C., Bakker, A., & Eijkelhof, H. (2014). *Studiesucces in het WO van deelnemers aan pre-universitaire verrijgingsprogramma's: alumni van het Junior College Utrecht*. [Study success in tertiary education of participants to university enrichment programmes]. Paper to the 2014 ORD conference.

Van der Valk, T. & Pilot, A. (2012). Empowerment and heterogeneity among talented pre-university science students in an enriched learning environment. In Markic, S., Eilks, I., di Fuccia, D., & Ralle, B. (Eds.): *Issues of Heterogeneity and Cultural Diversity in Science Education and Science Education Research*, pp.133-142 Aachen: Shaker Publishing.

Van der Valk, T. (2014). Connecting excellence in secondary and higher education: lessons from Junior College Utrecht. In: Wolfensberger, M.V.C., Drayer, L. & Volker, J.J.M. (Eds.). *Pursuit of excellence in a networked society*, pp. 253-262. Münster – New York: Waxmann.

Van der Valk, T., Tromp, S. & Kleijer, C. (2015). Learning Communities in a STEM Education Network: scaling-up a talent development programme. In: Maaß, K., Törner, G., Wernisch, D., Schäfer, E. & Reitz-Koncebovski, K. (Eds.) *Educating The Educators: International Approaches To Scaling-Up Professional Development In Mathematics And Science Education*, pp. 304-315. Münster: WTM – Verlag für wissenschaftliche Texte und Medien. Retrieved from: [http://educating-the-educators.ph-freiburg.de/images/Proceedings/ConferenceProceedings\\_EducatingTheEducators\\_MaasToe rnerEtAl\\_2015.pdf](http://educating-the-educators.ph-freiburg.de/images/Proceedings/ConferenceProceedings_EducatingTheEducators_MaasToe rnerEtAl_2015.pdf)





Note

## **Gifted and talented students' academic performance and choices at TU Delft**

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Received: 31 January 2017; Accepted: 8 May 2017; Published: 9 May 2017

Keywords: gifted students; Higher Engineering education, honours programmes participation

### **1. Introduction**

Since 2009 the department Electrical Engineering, Mathematics and Computer Science at the Technical University (TU) Delft in the Netherlands offers an honours programme to gifted and talented students in the bachelor programmes. The honours programme has a duration of two years and an extra study load of 20 EC. Students are selected for this programme when they have completed the first year in the nominal time and have a GPA of 7 or higher (on a scale of 1-10) for the courses in the first year. When students have completed their regular bachelor programme and the extra programme within three years, they receive a TU Delft honours certificate. This honours programme is mainly chosen by students from the bachelor programmes Electrical Engineering or Computer Science. Excellent students (GPA of 8.5 or higher for mathematics and physics at high school) from the bachelor programme Applied Mathematics mostly chose to do a double degree in Applied Mathematics and Applied Physics that involves an extra study load of 35 EC and has no time limit to complete both programmes.

### **2. Problem: disappointingly low numbers of honours students**

Although the influx of students is increasing for all regular programmes in recent years, we observed that only a small number of students choose the honours programme and that many of them, after being selected and enrolled, decided to leave the honours programme. Because of these disappointing numbers of excellent and talented students that opted for the honours programme, we have done research into the performance and choices of the ten percent best-performing students (in terms of GPA) coming from secondary education, and among the students that have skipped classes in secondary education ('accelerated students' or 'early college entrants').

The following research questions were formulated:

- What is the quality of the incoming students from pre-university education (*vwo*) and how many students belong to the subgroup of the top ten percent from *vwo* and/or to the subgroup of 'accelerated students'?
- What are the academic results of these subgroups in the regular bachelor programme?

- What choices do these students make in terms of enrichment (honours programme) or extracurricular activities like positions in student associations?

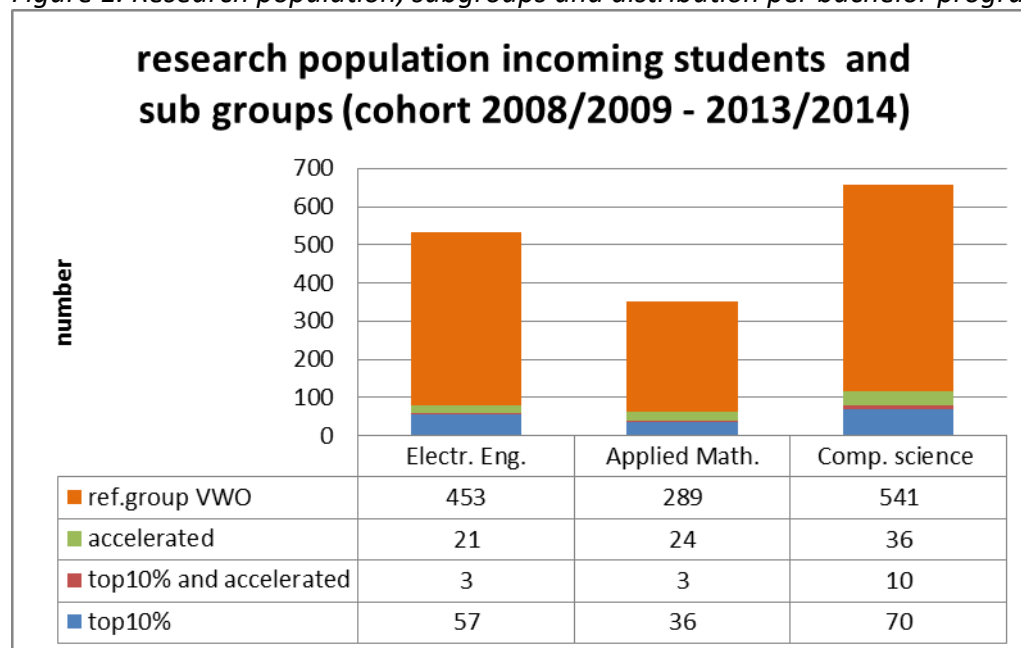
### 3. Theoretical framework

The theoretical framework used in this study is the work of Gagné (2009) to define gifted students, the research of Veenman et al. (Veenman, Bavelaar, De Wolf, & Van Haaren, 2014) on results from gifted students in secondary schools and their metacognitive skills, and the research of Mendaglio (2013) who describes the effects of “hitting the wall” and “the-big-fish-little pond” that gifted and talented students can meet after their transition from high school to university.

### 4. Methods

The TU Delft student database with data about background (age, grades secondary education), their grades and progress in the first year at TU Delft and time and grades regarding completion of their bachelor programme, has been explored and analysed. With descriptive statistics the students’ performance and choices have been clustered for age, GPA, study progress, grades and choices for an honours programme, leadership activities or extra courses. The database was analysed for six cohorts: 2008/2009 till 2014/2015. The choice has been made to focus on students with a Dutch high school diploma who have not switched from another university programme. The top ten percent of these students was chosen based on their GPA in high school. Figure 1 gives an overview of the research population and the subgroups.

Figure 1. Research population, subgroups and distribution per bachelor programme



### 5. Results

The results show that the top ten percent students are somewhat younger than their study mates not belonging to the top ten percent. The early college entrants are mainly students that have skipped one class at primary or secondary education (17 years old); nine students were 16 years old and two students were 15 years old. The total research population has a number of 1543 students. The results of the student’s performance in the first year confirm

previous research about the relation to study success at universities of technology (Bogaard, 2015). Next to motivation a high GPA and high grades for maths and science courses in high school are good predictors for study success.

The performance of the top ten percent students in the regular bachelor programme is remarkably well, especially compared with students who did not belong to the top ten percent or the research group early college entrants. The dropout rate in the first year of regular programme from the 'top ten percent group' is about ten percent. About half (5%) of the 'top group' decides to leave the programme within 0-4 months after the start. More than 60% of the top ten percent students complete their first year in one year and 30 to 40% do this with a GPA of 8 or higher. After three years 65% (or even more: 80% of the math students) completed their bachelor programme (cohorts 2008/2009-2012/13). About 40% can do this with a GPA of 8 and higher and a 9 for the final bachelor thesis. The early college entrants did less well than the top ten percent, especially those students who enrolled in the computer science programme. The drop-out rate of this subgroup early college entrants in the first year is high (40%); 30% of the early entrants students staying in the regular bachelor programme were successful in completing their regular programme in three years with a high GPA.

With regard to the choices these excellent students have made during their regular programme, it was found that 14% of the top ten percent group chooses to do an honours programme. These honours students all have Electrical Engineering or Computer Science as a major. The analysis also shows that gifted and talented students, instead of doing the honours programme, choose alternative extra activities, for example leading and management roles in study-, student- and civilian associations and special student projects, to broaden their skills. The TU Delft encourages students in these choices and gives them time and money to compensate for possible delay in their studies. It was remarkable that only few of the top ten percent from high school, who did not take an honours programme, has chosen to do extra courses next to their regular programme. Additional research into the high school results from the students who have completed the honours programme showed that more than 50% of the selected and successful students, belong to the subgroup 30% to 10% of the best students from high school.

## **6. Discussion and conclusions**

The results, shortly described here, give reason to collect more and also qualitative information about the performance and choices of ambitious and talented students. The research results also give insight into the quality of the incoming students and awareness of the possibilities to offer cognitively gifted students extra challenging study tasks in the regular programme as we do in the honours programme.

The results of this research and research into the background of the students doing an extra honours programme, have been input for restructuring the actual honours programme. We want to encourage more students to complete the extra honours programme. The high quality of incoming students and the small percentage of students choosing an extra honours programme in the second year, was reason to offer an interdisciplinary honours programme in the Robotics domain to excellent and motivated students already in the first year. It was also decided, due to the results that students choosing for an extra honours programme belong to the top 30% from high school, to monitor their study progress and

results of this top 30% students and offer these students an extra training in metacognitive skills and to inform these students earlier about the possibilities to do an extra honours programme.

## References

Bogaard, M.E.D. van den. (2015). *Towards an action oriented model for first year engineering success. A mixed methods approach*. Dissertation. TU Delft, Delft, Nederland.  
doi:10.4233/uuid:7e3ea63e-3f28-4f9d-a340-95acc8828763

Gagné, F. (2009). Talent development as seen through the differentiated model of giftedness and talent. In T. Balchin, B. Hymer, & D. J. Matthews (Eds.), *The Routledge International Companion to Gifted Education* (pp. 32-42). New York: Routledge.

Mendaglio, S. (2013). Gifted students' transition to university. *Gifted Education International*, 29(1), 3-12.

Veenman, M. V., Bavelaar, L., De Wolf, L., & Van Haaren, M. G. (2014). The on-line assessment of metacognitive skills in a computerized learning environment. *Learning and Individual Differences*, 29, 123-130.

Note

## **Glocality: a second international life for excellent work**

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Received: 14 November 2016; Accepted: 20 April 2017; Published: 2 May 2017

Keywords: Open access, Undergraduate research, Academic publishing

### **1. Introduction**

Glocality ([www.glocality.eu](http://www.glocality.eu)) is a student- and faculty-run multidisciplinary undergraduate academic journal which offers students and alumni from universities of applied sciences a serious scientific tool to share their knowledge with the rest of the scholarly community worldwide.

Those of us who work with talented students have found great ideas and talent in the class assignments they submit. Most of the time, these exceptional papers and ideas are graded to then be archived at their academic institutions for a couple of years, before being destructed in a paper shredder. Academic publishing is a difficult task for undergraduates. Most academic journals only accept contributions from Ph.D.'s or Ph.D. candidates. For students who do not even have a Bachelor degree yet, the territory of academic publishing is a forbidden area.

This international academic journal was born out of a quality research class at Windesheim Honours College in Zwolle, The Netherlands. We wanted students to have access to an international quality platform to publish their best work academically. The journal should contribute not only to the exchange of knowledge among students from different parts of the world, but it should also stimulate research among students. Besides, students who already have published in Glocality have been able to connect to international networks, professional networks and research institutions.

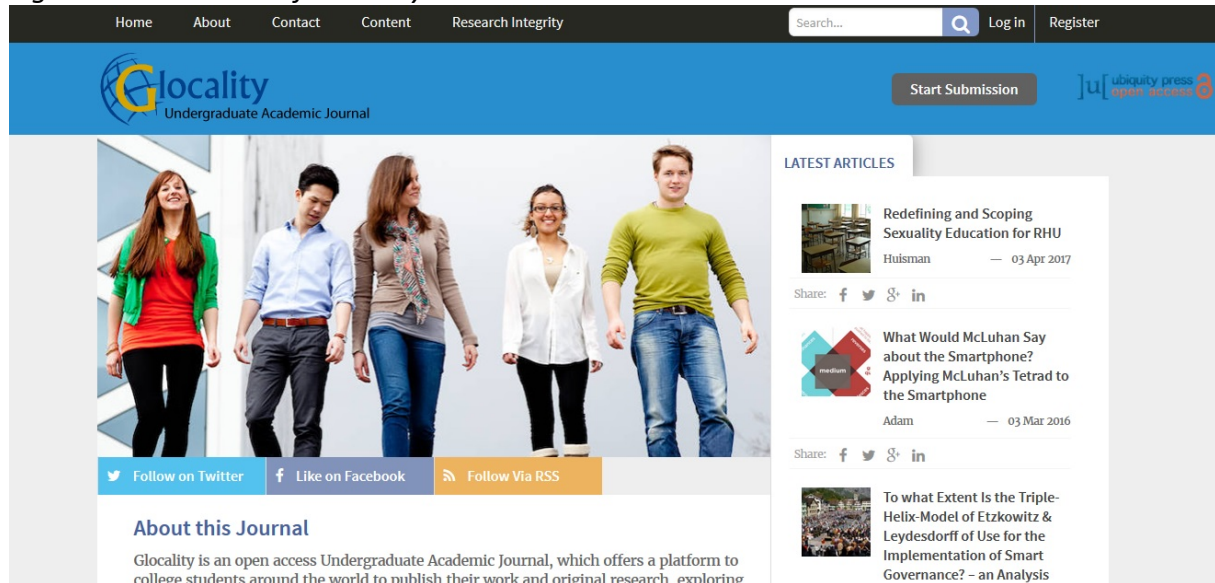
The journal is run by students. One of the faculty members has the editorial responsibility (the Editor-in-Chief), and works with a team of four students which is chosen each academic year. They act as managing editors under the supervision of the Editor-in-Chief and one editorial advisor. The whole team is supported by an international Editorial Board with relevant members of the work field and academics. The students running the journal also learn about the publishing process of academic research. This experience enables them to improve their eye for quality and detail. Some have expressed their willingness to become

authors themselves. Their involvement in the process of establishing a solid group of peer reviewers also helps the team of students to increase and build up their own networks.

Glocality wants to promote academic and scientific applied research among undergraduate students and create critical glocal thinking to deal with the challenges ahead of us in the disciplines of Social Entrepreneurship, Civil Society, Urban Dynamics and Health. We aim to create innovative and young schools of thought.

The journal is published online at [www.glocality.eu](http://www.glocality.eu) (see figure 1).

Figure 1. Screenshot of Glocality website



## 2. Our goals

The goals of Glocality are:

- To introduce students into research disciplines and the publishing process
- To encourage undergraduates to write at an academic level
- To make the results of undergraduate research accessible for everyone
- To include voices across all disciplines in a multimedia format
- To create a glocal community of scholars who contribute to the knowledge society.

## 3. Examples of published contributions

Below are some examples of contributions that were published in 2016-2017:

Adam, I. (2016). What Would McLuhan Say about the Smartphone? Applying McLuhan's Tetrad to the Smartphone. *Glocality* 2(1), p. 3. DOI: <http://doi.org/10.5334/glo.9>

van Eck, C. (2016). Drawing Boundaries: Boundary Arrangements of the IPCC Working Groups. *Glocality* 2(1), p. 1. DOI: <http://doi.org/10.5334/glo.4>

Gregorius, J. (2015). Does the Digital Age Require New Models of Democracy? – Lasswell's Policy Scientist of Democracy vs. Liquid Democracy. *Glocality* 1(1), p. 1. DOI: <http://doi.org/10.5334/glo.6>

Hohmann, L. (2016). To what Extent Is the Triple-Helix-Model of Etzkowitz & Leydesdorff of Use for the Implementation of Smart Governance? – an Analysis Referring on Implemented Triple Helix-Constellations. *Glocality* 2(1), p.2. DOI: <http://doi.org/10.5334/glo.7>

Huisman, M. (2017). Redefining and Scoping Sexuality Education for RHU. *Glocality* 2(1), p.4. DOI: <http://doi.org/10.5334/glo.11>

We are open for contributions from undergraduate students from all over the world. We facilitate the publishing process and cover all publishing costs. All contributions are blind peer reviewed by international experts from the work field or the academic world. We accept research papers, essays and case studies. The journal is published in Open Access.

Give your best academic work a second life and submit it to Glocality. International peer reviewers and our editorial team will take your work to the next level. For more information visit [www.glocality.eu](http://www.glocality.eu) and check the video <https://www.youtube.com/watch?v=3MlnDvzp-il>





Note

## Utrecht Law College (ULC): Preparing Students for the Future

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Received: 1 February 2017; Accepted: 20 April 2017; Published: 4 May 2017

Keywords: law school; learning community; personal development

### 1. Introduction

This short contribution will introduce the reader to the three pillars of the Utrecht Law College's teaching philosophy. These pillars are:

1. Community building,
2. Commitment,
3. Preparing students for future employment.

These honours-specific ambitions complement the general ambition of the law school, *i.e.* to teach the students a thorough knowledge of the law.

### 2. What is the Utrecht Law College?

Besides the regular Bachelors in Law, Utrecht University in the Netherlands also offers, since September 2005, the Utrecht Law College (ULC) programme. The ULC is the honours programme of the Law Faculty, and is ideally suited for the student who wants to prepare for tomorrow's legal practice in a more intensive way and in smaller groups. Utrecht Law College consists of two different colleges, Sirius (since 2005) and Tilia (since 2012). Each year, approximately 75 new students are selected for each college. Each college has its own study association. Students participate in all kinds of activities and organize such activities themselves. One can think of excursions, trips abroad, study groups, symposia and lectures on current themes. The students are provided with the enthusiastic support of the teachers who are affiliated with the Utrecht Law College. The study associations also organize the modules that make the ULC so unique; these are a series of activities where students learn more about a particular topic related to their studies. The ULC is a three year Bachelor programme, and after successful completion students are awarded the LLB (Bachelor of Laws).

### 3. Essence of the Utrecht Law College teaching method

*The most distinguishing feature* of ULC is the strong sense of community. Both teachers and students actively contribute to this. The two colleges of ULC – with the names Sirius and Tilia – constitute distinct communities. The study associations, responsible for organizing both academic lectures and various social activities, play a crucial role in this. The students are selected especially on their talent, motivation, and their demonstrated capacity to contribute to community building.

A *second* characteristic of the ULC is commitment. The ULC students must be committed to their studies, and the ULC staff must be committed to teaching. At the same time, it is important that an ULC student develops and employs his or her talents outside the classroom: in sports, music, or by joining the student organization's board. This combination of commitment to studies and personal development is one of the strengths of the ULC. The ULC aims to educate socially active, committed and highly versatile law students. To achieve this, the ULC encourages students to come up with ideas themselves to develop their general skills and competences. For example, in the past, students have developed a module on Personal Leadership. The staff, in turn, provides enthusiastic lecturers and tutors, whose task is to guide the students throughout their studies. Through the commitment of both students and teachers, a safe learning community is created to stimulate participants to improve themselves and each other continuously.

And *finally*, the ULC programme prepares the students for law practice. This could be at a law firm, but also with an NGO or in academia. Guest lectures and clinics provided by professionals are organized regularly, and the ULC students visit law firms, courts, governmental and other legal institutions. The term "law practice" must be understood in a broad sense: the ULC aspires not to limit itself to preparing students for the big commercial law firms.

It is important that students know themselves well. For this purpose, tutor meetings are organized devoted to professional and broad personal development. The latter is about self-understanding of one's own personal and academic growth and development. The focus in the meetings on personal development is on time management, employment orientation, employability skills, one's role in a team, etc. The purpose of these meetings is for the students to obtain practical skills, essential in future employment, in addition to the academic knowledge the study provides.

### 4. Discussion

The particular nature of the ULC teaching method raises various questions, many of which are still open for discussion. We discussed the following propositions at the Utrecht Honours Conference:

- Proposition 1: Is it the task of the university to train students to become good planners, manage their time well, know how to sell themselves on the job market, etc.? Or should the university focus on academic skills, competences and expertise?
- Proposition 2: Do honours students have to obtain above-average results for normal tests, or do they need to obtain normal results for above-average tests?

- Proposition 3: Do honours students thrive better under intensive and small-scale teaching, and if so, what can we expect from students in return?
- Proposition 4: Is someone who leaves university with a thorough knowledge of the law going to become a good lawyer? Or should we teach other issues as well, such as ethics, how to deal with clients, management skills, time planning, etc.?

## **5. Conclusions**

In essence, the ULC constitutes a small academic community, comprised of both excellent students and teachers. A good ULC student has made a conscious and well-informed decision to join the law school and, more particularly, the Utrecht Law College. She or he has an ambition and demonstrated ability to achieve good results, a motivation and demonstrated ability to study in the honours program, and academic curiosity. Since the students are co-responsible for the success of the ULC, the students must also have a willingness and demonstrated interest in organizing and attending extra (study) activities.

## **References**

More information about ULC (in Dutch) can be found on the website:

<https://www.uu.nl/bachelors/rechtsgeleerdheid-utrecht-law-college>



Note

## Honors education in Spain – preliminary research findings

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Received: 1 February 2017; Accepted: 4 May 2017; Published: 8 May 2017

Keywords: honors, honours, higher education, talent development, excellence, Spain

### 1. Introduction

In 2015, Dr. Marca V.C. Wolfensberger published the book *Talent Development in European Higher Education* (Wolfensberger, 2015). The book entails the results of research on talent development in higher education in the Benelux, Nordic and German-speaking countries. It is part of the *Honors in Europe* research project, which aims to create and share knowledge about talent development initiatives in European higher education. Following publication of the book, the research project was expanded to Southern Europe and exploratory research on different countries was started. This note is focused on Spain. The exploratory research on honors education in Spain conducted so far is focused on finding and contacting Spanish higher education institutions to find out which initiatives in talent development already exist.

### 2. Methods

Three steps have been taken to achieve the current results.

First of all, a list of higher education institutions in Spain to be included in the research had to be determined. In addition, general information about these universities, like the number of students, had to be found. The main source for this information was the Spanish Ministry of Education (Ministerio de educación, cultura Y deporte 2015, p. 3).

As a next step, we used online information to determine which universities offer an honors program that corresponds to the definition used by Wolfensberger: 'Honors programs are selective study programs linked to higher education institutions. They are designed for motivated and gifted students who want to do more than the regular program offers. These programs have clear admission criteria and clear goals and offer educational opportunities that are more challenging and demanding than regular programs' (Wolfensberger, 2015, p.24). The websites of all institutions were scoured for information on the existence of such programs.

At the same time, the websites were also searched for a valuable contact to whom we could send an e-mail. Usually this contact was a 'vicerector(a)' whose work field includes student affairs and/or academic organization, as this person would be best aware of the existence of such programs at the level of the whole institution.

The third step was to draw up an e-mail. In this e-mail general information was presented as well as two questions. These questions were as follows (shortened):

1. Does your organization offer special programs that correspond with the definition of an honors program?
2. Are there any other programs offered for talented students, or are they planned to be offered in the near future?

These e-mails were translated into Spanish and sent from a special account. Reminder e-mails were also sent from this account. When the response rate was found to be low, the same e-mail was sent again from the students' mail account of the first three authors.

### **3. Preliminary results**

In total there are 83 universities in Spain. After consulting the websites of all universities, we were able to find five universities that offer an honors program that (at first sight) matches our definition.

Mail contact with the remaining 78 universities led to an answer of 24 universities. 21 Universities responded they don't offer an honors program, but four of these universities said they plan to start an honors program in the near future. Only two universities that responded said that they already offer a program that corresponds with our definition.

For now, we can only identify seven universities out of 83 that have a special program for excellent students. At this point in the research, it is difficult to draw general conclusions about the programs found and the institutions offering them. Programs range from a disciplinary program for law students, which consists of curricular and extracurricular activities and is orientated internationally; to an institution-wide program focusing on developing more general capacities in talented students, focusing on the fields 'innovation, impact and influence'. Institutions offering programs range from small-scale regional universities to larger universities with multiple campuses.

These preliminary findings suggest that the provision of honors programs is not of great importance in Spanish higher education in general. However, it is important to note that we have not received a reply from the majority of higher education institutions. Our research has not yet been completed. Gathering information on the plans for new honors programs and the characteristics of the existing ones will take place in the next phase of this research project.

### **4. Conclusion and future perspectives**

As discussed under preliminary results, only 24 out of 78 universities have responded at the time of writing (January 2017). Since multiple e-mails have been sent, a next step to gather more results would be sending letters, or if possible, calling the universities. When more answers have been received, a more complete image of the provision of honors programs and the culture towards the concepts excellence and talent development in Spanish higher education can be painted. This would also open the possibility to look deeper into the

factors causing this culture. Eventually, a complete list of all the honors programs in Spain should be formed, as well as an in-depth piece on the culture towards excellence in Spanish higher education.

## References

Ministerio de educación, cultura Y deporte. (2015). Datos y Cifras del Sistema Universitario Español. Curso 2014/2015. Retrieved from: <http://www.mecd.gob.es/dms/mecd/educacion-mecd/areas-educacion/universidades/estadisticas-informes/datos-cifras/Datos-y-Cifras-del-SUE-Curso-2014-2015.pdf>

Wolfensberger, M. (2015). Talent Development in European Higher Education. Honors programs in the Benelux, Nordic and German-speaking countries. Heidelberg, New York, Dordrecht & London: Springer International Publishing. Retrieved from: <http://doi.org/10.1007/978-3-319-12919-8>





Note

## Research, education and clinical practice: an example of a learning community in the field of Speech and Language Therapy

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Received: 30 January 2017; Accepted: 23 February 2017; Published: 12 May 2017

Keywords: applied research; aphasia; student involvement

### 1. Introduction

The HU University of Applied Sciences Utrecht in The Netherlands has an honours program based on a star-system, in which students have the opportunity to earn one or more stars on top of their BA curriculum, which helps them to distinguish themselves from other students. There are five areas in which students can extend their knowledge; expertise, innovation & dissemination, international orientation, professional drive and leadership. In addition to the extra work students do, they write a reflection report on their experiences. Both are then evaluated by an honours committee. If you receive a positive review, you will be awarded a Star Certificate. In this particular project, four Speech and Language Therapy (SLT)-students participated in an innovative research project involving the development of a new diagnostic tool for clinical practice. The project provides a great example of how innovation takes place, when research, education and clinical practice meet. The students shared their experiences at the Honours Conference 2016 in Utrecht. This note is a summary of their presentation.

### 2. Contents of the honours program

To understand the contents of the honours program the students participated in, a little background information about speech and language therapy is needed.

A Speech and Language Therapist (SLT) is specialized in communication disorders. Communication disorders can be caused by multiple reasons. Aphasia is a communication disorder, caused by acquired brain damage. People with aphasia may have problems in speaking, reading, writing and language comprehension. Many people with aphasia have problems in finding words and naming objects, which may affect their daily communication. Words are stored in our brain, in the so-called lexicon. Several factors affect the speed and accuracy of word retrieval. Two of these factors are frequency of occurrence of a word and

age of acquisition. The influence of frequency on word retrieval is commonly described; the more often the word is used, the easier and faster we retrieve the word from our brain. Recent research has shown that also the age of acquisition is an important variable in the organisation of the words in the brain. The younger the word is acquired, the faster and more accurately they are retrieved, and the better they seem to be preserved in our brain after damage.

Word finding difficulties can be diagnosed by a test. The most common test SLTs use is the Boston Naming Test (BNT, see Kaplan, Goodglass & Weintraub, 1983). This instrument is outdated and it is not standardized for Dutch. Furthermore, the diagnosis word finding difficulties by the BNT is only based on the frequency factor. Therefore, the Research group Speech Language Therapy at HU University of Applied Sciences is developing a new test. It is based on the most recent insights in cognitive linguistics and includes both frequency and age of acquisition factors.

This is where the honours program began. The students were involved in selecting items for the test and helped to set up and perform a survey to determine the age of acquisition of these words.

To create the naming test, words had to be collected for six categories (table 1).

*Table 1. The six categories for the items of the new naming test*

Early age of acquisition and high frequency (e.g. house)	Late AoA and high frequency (e.g. taxi)
Early age of acquisition and middle frequency	Late AoA and middle frequency
Early age of acquisition and low frequency (e.g. diaper)	Late AoA and low frequency (e.g. iron)

The students searched for words to fill these categories. Frequency of selected words was easy to find in a database (SUBTLEX-NL, see Keuleers, Brysbaert & New, 2010), but there is little data available about the age of acquisition of Dutch words. Research was necessary to determine the exact age of acquisition (AoA) for the words that will be included in the test. Earlier research has shown that AoA can be determined by asking people at what age they think they acquired a specific word. Therefore, the students performed a survey to determine the age of acquisition of the selected words. Almost 100 participants estimated their AoA for the words in the survey. Based on these data, and the frequency of items, a final selection was made for the test.

The naming test will probably be published on paper and online. At the moment there are no other tests for speech and language therapy online, so this is an innovative concept in the discipline. Collaboration with ICT-students from the faculty Nature and Technology was started to explore the possible application of the test in digital form. The collaboration was interactive, because the ICT-students also needed help in developing an application for people with aphasia. The students informed the ICT-students in order to make the app appropriate for people with aphasia.

### **3. Learning experiences**

By participating in this research project, experience was gained in the interaction between doing research and the clinical practice during education. Collaboration between

researchers, clinical practitioners and students creates innovation. In this research, principles of Evidence Based Practice (EBP, relating to the best available research evidence, clinical expertise and the client preferences) are combined to create an evidence based naming task.

Through the collaboration with the faculty Nature and Technology, the students learned to talk comprehensibly about aphasia with a layperson. Furthermore, they experienced the possibilities of innovative technology, which is little used by SLTs. There is a lot of potential for SLTs for including more technology in their therapy.

Overall, knowledge is expanded and deepened in different ways by participating in this honours project. Knowledge is gained about doing research, which is part of evidence-based practice. Developing a test takes many years, money and patience. Besides, the students learned more about the steps that needed to be made in this kind of research. Moreover, more specific knowledge about word finding difficulties is gained.

## References

Kaplan, E.F., Goodglass, H. & Weintraub, S. (1983). *The Boston Naming test (2nd edition)*. Philadelphia: Lea & Febiger.

Keuleers, E., Brysbaert, M. & New, B. (2010). SUBTLEX-NL: A new frequency measure for Dutch words based on film subtitles. *Behavior Research Methods*, 42(3), 643-650.



*Paper*

## **Tracing transforming honors tracks - Arts and sciences beyond borders**

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Received: 1 February 2017; Accepted: 11 May 2017; Published: 12 May 2017

Keywords: Wunderkammer; borders; cross overs; science and art; transformative learning; self-directed learning

### **Abstract**

In this paper we describe how honors students of an art university and a classical research university in the east of the Netherlands, came together to work on the development of new ecologies of art and science. We narrate a yearlong learning journey by highlighting two main projects, first a local Wunderkammer project and subsequently a joint research trip to New York, Boston and Cambridge for investigating similar initiatives across the Atlantic. While going beyond the borders of disciplines and institutions, in search of new terrain, students reframe their own field as well. By experimenting with the form of our honors tracks we hope to widen the horizon of young people and help them unleash their potential. Our meandering story describes how the honors track kept on changing form, by allowing students to claim radical ownership, and how this has taught us that such experiments can not only be carried out in a responsible manner, but may also create more powerful environments for learning across borders.

### **1. Wonder**

Our story starts with the initiative of two teachers involved in the honors programs of the Radboud University and ArtEZ University of the Arts in two nearby cities in the Netherlands, to let their students meet someday.<sup>1</sup> So it happened that a group of Radboud honors students was invited to pay a visit to the extraordinary underground lodgings of the theatre and dance departments of ArtEZ in Arnhem. This environment proved to be somewhat opposite of what they were used to. No school desks around but large, almost empty rooms instead, dark painted rooms that merely begged for human movement or other activities to

*take place*, literally. Experiencing this spatial difference with their daily surroundings influenced their view on the arts. A lot of those Radboud students had no clue whatsoever of where and how, in general, art students learned and worked. The meeting proved to be fruitful: the honors students exchanged overall ideas and idiosyncrasies of their respective artistic and scientific disciplines, group photos were made and distributed, and hopes were expressed to continue, in whatever way, the encounter.

## 2. Wonder-room

In the meantime, the cultural organization of the Radboud University ('Cultuur op de Campus') contacted the Society of Arts, which is part of the Royal Netherlands Academy of Arts and Sciences (KNAW). Both parties approached the staff of the Radboud Honours Academy and the ArtEZ Honours Program. They were looking for opportunities to involve students in their activities to have them learn about the role of the arts within society. Their proposal was to involve both art and science students in a project that the Society of Arts had coined 'Wunderkammer': a 'wonder-room' or Cabinet of Curiosities. During a few meetings, with a special evening in the Amsterdam Trippenhuys, where the KNAW resides, the group formed itself and explored the idea of the Wunderkammer.<sup>2</sup>

The Wunderkammer, or to follow Julius von Schlosser's phrase 'Kunst- und Wunderkammer',<sup>3</sup> was the place and space in which curiosities of the world were collected and displayed as from the 16<sup>th</sup> century. These collections were organized in a way that did lack, to our modern eyes at least, any recognizable taxonomy. Works of art, wonders of nature, and all kinds of other curious objects and machines, were displayed in an unorderedly and unusual manner. These Wunderkammers appear to us as pure products of the imagination, as a form of surrealism *avant la lettre*. What finally became clear in our collective musings on this phenomenon is that these collections did not differentiate at all between art and science as we do now. They were just mingled and not set apart; they were the result of wonder and admiration about all kinds of natural or artificial things, whatever their origin. Ever since the nineteenth century our museums have begun to leave this particular way of displaying behind. Science and art developed into separate realms and metaphysical entities. In the Netherlands, the extraordinary 18<sup>th</sup> century Teylers Museum in Haarlem was one of the last established museums in which art and science would find a shared place. Scientific machines, minerals, stones and monsters, and drawings by Leonardo and Rafael found refuge in the same building.

## 3. Family room

All student participants agreed that the model of the Wunderkammer as a seemingly *non-hierarchical* collection of objects from different fields, could catalyze thinking about current and future relationships of science and art.<sup>4</sup> As such, their notion fitted the purpose of the Wunderkammer-project, which was to facilitate the exchange of ideas and actions between students working across the fields of art, science and the humanities. The expected result should ideally be a platform for joint experimentation and interdisciplinary thinking, pivoting around wonder. A place where science and art would be siblings. Since family members also have to meet from time to time to confirm their mutual affiliation, the Wunderkammer would serve as the family room for thinking together. The family room was not a fixed place but was an imaginative, immaterial, yet existing space that was founded on a reciprocal interest in these fields. The Wunderkammer group represented, in short, a wide variety of

artistic, scientific and scholarly disciplines, including philosophy, medicine, physics, fine art, dance, theatre and graphic design.

#### 4. Wonder and wander

We challenged the students to reconsider their own areas of expertise as well as their familiar ways of knowledge production, to broaden up their own perspectives and to give free rein to curiosity, serendipity and the workings of the imagination. We asked them to critically enquire their own and others' convictions, and try to reopen their view on art and science as from scratch. Obviously, this is not easy. We live in an age now where scientists – at least in some fields – seem to claim and be given the final say about human nature, which fosters all kinds of preconceptions on both sides.<sup>5</sup> The Wunderkammer provided a radically different, yet safe, environment to foster a state of open mind.

Admiration and wonder – looking as if everything you encounter is new – may lead to wandering about.<sup>6</sup> At first, not knowing where to go, with no right direction being given, this turned out to be cumbersome for the students. They had to find out for themselves and let their curiosity speak. We, Academy and tutors of the honors program, only asked them to think and come up with something and to present that in a few months' time, in some public arena. What would science do when nothing is asked for, when no specific outcome was expected? What would art do when nothing is impossible beforehand? From our tutorial perspective, this was a crucial starting point because both art and science have come under severe political and societal surveillance, and are being curtailed constantly. Academic and artistic freedom is not self-evident nowadays. The arts are increasingly asked to be effective, not to say useful. A genuine opportunity for starting together from scratch would seem ideal, wouldn't it?

This was, to be honest, a bit optimistic. Students did take up the challenge, but had to get used, initially, to organizing their own meetings and having to come up with research ideas all by themselves. Self-direction is so alien to most mainstream educational surroundings, that even gifted students need some time to really grasp that it is up to them; even willing teachers have trouble getting this message across in a consistent and convincing way. Evidently, we provided coaching, trying to help them as they were contemplating the values of artistic and scientific freedom. Employing freedom in thinking or acting is, after all, also something that involves learning or unlearning, but it must first linger (as an ideal) in one's mind before it can be strived for. To be confronted with emptiness – *i.e.* with no set question; no set field; no felt urgency; solely with the challenge to think and act from within their fields of knowledge – proved to be hard. Nevertheless, they became productive after considering these incentives. Students started to work, arranged meetings and tried to find out what their correspondences were and how they could find a general base for working together. What bound them together was the desire for getting in touch, to get closer, to find borders, and to cross them. It caused a kind of 'symphilosophizing' as Novalis, the German poet, would have called it. Novalis eye-witnessed the split of science and art at the start of the nineteenth century, and already saw the need to reconcile and not to diverge.<sup>7</sup>

## 5. Wandering: an encounter

While students were wandering and ‘symphilosophizing’ together and trying to find some shared themes, another initiative came to the fore. The famous harpist Lavinia Meijer was invited as an artist-in-residence at the Radboud University. Would it not be a good idea to seek a connection to this musician, who is a ‘gormandizer’ when it comes to working together with all kinds of musicians and music genres? And so it happened. She definitely challenged our Wunderkammer-students and functioned as a role model being a serious professional while having retained an ‘ability to play’. This collaboration resulted in a special evening at the university, *Wunderkammer meets Lavinia*,<sup>8</sup> in February 2016.

The program consisted of the preliminary results of the multidisciplinary research groups: ‘Reversed Music’, ‘Cat Stories’, ‘Building Blocks: The return of the *Cadavre Exquis*’, vocal improvisation and an ‘Experiment on the Experience of Time’, interspersed by improvised dance performances with Lavinia.<sup>9</sup> These projects were not aimed at giving final answers or solutions, but they enriched questions and problems. Having been put into the frame of the performing arts some participants felt a little strange; an awkwardness perhaps related to having their regular knowledge and presentation environments being reframed. Others reacted differently by turning a ‘happening’ into a research opportunity. One of these scientific experiments, was placed and performed in the public arena itself and provided real-time research results.<sup>10</sup> All student groups tried to take methods and methodologies out of their regular contexts and put them into new ‘strange choreographies’. The most interesting aspect is that students from different disciplines and fields were willing to take risks in leaving their comfort zone. That was, to put it into a generally accepted language, the *profit* of the whole event: being together and balancing on new threads that were woven into uncertain entities. One of the students has put it this way: ‘To break through stereotypes and paradigms one requires a lot of patience and willingness to give up one’s own position.’<sup>11</sup>

This newly made Wunderkammer was a display of interesting streams of thoughts and, sometimes, of objects like the ‘Building Blocks’.<sup>12</sup> The latter project was inspired by the Surrealist idea of the *Cadavre Exquis*, a method, as the group describes, ‘...in which the participants have an equal say, without having to compromise their respective talents: *Inspired by this way of collective thinking we developed our own set of rules. Each person had to create an object, idea, proposal, etcetera to give to the next person. The second step was for this next person to further develop the given idea within one or two weeks and again give it to the next person. This would continue for a total of four sessions until all of the four participants had worked on it, resulting in sixteen separate and four final works.*’<sup>13</sup>

## 6. Mind the Gap: Across the Atlantic

After the presentations at the university and at the *Honors Futures* Conference in Utrecht in June 2016, the honors students took after their own business again. Connections were there and some students kept on seeing each other. Soon after we were offered the opportunity to apply for a subsidy for establishing new connections between the two institutes. We applied for subsidy for a study trip to the USA, the country that is known for its active honors communities. In a few months’ time, we formed a (partly) new honors students group that would prepare the visits to interesting spots in New York, Boston and Cambridge. That is to say, once more we made the students responsible for an opportunity to explore other



worlds. Also, we invited two more tutors representing the Radboud Honours Academy as a whole and the Radboud university medical center, respectively. All this led to an even broader group of ‘specialists’ than the Wunderkammer: twelve honors students from a different background, six from each institution formed the group. The variety of backgrounds ranged from music to medicine, from physics to fine art, and from dance to law. This variety was remarkable, at least to many of our American hosts.<sup>14</sup>

In the Wunderkammer project, students were challenged to overcome the problem of entering *terrae incognitae* without a structured assignment or dominant mode of working known from their own respective backgrounds. Now, with the new group we even wanted to take this one step further, and provide the students with the opportunity to develop their ownership, by taking a leading role in both the organization as well as in the programming of the trip.

The rationale behind this starts with the fact that in The Netherlands the natural sciences and the humanities together with the arts are already being divided during secondary education. Subsequently, most university students, starting at the early age of 17 or 18 years old, do not challenge the borders of their bachelor’s programs, but direct their learning at what educational organizations want and get money for, *i.e.* for students to pass tests as quickly and smoothly as possible and graduate nominally. Assessment seems to direct their learning. This system has, however, a very unfortunate effect: when the program makes students start to wonder, most of the time they do not wonder about themselves or the world but about what the teacher wants them to do. Evidently, this is more so at a research university than at a university of the arts; still, following the teacher is the dominant educational format that we all know from school.

Thinking along these lines we started to realize that for students to really be given a chance to explore new territories, we would perhaps have to break with this default ‘educational mode’, just as with the Wunderkammer project, or even more so. In the next section we will elaborate on this link between border crossing and ownership of learning.

We therefore formed groups of three students and challenged them to take responsibility for one part of the trip’s program (up to half a day). We organized preparatory meetings during which we, as a community of students and tutors, decided upon the final selection of program proposals. Some students even doubted whether they could get anything serious organized at all, given that they had only a few months’ time. It was therefore very inspiring to finally see that they could take the lead, a few months later, in our visits to well-respected institutes like Harvard, MIT or The City College of New York. For them, as they told us, it was an experience they will never forget. One student received a nicely written personal e-mail from Noam Chomsky saying that he, unfortunately, could not meet them during that particular week, is a cherished witness and symbol of what may happen when you just reach out.

## **7. Education models challenged by the trip**

Currently, educational innovation focuses on the development of so-called ‘21<sup>st</sup> Century skills’. This is a catch-all term that seems to contain many higher order skills, not only those that are particularly related to the extant age like innovative technologies and digital

literacy, but also skills that have been relevant since the dawn of mankind, like critical and creative thinking. The urgency however behind this focus is the fact that people feel that the '21<sup>st</sup> century workplace' is changing so rapidly that it is very uncertain what our professional lives will look like the coming decades. Change will be our only constant, as the saying goes, and hence we know for sure that 21<sup>st</sup> century professionals will need to be adaptive and keep on learning. That begs for them to constantly frame and reframe their own field of expertise and those of others.

At the start of the third millennium major authors in the field of self-directed learning (SDL) already said it would be likely that SDL would come to the fore because of an increasing societal demand for lifelong learning.<sup>15</sup> For years SDL was associated with 'andragogy', not with a key set of skills we should start to acquire from a very young age, and onwards, particularly at the university level.

Even though self-direction and personal leadership are now at the heart of today's view on education and SDL is considered to be the key link between undergraduate education and continuing professional development, one may argue that change is slow when it comes down to giving students and professionals substantial freedom to develop such skills. The dominant paradigm is that of the discipline, and the prevailing educational format is still largely based on organizational demands and not that of the learner per se. Consequently, millions of students across the globe are still being spoon-fed.

This even holds for some honors programs, in particular for some faculty-based tracks that try to further specialization. These tracks do obviously serve a purpose, and may even be considered excellent in some sense, but they do not necessarily embody the idea that the learner him- or herself determines the quality of his or her personal and professional development. The Radboud Honours Academy's interdisciplinary programs, on the other hand, focus on the enrichment of the individual student by intentionally crossing borders of the natural sciences and the humanities. Even then, however, many parts of the honors program consist of traditional didactic formats. To really help students open up to new vistas we believe they need to go 'all-in' and therefore be given the chance to organize their own learning experience.

That is why we handed our students the task to organize their own program in the USA, but make it fit within the confines of the overall program and aims. But would this work? Wouldn't they first have to experience it before actually grasping it? It turned out that merely telling them our didactic, little schemes did not do the trick, and we did not expect that either. We knew beforehand that they had to live through it to see what it would imply for them personally. Experimenting with providing freedom is risky, but, within the context of this honors program which was all about venturing out, we wanted to take the challenge and risk. Could we ourselves have come up with an even 'better' program for the trip, making use of our own networks and affiliation? Probably. In that case we would, however, not have challenged the students to think about what they wanted, for themselves, and as a group. Even during the first meeting in New York, we noticed that students were still waiting for tutors to take the lead during conversations with our American partners. Only after we discussed everybody's expectations at length, sitting on some boulders in Central Park, they could break through the conventional operating mode.

The students came up with several proposals, so we visited varied spots: the DIAP for instance, the Digital and Interdisciplinary Art Practice MFA program of the City College of New York,<sup>16</sup> where we did a workshop which was proposed and organized by one of the ArtEZ students. The fact that we had this active role for our own students, made them not only prepare very well, but also take the lead during their part of the program, which many pointed out as something that they learned a lot from: ‘My own workshop at the Central Square Theatre springs to mind immediately, because I could test my teaching competencies in a totally new setting. I realized I am a teacher in heart and soul.’

We went to the Hall of Science where we had talks with the staff and found out, among other things, that art was also present but, to our opinion, only serving an illustrative purpose, not as a force of its own. Eleven out of twelve students report that most cross-overs we encountered were manifestations, actually, of one discipline ‘serving’ the other. We were present at a performance evening of the Judson Dance Theater in NYC, a famous place for experiments in performance. Students and tutors joined the collective dance moments actively and could experience the *researching* quality of such kinds of meetings and gatherings. The performances were not set up as a show but were open for questions, comments and physical participation. Here, a university student called it ‘scientific’: ‘I didn’t understand a lot of it, but it really felt like research, like experimenting.’ Whereas an art student was wondering about the borders of art: ‘Was this art? Half of the audience was on stage, copying the performer and creating the performance all together.’ In Boston we had meetings at MIT and Harvard. At Harvard Kennedy School we visited a social psychology research group focused on the science of nudging. We found out that they did not invite artists or designers to help create the nudges they investigated. We did a design-thinking workshop, creating nudges on the spot, in small groups of both scientists and artists, leaving our hosts with astonishment after an hour, because of the quick and unexpected results by working in a different mode *i.e.* by tapping differently into our own, hidden creative resources.

With regard to us experimenting with ownership we saw different patterns. Given the age difference, 19 to 25 years, we of course knew some students would be further ahead in this regard.<sup>17</sup> One of the younger students writes in her reflection on the trip: ‘One of the things I remember best is sitting together in Central Park like a troop of monkeys on the rocks and talking about expectations. It definitely underscored the relevance of making everyone’s expectations manifest. I didn’t know they were so far apart.’ She refers to one particular moment early on in the trip when the teachers decided to be more outspoken about what they expected, which is to show more leadership. A few of the students paradoxically replied to that: ‘If you would have told us to do it, we would have done it.’ This anecdote is just one in a row that demonstrate how students started to value process over outcome.

What we wanted is for the entire track to be a formative experience. For some it really seems to have opened their eyes: ‘Art always seemed a luxury to me, like you would have the luxury not to be a farmer in our society. Now I have come to realize that it is part of being human.’ The group dynamics played a big role in that, according to what another student says: ‘The trip was not only about discovering what we want to do together, but also who we are together.’ Whereas the reflections of the university students seem to show

more of these 'formative' examples, the art students reflect more on the borders of their own discipline and are more precise in what they are doing differently now, after the trip: 'When I work on a project I often look at the scientific approach and try to eliminate 'style' or 'traditions' in the toolbox that has already been established.' This can also be quite fundamental: 'I have learned that the more relevant questions are actually asked outside the fine arts.'

### **8. Conclusion: the sequel**

In retrospect we can conclude that giving free rein to students within an honors course is a tricky but fruitful enterprise, which is not easy because it contains a lot of uncertainties. Students had to enter the no-border-land of art and science, the teachers had to refrain from interfering. The latter position is not easy too because they are always imbued with responsibility and learning goals. By intentionally transforming the status quo, by altering the very forms of knowledge, of learning, of collaboration, of place and time, we provided space for new encounters. Students could adopt new perspectives, create new outlooks on themselves and on others, and on other domains. By recording all the meetings in NYC and Boston that the students had organized and by interviewing them and by finally asking them to write a critical reflection on the trip and the – still – on-going journey that they have themselves started, we are trying to follow these tracks of transformation.<sup>18</sup> Some of the traces we report here, express our hopes that others will find inspiration in it.

As teachers we also became aware of our own transformed positions within the whole trajectory. Leaving authority behind when observing that things might go wrong is quite challenging. But what can be wrong when the outcome is that all these transformations will have a lifetime effect? This is probably the explanation why students gave us advice (when we finally had returned home) to not restrict bringing fields together to honors students only; every student should get this opportunity. We agree.

Some of the students who travelled to the USA have now formed a new community, only loosely connected to the institutions, and are gathering regularly in so-called 'Salo(o)ns', carrying on their investigations and hooking up to several other organizations and border crossing initiatives. The initiative has been recently baptized *Scart up!* During one of the gatherings we were being introduced as tutors to a couple of new members of this community. In response, we have said that we were no longer tutors, but would be grateful to be accepted as regular members of this interesting and promising ensemble.<sup>19</sup> Teachers and students have become equals. Reframing roles and reframing ideas and domains is what honors should strive for.

### **Acknowledgements**

We wish to thank our dear and inspiring colleagues Marijn de Langen, Marlies van Hak and Dalila Sehovic (ArtEZ University of the Arts), Charlotte Brand and Martijn Stevens, Ariane Vervoorn (Radboud University), Barbara Visser, Bart Haensel, Annelies ten Have (Society of Arts/KNAW) who all contributed to this journey. We wish to thank the Sirius Program for its (financial) support. Without the participating students, however, this text would have been impossible, thanks to them all.

## References

- Brockett, R. G. (2000). Is it Time to Move On? Reflections on a Research Agenda for Self-Directed Learning in the 21<sup>st</sup> Century. *Adult Education Research Conference*.  
<http://newprairiepress.org/aerc/2000/roundtables/7>
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult education quarterly* 41(3), 125-149.
- Koksma, J.J. (2014). Narrators of Neuromyth. In Coenen, C., Dijkstra, A., Fautz, C., Guivant, J., Konrad, K., Milburn, C., & van Lente, H. (Eds.) *Innovation and responsibility: engaging with new and emerging technologies*, 149-163. Berlin: Akademische Verlagsgesellschaft.
- Kuipers, S., Hillen, C., Sheffer, C., Kuijpers, S. (n.d. [2016]). *Time (In)dependent Manipulation Experience. A practical experiment on the experience of time within the framework of the Wunderkammer Project of the Royal Dutch Academy of Arts*. n.pl, n.d.  
[http://www.ru.nl/publish/pages/793213/time\\_independant\\_manipulation\\_experience.pdf](http://www.ru.nl/publish/pages/793213/time_independant_manipulation_experience.pdf)
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New directions for adult and continuing education* 89, 3-14.
- Sonderen, P. (2013). Het Honours Programme Theorie en Onderzoek. Een stevige en inspirerende uitdaging voor kunststudenten [The Honors Program *Theory and Research*. A big and inspiring endeavor for art students]. *Tijdschrift voor Hoger Onderwijs & Management (TH&MA)* 1, 55-60.
- Sonderen, P. & De Langen, M. (2013). Van zelf spreekt niets [No thing is self evident]. In AzK, *Art a/z Knowledge*, 0-4. Arnhem: ArtEZ University of the Arts.
- Sonderen, P. (2016). Tussen academies en academisch. Over onderzoek in het kunstonderwijs [Between academic and academics. On research in art education]. *Tijdschrift voor Hoger Onderwijs & Management (TH&MA)*, 4, 24-29.
- Sonderen, P. (2017a). Where theory and artistic practice meet: the art of oscillation (on Hemsterhuis, Novalis and now). In: Sonderen, P. & De Langen, M. (Eds.), *Theory Arts Practices*, 18-69. Arnhem: ArtEZ Press.
- Sonderen, P. (2017b). 'Of Research, Passion and Art'. *Journal of Aesthetic Education* 51(1), 54-68.

## Additional relevant webpages / other sources

- [www.know.nl/en/news/calendar/introduction-to-the-wunderkammer-project](http://www.know.nl/en/news/calendar/introduction-to-the-wunderkammer-project)
- [www.ru.nl/honoursacademy/](http://www.ru.nl/honoursacademy/)
- [www.artez.nl/en/study-programmes/honours-programme-theory-and-research](http://www.artez.nl/en/study-programmes/honours-programme-theory-and-research)

- <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/>
- Wunderkammer meets Lavinia AFTERMOVIE:  
<https://www.youtube.com/watch?v=Cfe-UIEcOWk>

## Notes

<sup>1</sup> They were Marlies van Hak Ma, coordinator and tutor at the ArtEZ Honours Program, and dr. Martijn Stevens, tutor and program co-director at the Radboud Honours Academy; the meeting took place in the spring of 2015.

<sup>2</sup> <https://www.knaw.nl/en/news/calendar/introduction-to-the-wunderkammer-project>

<sup>3</sup> <http://digi.ub.uni-heidelberg.de/diglit/schlosser1908>, retrieved 18/1/2017.

<sup>4</sup> Although many students were interested in the project, only a few could finally apply because of lack of time. The project was not only additional to their bachelor program but also to their honors program. Still about 10 students have started the project, and are still active; they have regular meetings ('Salons') and hook up with other initiatives on the border of arts and sciences (like Kunstlab).

<sup>5</sup> Think of the current 'neuro-hype' allowing something to be real only if it is made visible by brain imaging techniques (Cf. Koksma, 2014).

<sup>6</sup> Descartes saw admiration as the first passion that could not be reduced to another one and was therefore basic to scientific wonder.

<sup>7</sup> Cf. Sonderen, 2017a.

<sup>8</sup> <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/>

<sup>9</sup> The evening was moderated by philosopher Cees Leijenhorst. Musicologist and musician Vincent Meelberg played double bass and was asked to reflect on the outcomes from a scientific perspective.

<sup>10</sup> See for details of the experiment Kuipers et. al., n.d. [2016]; its main question was if time had an objective basis. The results indicated that measurement and experience of time do not coincide.

<sup>11</sup> <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/>

<sup>12</sup> Building Blocks: <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/> and <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/examples-building-blocks/>

<sup>13</sup> See for examples: <http://www.ru.nl/codc/english/events/wunderkammer/copy-review-results/>.

<sup>14</sup> One of the students remarked in her reflections on the trip that she saw that our American hosts were impressed by this mere fact, which they called 'an accomplishment in itself.' With honors students from dance, political science, music theatre, European law, fine art, history, physics & chemistry, graphic design, medicine, theatre education and public administration we were indeed an extraordinary mixed group. The university students were 19-21 years old and were in their second or third year of their bachelor's program. The art students were 21-25 years of age.

<sup>15</sup> Brockett, 2000; Merriam, 2001.

<sup>16</sup> <https://www.ccnycunyu.edu/diap>

<sup>17</sup> Grow, 1991.

<sup>18</sup> For this publication we have concentrated on the transformative aspects.

<sup>19</sup> *Participants ArtEZ University of the Arts*. Staff: dr. Peter Sonderen, Marijn de Langen, MA, Marlies van Hak, MA. Students: Léa Vinette, Carcom Sheffer, Nina Meijer, Michiel Terpelle, Chris Hillen, Cassandra Onck, Johanna Tengan, Laura Saumweber, Annelie Koning, Kaulane Huisman, Lyanne van den Berg.

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*Participant Cultuur op de Campus (Radboud University)*. Ariane Vervoorn.