

Programme
of the
Third Biennial Meeting of the Special Interest Group Educational Effectiveness (SIG 18)
of the European Association for Research on Learning and Instruction (EARLI)

From Theory to Theory.
Empirical Analyses in Relation to Theoretical Models of Educational Effectiveness

29 – 31 August 2012, Zurich, Switzerland

Congress Committee:

Katharina Maag Merki (Conference Chair)

Adrienne Angehrn

Monika Holmeier

Evelyn Hug

Eliane Panek

Scientific Committee:

Herbert Altrichter (Austria)

Jürgen Baumert (Germany)

Wilfried Bos (Germany)

Roel J. Bosker (The Netherlands)

Bert Creemers (The Netherlands)

Hartmut Ditton (Germany)

Marcus Emmerich (Switzerland)

Bieke De Fraine (Belgium)

Eckhard Klieme (Germany)

Leonidas Kyriakides (Cyprus)

Hans Luyten (The Netherlands)

Katharina Maag Merki (Switzerland)

Daniel Muijs (United Kingdom)

Erich Ramseier (Switzerland)

Kurt Reusser (Switzerland)

Pam Sammons (United Kingdom)

Jaap Scheerens (The Netherlands)

Steve Strand (United Kingdom)

Jan Van Damme (Belgium)

Stefanie van Ophuysen (Germany)

Peter Van Petegem (Belgium)

Welcome to the third biennial EARLI SIG 18 – Meeting at the University of Zurich

It is a great honour and pleasure for us to welcome you at the University of Zurich. Research on Educational Effectiveness has a long tradition at our university. One of the oldest longitudinal studies in German-speaking countries was conducted by Helmut Fend at the University of Zurich. In the late 1970s he started to conduct research on 2000 German youngsters across their adolescent years. With five measurement times from age 12 to 16, he examined the development of individual psychological and sociological dimensions (e.g. motivation, self-concept, self-esteem or performance anxiety) depending on their school experiences and the relationships with their parents and peers. The follow-up study ('LifE')¹ 20 years later made it possible to analyse to what extent school experiences during adolescence had influenced the long-term development in young adulthood. Finally, three months ago, the former adolescents, who are now 45 years old, were questioned again. In the coming months the results concerning the question of how schools can explain inter-individual differences in mid-adulthood are awaited with great anticipation.

Numerous research sites have examined with complex studies which dimensions distinguish effective educational systems and how school exerts a profound effect on human development. The current state of research provides first evidence concerning which factors are of great importance for learning and the development of students. Furthermore, the methodology of Educational Effectiveness research and the strategies to analyse the impact of school systems on student learning respectively have been significantly enhanced.

However, important questions and issues remain unresolved and will require further negotiation. Additionally, the embedding of the empirically identified results in theoretical models of Educational Effectiveness has to be taken into account more systematically.

Therefore, it is the aim of third biennial meeting of the EARLI SIG 18 to examine the relationship between theory and empiricism of Educational Effectiveness; that is on the one hand, to empirically validate existing theoretical models of Educational Effectiveness and on the other hand, to develop further theories of Educational Effectiveness. Furthermore, the investigation of the interdependency between Educational Effectiveness theory and empirical analyses of the effects of school and teaching factors on school, teacher and student development in different subjects and different sectors of education (early years, primary, secondary and higher education) is of special interest.

The discussions held at the conference should provide further development of Educational Effectiveness theory considering the complex processes of student learning and the multilevel structure of educational systems. In the 100 presentations, researchers from 20 countries examine significant questions of Educational Effectiveness research.

¹ Pathways from Late Childhood to Adulthood. Context and Development in Adolescence as Predictors of Productive Life-Courses (<http://www.uni-potsdam.de/life-studie/index.php?id=104>)

Furthermore, the keynote lectures will be given by five international researchers who are widely experienced in theoretical and empirical modelling of Educational Effectiveness. They will analyse the main questions by emphasising different aspects of Educational Effectiveness. By contrasting the different approaches, there will be the opportunity to shed light on the structure of Educational Effectiveness theory.

At our conference we now wish you lively discussions, a profound analysis of scientific theories and empirical findings in the context of the Educational Effectiveness research, and the opportunity to get into conversation with colleagues. We hope you will enjoy your stay here in Zurich.

Prof. Dr. Katharina Maag Merki and colleagues

Congress committee

Table of Contents

A. PRACTICAL GUIDE	2
1. INTRODUCTION	2
2. SUPPORT	3
3. SESSION INFORMATION	4
4. VENUE	5
5. INTERNET ACCESS AT THE UNIVERSITY BUILDINGS	6
6. SOCIAL ACTIVITIES	7
7. IMPORTANT ADDRESSES	8
8. RESTAURANTS	9
9. MAP OF ZURICH.....	13
10. LOCAL PUBLIC TRANSPORT.....	14
B. CONFERENCE PROGRAMME – OVERVIEW	15
C. WEDNESDAY, 29TH AUGUST 2012	16
1. OPENING, INTRODUCTION: 13:30 - 13:45 (ROOM: KO2-F-180)	17
2. KEYNOTE SPEAKER I – PROF. DR. JAAP SCHEERENS: 13:45 – 14:45 (ROOM: KO2-F-180).....	18
3. SESSION I: 15:00 – 16:30	19
4. SESSION II: 17:00 – 18:30	33
5. APERITIF: AS FROM 18:30 (ROOM: ZOOLOGICAL MUSEUM)	45
D. THURSDAY, 30TH AUGUST 2012.....	46
1. KEYNOTE SPEAKER II – PROF. DR. ECKHARD KLIEME: 09:00 – 10:00 (ROOM: KO2-F-180)	47
2. SESSION III: 10:30 – 12:00	49
3. LUNCH: 12:00 – 12:45 (ROOM: KO2-F-152)	67
4. SIG-MEETING: 12:45 – 13:30 (ROOM: KOL-F-117)	68
5. SESSION IV: 13:30 – 15:00	69
6. SESSION V: 15:30 – 17:00	87
7. KEYNOTE SPEAKER III – PROF. DR. BIEKE DE FRAINE: 17:15 – 18:15 (ROOM: KO2-F-180).....	102
8. BANQUET: AS FROM 19:00.....	103
E. FRIDAY, 31ST AUGUST 2012.....	104
1. KEYNOTE SPEAKER IV – PROF. DR. SEAN REARDON: 08:30 – 09:30 (ROOM: KO2-F-180)	105
2. SESSION VI: 10:00 – 11:30	107
3. KEYNOTE SPEAKER V – PROF. DR. BERT CREEMERS: 11:45 – 12:45 (ROOM: KO2-F-180)	120
4. AWARDING OF BEST POSTER AND CLOSING: 12:45 - 13:00 (ROOM: KO2-F-180).....	121
F. REGISTER OF PERSONS	122

A. Practical Guide

1. Introduction

Welcome to the Third Biennial Meeting of the Special Interest Group Educational Effectiveness (SIG 18) of the European Association for Research on Learning and Instruction (EARLI).

Venue

The conference will be held at the Main Building of the University of Zurich, floors KOL-F and KO2-F:

Address: University of Zurich
Main Building
Rämistrasse 71
8006 Zurich
Switzerland

Programme:

Check out the programme on page 15. Last-minute changes will be announced at the bulletin opposite to the Conference Office (Room KO2-F-155). The abstracts can be found from page 18 on.

Registration desk:

On Wednesday and Thursday until 2pm, the registration desk will be set up opposite to the main entrance to the right (Rämistrasse 71). Conference bags, name tags and the dinner voucher (for Thursday night) can be collected there. On Thursday after 2pm and Friday, registration is possible at the Conference Office (Room KO2-F-155).

Conference Office:

The Conference Office is located in Room KO2-F-155. There, any inquiries can be dealt with in person. The Conference Office will be open daily from half an hour before the start of each day until half an hour after the end of each day. In addition, helpers wearing a blue polo-shirt and a white lanyard are happy to help you.

Luggage-Storage and Lost-and-Found-Office:

There is a room where you can safely store your luggage. Please consult the Conference Office for more information (Room KO2-F-155).

All lost and found objects will be stored at the Conference Office (Room KO2-F-155).

Coffee breaks and lunches

All coffee breaks during the conference and the buffet lunch on Thursday will be served in room KO2-F-152. Aperitif on Wednesday evening will be served in the Zoological Museum on floor KO2-E.

We would like to remind you that drinking and eating is not allowed in the rooms where the sessions and lectures take place. Furthermore, smoking is not allowed in any university building.

2. Support

The event is supported by:

Mercator Foundation Switzerland



Hochschulstiftung der Universität Zürich



Schweizerischer Nationalfonds



Swiss Academy of Humanities and
Social Sciences

Schweizerische Akademie der Geistes- und Sozialwissenschaften
Académie suisse des sciences humaines et sociales
Accademia svizzera di scienze umane e sociali
Academia svizra da ciencias moralas e socialas
Swiss Academy of Humanities and Social Sciences



Staatskanzlei des Kantons Zürich



Stadt Zürich



We thank all the donors for their support.

3. Session Information

Paper Sessions

A paper session consists of three papers that have been grouped by the conference organizing committee based on the keywords submitted by the authors. Each presentation lasts approximately 20 minutes followed by a question-and-answer session of 10 minutes.

Poster Session

A poster session lasts 45 minutes, consists of 3 posters and will be held two times in series. Every presenter gives a short introduction into his or her poster, which should last not more than 5 minutes. After the introductions to the three posters, there will be time for the audience to meet the poster-presenters for discussions. This discussion lasts 30 minutes. After the first round, the second round starts immediately with a new audience. If there are only few viewers, the session will consist of 6 posters and will last no longer than 90 minutes. Every presenter has to give his introduction only once.

Round-tables

In contrast to paper sessions, in which the presenters should at least present a finished study or should have analysed and interpreted their data, round-tables open up the opportunity to discuss outcomes as well as the design of a research project or research in progress. The purpose of a round-table is to have an in-depth discussion on one or two central issues of your research (i.e. research design). Each presentation and discussion lasts 30 minutes (10 minutes presentation, 20 minutes discussion).

Symposia

Symposia give the opportunity to present research on one topic, providing a coherent set of papers for discussion. A symposium consists of three conceptually linked papers which have been grouped by a symposium chair upon submission. The symposium lasts 90 minutes, to be divided into 3 paper presentations with a few minutes for questions, conclusions by the discussant and an open discussion with the audience.

4. Venue

4.1. How to reach the venue

By Plane

From Zurich Airport the main station and city centre can be reached by train (leaving at least every 15 minutes) in 10 minutes or by taxi for approximately 49 EUR / 60 CHF in 20 minutes.

Timetables: <http://www.sbb.ch>

By Tram

From the "Hauptbahnhof" Zurich the main University building can be reached on foot, by public transport or by taxi in 10-15 minutes.

→ From "Bahnhofplatz" or "Hauptbahnhof":

- Tram 10 (direction "Zürich Flughafen Fracht") to the stop "ETH/Universitätsspital"
- Tram 3 (direction "Klusplatz") to the stop "Neumarkt"

→ From "Bahnhofstrasse/Hauptbahnhof":

- Tram 6 (direction "Zoo") to the stop "ETH/Universitätsspital"

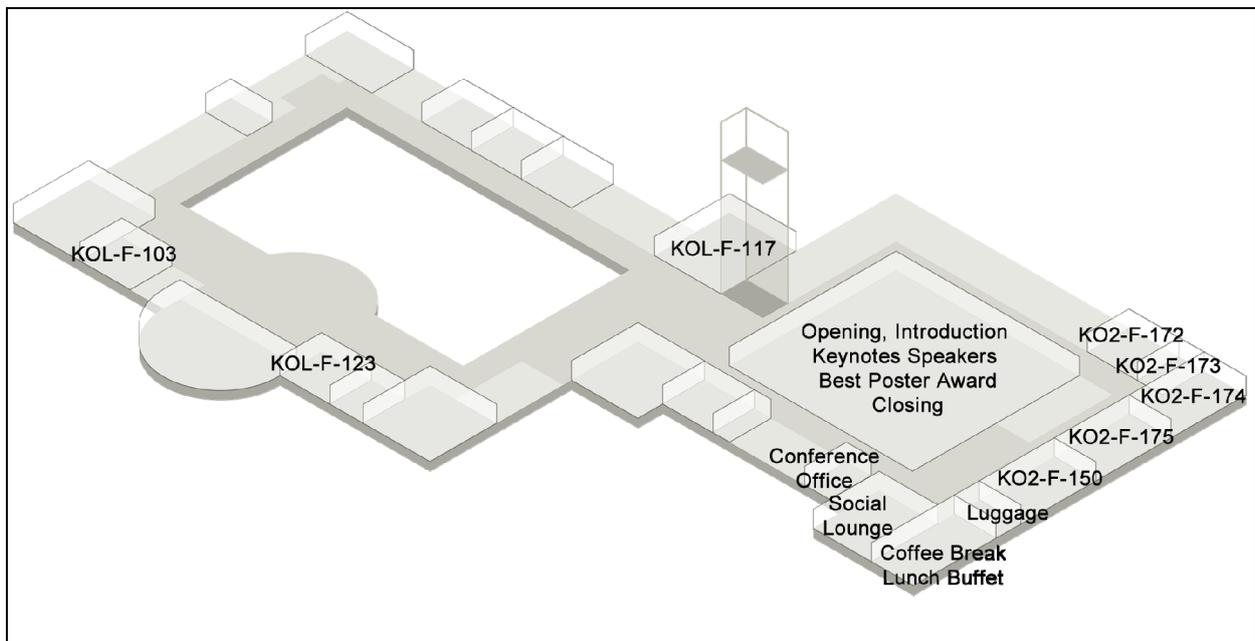
Timetable: <http://online.fahrplan.zvv.ch>

By Car

Please note that in the vicinity of the University only a few parking spaces are available. We recommend using public transport. Information about car parks in the city centre can be found here:

<http://www.parkhaeuser.ch/Parkhausliste>

4.2. Floor Plan



5. Internet Access at the University Buildings

Free internet access is offered to the participants of the EARLI SIG 18 2012 Conference at the University of Zurich.

In order to use the internet, proceed as follows:

1. Start your web browser (Internet Explorer, Netscape, Mozilla, Firefox etc.).
2. Open any remote web page, e.g. www.google.com.
3. You will be redirected to the University GATE site.
4. Log-in to the Internet using your username and password².
5. Accept the certificate permanently and ignore the following warning.
6. You now have Internet access. Repeat the above steps if you lose your connection.

Should you have any problems accessing the internet, please consult the Conference Office (Room KO2-F-155).

² The temporal account has to be activated before the conference and cannot be created at the days of the conference. The registrants had been informed about this by the committee via email on the 9th of August.

6. Social Activities

Guided Walking Tour

We would like to offer the congress members of the EARLI SIG 18 meeting a free guided walking tour of the old town of Zurich to come face to face with Zurich's past and present through a selection of buildings, stories and anecdotes. This tour will take place on Wednesday, 29th of August 2012 from 10-12am. Late registration is possible at the registration desks.

Meeting Point: Registration desk at 9:50am.

Conference Dinner

The conference dinner will take place in an old traditional building and nice garden on Thursday August 30, 2012 as from 7pm.

The Location:

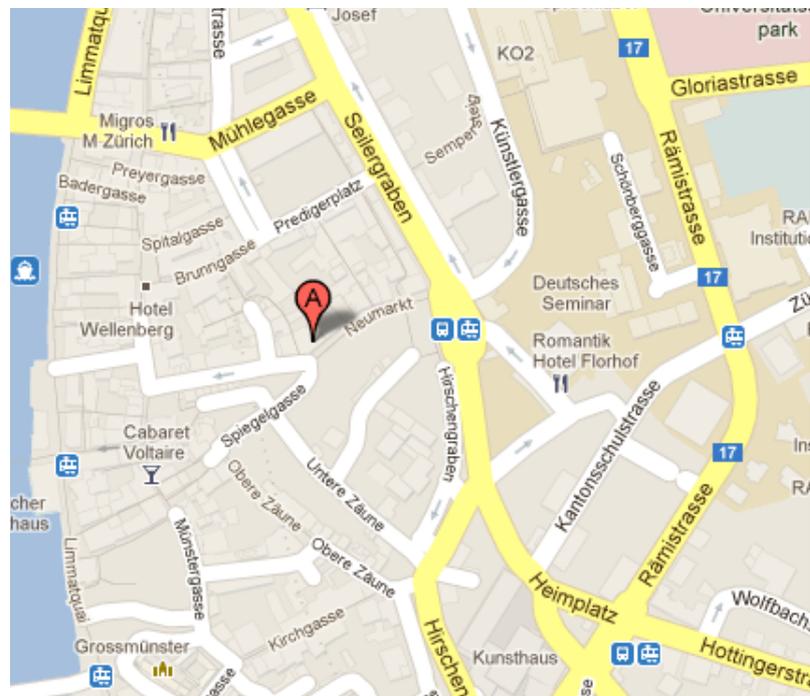
Wirtschaft Neumarkt

Neumarkt 5

8001 Zürich

+41 44 252 79 39

<http://wirtschaft-neumarkt.ch/>



Those, who subscribed for dinner at the registration, please **do not forget to bring your dinner voucher**. For those who did not subscribe for dinner but still want to join, there is a limited number of extra vouchers for 45 EUR / 55 CHF available. For more information, see the Conference Office (Room KO2-F-155).

How to get to the Dinner venue:

→ From the Main building of University:

- Walk down Kunstlergasse, at station Neumarkt, cross the road and continue straight into the pedestrian area. After approx. 30m you will find the Restaurant Neumarkt to your right.

→ From the Main Railway Station:

- Take Bus 31 (direction *Hegibachplatz*) or Tram 3 (direction *Klusplatz*) to *Neumarkt*. From there, turn left into Neumarkt.

7. Important Addresses

Conference Venue

University of Zurich
 Main Building
 Floors KOL-F and KO2-F
 Rämistrasse 71
 8006 Zurich
 Switzerland

Tourist Information Office

Zurich Tourism Tourist Service
 At the Main Railway Station
 8021 Zurich
 Tel. +41 44 215 40 00
 Fax +41 44 215 40 44
 information@zuerich.com
 Mon-Sat: 8am – 8.30pm
 Sun: 8.30am – 6.30pm

Taxis

You can find many taxis in front of the main railway station.

Taxi 444:	+41 44 444 44 44
Alpha Taxi:	+41 44 777 77 77
Züritaxi 7x2 AG:	+41 44 222 22 22

Police Station

Stadtpolizei Zürich
 Bahnhofquai 3
 8001 Zurich
 + 41 44 411 71 17

In Case of Emergency

Ambulance:	144
Police:	117
Fire station:	118

Medical Help

Permanence Main Railway Station Zurich
 Bahnhofplatz 15, 8001 Zurich / Next to the pharmacy
 +41 215 44 44

Hospital Help

Universitätsspital Zürich
 Rämistrasse 100, 8091 Zurich
 +41 44 255 11 11
 Open: 7am – 10pm

8. Restaurants

Cafeterias at the University

The cafeterias at the University offer a range of tasty, healthy and fresh menus for a small price (warm dish 12.50 CHF for visitors). In Mensa A and Mensa B at the UZH Zentrum, you are even entitled to a UZH-member-price (7 CHF) upon showing your nametag and lanyard. There are several locations near the venue where you can have warm dishes, sandwiches, snacks or coffee.

Warm dishes, sandwiches, coffee and more:

Mensa A

UZH Zentrum, Mainbuilding, Ground Floor

Warm dishes: 11am – 2pm

Pasta buffet /Salad buffet: 11am – 3pm

Open: 7.30am – 4pm

Mensa B

UZH Zentrum, Mainbuilding, 1st Floor

Warm dishes: 11am – 2pm

Open: 11am – 3pm

Cafeteria UZH Plattenstrasse

Plattenstrasse 14 / 20, 8032 Zurich

Open: 7am – 4.30pm

Cafeteria UZH Rämistrasse

Rämistrasse 74, 8001 Zurich

Monday- Thursday: 7.30am – 5pm

Friday: 7.30am – 4.30pm

Coffee and snacks in the main building:

Rondell (Kaffeebar)

Main building, Floor KO2-E, opposite to the main entrance

Open: 8am – 4pm

Cafeterias at ETH

Clausius Bar: Asian Food

Clausiusstrasse 3, Building CLA- Floor D

Open: 7.30am – 4pm

Mensa Polyterasse

ETH Zentrum MM Floor B

Open: 11.15am - 1.30pm // 5.15pm – 7.15pm

Cafeteria Tannenbar

At the corner of Universitäts-/Tannenstrasse,

Tramstation ETH/Universitätsspital

Open: 7am – 5pm

bQM: Student bar and coffee

Leonhardstrasse 34, 8092 Zurich

Open: 11.30am – 10pm

Comparatively low priced restaurants

Swiss Food

Zeughauskeller Restaurant

Bahnhofstrasse 28a, 8001 Zurich
+41 44 220 15 15

Restaurant Bauschänzli

Stadthausquai 2, 8001 Zurich
+41 44 212 49 19

Rheinfelder Bierhalle

Niederdorfstrasse 76, 8001, Zurich
+41 44 251 54 64

Organic Wholemeal Food

Schlauch

Münstergasse 20, 8001 Zurich
+41 44 251 23 04

Restaurant Hermanseck

Birmensdorferstrasse 58, 8004 Zurich
+41 44 241 28 20

Swiss & International Food

Zentrum Karl der Grosse

Kirchgasse 14, 8001 Zurich
+41 44 266 85 00

Italian Food

Restaurant Commihalle

Stampfenbachstrasse 8, 8001 Zurich
+41 44 250 59 60

Restaurant Commercio

Mühlebachstrasse 2, 8008 Zurich
+41 44 250 59 30

Santa Lucia

Luisenstrasse 31, 8005 Zurich
+41 44 272 58 93

Spaghetti Factory

Schiffände 6, 8001 Zurich
+41 44 252 26 66

Comparatively middle priced restaurants**Swiss Food**

Restaurant zum Grünen Glas

Untere Zäune 15, 8001 Zurich
+41 44 251 65 04

Restaurant und Zunftstube Weisser Wind

Oberdorfstrasse 20, 8001 Zurich
+41 44 251 18 45

Wirtschaft Neumarkt

Neumarkt 5, 8001 Zurich
+41 44 252 79 39

Swiss & International Food

Restaurant Rosengarten

Gemeindestrasse 60, 8032 Zurich,
+41 44 251 37 36

Restaurant Bahnhof Stadelhofen

Goethestrasse 24, 8001 Zurich
+41 44 250 59 20

European Cuisine

Restaurant Reithalle

Gessner-Allee 8, 8001 Zurich
+41 44 212 07 66

Italian Food

Ristorante Toscano im Niederdorf

Schmidgasse 3, 8001 Zurich
+41 44 261 54 50

Spanish Food

Restaurant Bodega Espanola

Münstergasse 15, 8001 Zurich
+41 44 251 2310

Mediterranean Food

Restaurant Mère Catherine

Nägelihof 3, 8001 Zurich
+41 44 250 59 40

Vegetarian Food

tibits Zürich

Seefeldstrasse 2, 8008 Zurich
+41 44 260 32 22

Haus Hiltl

Sihlstrasse 28, 8001 Zurich
+41 44 227 70 00

High priced restaurants

Swiss Food

Restaurant Oepfelhammer

Rindermarkt 12, 8001 Zurich

+41 44 251 23 36

Zunftthaus zur Waag

Münsterhof 8, 8001 Zurich

+41 44 216 99 66

Restaurant Kronenhalle

Rämistrasse 4, 8001 Zurich

+41 44 262 99 00

Mediterranean & Swiss Food

Restaurant tre fratelli

Nordstrasse 182, 8037 Zurich

+41 44 363 33 03

Swiss & French Food

Restaurant Bar Blaue Ente

Mühle Tiefenbrunnen

Seefeldstrasse 223, 8008 Zurich

+41 44 388 68 40

European Cuisine & Mediterranean

Restaurant Camino

Freischützgasse 4, 8004 Zurich

+41 44 240 21 21

International Food

Romantik Hotel Florhof

Florhofgasse 4, 8001 Zurich

+41 44 250 26 26

Spanish Food

Restaurant Rechberg

Chorgasse 20, 8001 Zurich

+41 44 251 17 60

10. Local Public Transport

Tickets have to be **purchased before getting on** the tram, bus or urban railway. There is no possibility to buy tickets once on the public transport.

Tickets can be purchased at the ticket machines found at every stop, at the VBZ-Ticket corners or at various kiosks. Tickets are valid for tram, bus and urban railway (if in the respectable zone).

Single ticket	<i>Valid hrs.</i>	<i>Adults</i>
Local network*	1/2	CHF 2.60
1-2 zones	1	CHF 4.10

Day pass	<i>Valid hrs</i>	<i>Adults</i>
Local network*	24	CHF 5.20
1-2 zones	24	CHF 8.20

If you travel more frequently in the same zones, you can save up to 10% with a multiple-journey ticket or a multiple day pass:

Multiple Single Pass (6 single journeys on one ticket)

	<i>Valid hrs</i>	<i>Adults</i>
Local network*	1/2	CHF 12.80
1-2 zones	1	CHF 22.20

Multiple Day Pass (6 freely selectable days of travel on one ticket)

	<i>Valid hrs</i>	<i>Adults</i>
Local network*	24	CHF 25.60
1-2 zones	24	CHF 44.40

* Journeys that count as within local network (Kurzstrecke) are indicated at every ticket machine.



For your stay in Zurich, there is the possibility to buy the Zürich card at a price of 20 CHF (24 hours) or 40 CHF (72 hours). This price includes travelling by tram, bus, train, boat and funicular railways, as well as numerous benefits, such as free entry to all museums, discount in certain shops, on movie theaters, opera house, zoo, spa as well as tours of Zürich Tourism.

B. Conference Programme – Overview

Wednesday, 29th August

Time	Description
10:00 - 14:00	Registration
13:30 - 13:45	Opening, Introduction
13:45 - 14:45	Keynote Speaker I - Prof. Dr. Jaap Scheerens
14:45 - 15:00	Transfer
15:00 - 16:30	Session I
16:30 - 17:00	Coffee break
17:00 - 18:30	Session II
As from 18:30	Aperitif

Thursday, 30th August

Time	Description
09:00 - 10:00	Keynote Speaker II - Prof. Dr. Eckhard Klieme
10:00 - 10:30	Coffee break
10:30 - 12:00	Session III
12:00 - 13:30	Lunch
12:45 - 13:30	SIG-Meeting
13:30 - 15:00	Session IV
15:00 - 15:30	Coffee break
15:30 - 17:00	Session V
17:00 - 17:15	Transfer
17:15 - 18:15	Keynote Speaker III - Prof. Dr. Bieke De Fraine
As from 19:00	Banquet

Friday, 31st August

Time	Description
08:30 - 09:30	Keynote Speaker IV - Prof. Dr. Sean Reardon
09:30 - 10:00	Coffee break
10:00 - 11:30	Session VI
11:30 - 11:45	Transfer
11:45 - 12:45	Keynote Speaker V - Prof. Dr. Bert Creemers
12:45 - 13:00	Awarding of the Best Poster & Closing

C. Wednesday, 29th August 2012

Time	Description
10:00 - 14:00	Registration
13:30 - 13:45	Opening, Introduction (Room: KO2-F-180)
13:45 - 14:45	Keynote Speaker I - Prof. Dr. Jaap Scheerens (Room: KO2-F-180)
14:45 - 15:00	Transfer
15:00 - 16:30	Session I <ul style="list-style-type: none"> • Round Table & Papers: Teacher and Effectiveness (Room: KO2-F-174) • Paper Session: Methods I (Room: KOL-F-117) • Paper Session: Social Disadvantages (Room: KO2-F-175) • Paper Session: Reading and Literacy (Room: KO2-F-172)
16:30 - 17:00	Coffee break (Room: KO2-F-152)
17:00 - 18:30	Session II <ul style="list-style-type: none"> • Symposium: How institutional arrangements affect academic achievement: Evidence from Germany (Room: KOL-F-117) • Paper Session: Secondary School (Room: KO2-F-175) • Paper Session: Teacher Effectiveness and Quality (Room: KO2-F-172) • Paper Session: Student Achievement I (Room: KO2-F-174)
As from 18:30	Aperitif (Zoological Museum)

1. Opening, Introduction: 13:30 - 13:45 (Room: KO2-F-180)

Conference Opening:

Prof. Dr. Katharina Maag Merki

Welcoming Words:

Prof. Dr. Otfried Jarren, Prorector of Humanities & Social Sciences, University of Zurich

Prof. Dr. Lucien Criblez, Director of the Institute of Education, University of Zurich

2. Keynote Speaker I – Prof. Dr. Jaap Scheerens: 13:45 – 14:45 (Room: KO2-F-180)**Theory development on educational effectiveness and ineffectiveness.**

Prof. Dr. Jaap Scheerens, University of Twente, The Netherlands

Abstract:

School effectiveness research developed as a practice oriented empirical research approach.

Following Snow's description of an "inductive" process of theory formation, the major next step was conceptual mapping of the field. A multi level presentation stimulated the conceptualization of educational effectiveness as an integration of system level, school level and classroom level factors. In this article next steps in theory formation, based on the formation of broader constructs and eclectic use of available theories are considered in a confrontation with different appreciations of the strength of the current knowledge base. Cognitive dissonance about the knowledge base inspires to not just look for explanations of "positive" factors, associated with effectiveness, but also for those that say something about ineffectiveness. It is concluded that a family of different interpretations of the rationality paradigm (synoptic planning, contingency theory, creating market mechanisms and cybernetics) does rather well in explaining both positive and negative factors. Alternative theories like loose coupling and self-organizing enlarge the scope of potentially effectiveness enhancing factors as well as variables and mechanisms associated with ineffectiveness. This in turn could lead to a broadened research agenda, with heightened attention for informal processes in schools as organizations, composition effects, recruitment, training and professional development policies as well as implementation and enactment of rational strategies.

3. Session I: 15:00 – 16:30

Round Table & Papers: Teacher and Effectiveness (Room: KO2-F-174)

- *Brigitte Schreier*: Evaluating the effects of classroom interventions targeting 9th grade students? (Round Table)
 - *Sarah Gielen*: Teachers' cultural fit in schools: The tale of 'the ugly duckling'?
 - *Courtney A. Bell*: Normative and criterion-referenced approaches to understanding teaching quality.
-

Paper Session: Methods I (Room: KOL-F-117)

- *Joseph J. Stevens*: Using Hybrid Regression Discontinuity Designs to Evaluate Educational Effectiveness.
 - *Ioulia Televantou*: Integrating Multilevel Structural Equation Models with Regression Discontinuity Designs: An application to TIMSS-95.
 - *Linda Gräfe*: How to deal with missing responses in competency tests?
-

Paper Session: Social Disadvantages (Room: KO2-F-175)

- *Pam Sammons*: Protecting the development of 5-11 year olds from the impacts of early disadvantage: The Role of Primary School Academic Effectiveness.
 - *Hartmut Ditton*: Heterogeneity and development of achievement in elementary schools.
 - *Sarah Miller*: Home-based child development interventions for preschool children from socially disadvantaged families.
-

Paper Session: Reading and Literacy (Room: KO2-F-172)

- *Gudrun Vanlaar*: The Effectiveness of Class Practices in Improving Reading Comprehension in High-Risk Students
 - *Paul Connolly*: The effects of Booktime on the reading attitudes and behaviours of children aged 4-5 years old and their parents in Northern Ireland: A Cluster randomized controlled trial
 - *Michael Leucht*: When less is more: Educational Effectiveness of English as a Foreign Language Instruction in Germany
-

Round Table & Papers: Teacher and Effectiveness (Room: KO2-F-174)**ROUND TABLE: Evaluating the effects of classroom interventions targeting 9th grade students?**

- *Brigitte Schreier, Ulrich Trautwein, Benjamin Nagengast & Anna-Lena Dicke, Center for Educational Science and Psychology, University of Tübingen, Germany; brigitte.schreier@uni-tuebingen.de; ulrich.trautwein@uni-tuebingen.de; benjamin.nagengast@uni-tuebingen.de; anna-lena.dicke@uni-tuebingen.de*

Abstract:

Students' achievement motivation and homework compliance has been found to decrease continuously throughout lower secondary school, especially in mathematics. However, studies investigating ways to improve students' achievement motivation and homework compliance with classroom interventions are rare (e.g., Hulleman & Harackiewicz, 2009), and have not yet targeted the subject of mathematics.

In this roundtable session, we would like to discuss the design of a project aiming to enhance students' achievement motivation and homework compliance in mathematics by conducting two separate experimental studies in 9th grade mathematics classrooms. In the first study, the effects of three different task conditions concerning the utility perception of mathematics on students' self-reported homework behavior and perceptions in mathematics will be explored. In the second study, the effects of three different task conditions concerning students' utility perception, students' goal commitment, or a combination of the two conditions will be investigated.

Intervention material for the first study was developed based on the expectancy-value model of achievement behavior (Eccles & Wigfield, 2002) and on the homework behavior model (Trautwein, Lüdtke, Schnyder, & Niggli, 2006). The study will be conducted during mathematics lessons in 9th grade classrooms in German high track secondary schools in the spring of 2012. Within every participating class, students will be randomly assigned either to one of three intervention conditions (reflections on students' utility perceptions in mathematics) or to a control condition. Questionnaire data will be collected before the intervention, 6 and 12 weeks after the intervention. As homework diaries are considered suitable for measuring students' motivational and self-regulated behavior on a daily basis (Zimmerman, 2008), all students will be asked to keep a diary assessing their daily homework behavior in mathematics. In particular, students' homework compliance, utility perception, effort, and interest will be measured for 6 weeks after the intervention. For students in the relevance conditions, homework diaries will contain refreshments of the utility-value-intervention once a fortnight.

In the second study, intervention strategies used in the first study will be combined with an intervention aimed at increasing students' implementation intentions (cp., Gollwitzer & Sheeran, 2006). The second study will be conducted in 9th grade classrooms in the winter of 2012. Concerning the design of the second study, we are facing two problems. First, we would like to evaluate students' homework motivation and compliance as thoroughly as possible. Assessing students' homework behavior and perceptions with homework diaries, however, in itself already constitutes an intervention. Second, a one-lesson intervention might not suffice to trigger a change in students' achievement motivation and homework behavior. Repeated classroom interventions, on the one hand, are time-costly and difficult to implement. Using homework diaries to reinforce the intervention, on the other hand, bears the risk that unmotivated or students low in conscientiousness will not expose themselves to this refreshment of the intervention.

Questions: 1) How can the homework behavior and motivation of both the students in the relevance conditions and the students in the control group be assessed thoroughly without producing a treatment effect for the control group? 2) How can the effects of the intervention be maintained without implementing multiple repeated interventions in the classroom?

PAPER 1: Teachers' cultural fit in schools: The tale of 'the ugly duckling'?

- Sarah Gielen, KU Leuven, Belgium; Sarah.gielen@ped.kuleuven.be

Abstract:

The current study looks for determinants at the school level that keep teachers satisfied in their profession and provides them a feeling of self-efficacy. It explores the role of cultural fit, as an interaction between a group level characteristic (shared beliefs as an aspect of the school culture) and an individual characteristic (teachers' personal beliefs on learning and instruction).

This study uses the Flemish data from the TALIS 2008 dataset that is collected by the OECD. Approximately 3500 teachers, of 197 schools, at ISCED 2 level of secondary education in Flanders (Belgium) have been surveyed.

Results show, contrary to what was expected, that the larger the cultural misfit of a teacher is, the higher his self-efficacy and his job satisfaction. The direct effect between cultural misfit and job satisfaction disappears when the well-documented positive effect of self-efficacy on job satisfaction is added to the model. Self-efficacy appears to be a mediator in the effect of cultural (mis)fit on job satisfaction. The estimate of the indirect effect is significant.

Keywords: *teachers, school culture, job satisfaction*

PAPER 2: Normative and criterion-referenced approaches to understanding teaching quality.

- Courtney A. Bell, *Educational Testing Service, United State; cbell@ets.org*
- Drew H. Gitomer, *Rutgers, The State University of New Jersey, United States; drew.gitomer@gse.rutgers.edu*

Abstract:

The purpose of this study is to investigate the status and character of instructional quality in a large sample of U.S. middle school English/language arts and mathematics classrooms. In order to do this, data was collected from 458 ELA and math middle school classrooms. Each participating teacher was observed four times; each lesson was scored on two general and one subject specific observational protocol. Six assignments and the associated student work for two of those assignments was also collected and scored using a subject specific artifact protocol. Finally, VAM estimates were calculated from the state's student achievement data. Using descriptive statistics, correlational analyses and VAM, we investigated the degree to which scores on protocols with different theoretical perspectives and subject specificity suggest similar conclusions about the strengths and weakness of the observed teaching. We find that depending on what aspects of teaching we focus on, we would make different inferences about teaching quality. Specifically, we see that across three observation protocols, traditional classroom management measures are generally good. Conversely, the cognitive dimensions of instruction are weak. We find these patterns to be consistent across instruments, across ELA and mathematics, and across classrooms with different demographic patterns. We suggest that systems of teaching evaluation should take account of both normative and criterion-referenced tools so as to improve the likelihood that teaching evaluation will lead to improved student learning.

Keywords: *Teacher quality, Measurement, Observation*

Paper Session: Methods I (Room: KOL-F-117)**PAPER 1: Using Hybrid Regression Discontinuity Designs to Evaluate Educational Effectiveness.**

- *Joseph J. Stevens & Keith Zvoch, Department of Educational Methodology, Policy and Leadership, University of Oregon, United States; stevensj@uoregon.edu; kzvoch@uoregon.edu*

Abstract:

The purpose of this paper is to demonstrate the application, analysis, and interpretation of Hybrid Regression Discontinuity Designs (HRD); designs that combine Random Control Trial (RCT) and Regression Discontinuity (RD) designs to randomize or isolate the effects of confounding variables and increase validity. Hybrid designs have high internal validity and fit well in settings where intervention is needs-based and flexibility in assignment to intervention is required. Data analyzed in the study were provided by a school district in the U.S. Pacific Northwest and were comprised of students with spring first grade and fall second grade assessment scores from 2010 and 2011. The school district offers a 5-week intensive literacy program to early elementary students during summer vacation designed to close the performance gap between strong and struggling readers. Spring and fall administrations of the Test of Oral Reading Fluency were the pre- and post-test measures. Students below a spring low benchmark score were invited to summer school. Students above the low benchmark and below a high benchmark score were randomly assigned to summer school or a control group. These procedures defined both an RD design (below the low benchmark) and an RCT design (between the benchmarks). Intent to Treat (ITT), Treatment-on-Treated (TOT), instrumental variable, and Complier Average Causal Effect (CACE) latent mixture model analyses were used to evaluate the impact of summer school. We also scrutinized functional form of the pre-post relationship using graphical methods, local regression analysis (LOESS), and nonparametric kernel regression methods. Across multiple models and analyses, there was consistent evidence for a significant effect of intervention on literacy growth from about 4 to over 10 words per minute (WPM) with corresponding effect sizes reaching as high as 1.0 standard deviation.

Keywords: *regression discontinuity designs, research design, statistical analysis of program effectiveness*

**PAPER 2: Integrating Multilevel Structural Equation Models
with Regression Discontinuity Designs: An application to TIMSS 95.**

- *Ioulia Televantou, Department of Education, University of Oxford, United Kingdom;
ioulia.televantou@education.ox.ac.uk*

Abstract:

The majority of school effectiveness studies focus on the relative differences between schools in their contribution to the student's knowledge. It is nevertheless just as important to assess the absolute effect of schooling (schooling versus no schooling) on students' development. One way in which this can be achieved by applying the Regression Discontinuity (RD) approach to educational data that meet the assumptions underpinning the approach.

The data used come from the Third International Mathematics and Science Study (TIMSS 95) and refer to students from two adjacent grades both in primary (grades 4 and 5) and secondary school (grades 8 and 9). This is – to my knowledge – the first study to use the new achievement data released in April 1999 that contain scaled scores not only for the overall mathematics attainment of the students but also for their achievement in the different content areas. The latter are used as multiple indicators to control for unreliability in the measured achievement of the students: The latent variable models recently developed by quantitative researchers (e.g. Marsh, Lüdtke, Robitzsch, Trautwein, Asparouhov, Muthén and Nagengast, 2009) are demonstrated. Multilevel models are used throughout the analysis that make adjustments for the effect of age and grade level on students' achievement as well as for a variety of different student and school level variables.

The absolute effect of schooling was found positive both for primary and secondary school. The effect of age was found much smaller in the higher grades than in the lower ones. Primary schools appeared to differ significantly in their estimated absolute effects –this was not the case for secondary schools. Controlling for background variables did not substantially alter the estimates while measurement error adjustments led to larger grade to age effect ratio.

Clearly schooling significantly affects development – policy makers should invest highly in education.

Keywords: *Regression Discontinuity, TIMSS – 95, measurement error*

PAPER 3: How to deal with missing responses in competency tests?

- *Linda Gräfe, University of Jena, Germany; linda.graefe@uni-jena.de*
- *Steffi Pohl, University of Bamberg, Germany; steffi.pohl@uni-bamberg.de*

Abstract:

Missing responses in competency tests is a very frequent and problematic issue. Two prominent types of missings are: omitted and not reached items. For estimation of item and person parameters missing responses are often nonignorable and may generate biased estimates. In this work we compared three data-based and two model-based approaches for dealing with missing responses in competence data of the National Educational Panel Study, a longitudinal large scale study on competence development in Germany. In the first data-based approach the missing responses will be ignored, in the second the missing responses are treated as wrong, and in the third, missing responses are ignored for the estimations of the item parameters and treated as incorrect for the estimation of the person parameters. In the model-based approaches the missing responses are modeled either via a manifest variable in a latent regression or via a latent variable in a two-dimensional Rasch model. All approaches are tested for a) omitted responses, b) not reached items, and c) both kinds of missing responses together. The different approaches are evaluated based on item and person parameter estimates and are compared to results from simulation studies found in the literature. The results will be used to give guidelines on how to deal with missing responses in competency tests.

Keywords: *Missing Data, Items Response Theory, Competency Tests*

Paper Session: Social Disadvantages (Room: KO2-F-175)**PAPER 1: Protecting the development of 5-11 year olds from the impacts of early disadvantage:
The Role of Primary School Academic Effectiveness.**

- Pam Sammons*, James Hall, Kathy Sylva, Edward Melhuish, Iram Siraj-Blatchford & Brenda Taggart,
*Department of Education, University of Oxford, United Kingdom;
Pamela.Sammons@Education.ox.ac.uk

Abstract:

Whether or not more academically effective schools can successfully mitigate the impacts of early disadvantage upon latter educational attainment remains uncertain in both the Educational Effectiveness and Risk and Resilience research traditions. Here, we draw upon both fields to frame a prospective longitudinal investigation of 2,664 children between the ages of 6-11 years who attended 767 UK primary schools. Measures of attainment and development were taken at child ages 6, 7, and 11 years and included assessments of children's academic skills in English (reading, writing) and maths together with self regulation. Experiencing multiple early (< 5 years) disadvantages was summarised through a cumulative index.

Structural Equation Models indicated that, experiencing multiple disadvantages before age 5 years had a strong negative effect on attainment and self regulation throughout primary school to age 11. However, attending a more academically effective primary school for just a single year partially protected reading, maths, and self regulation at age 6. More academically effective primary schools also significantly lessened the extent to which abilities at ages 6 and 7 predicted these same abilities at age 11. Taking these two findings together, we have evidence of a secondary and longer-term protective effect: that attending a more academically effective primary school may lessen the "internalisation of early disadvantage". Although multiple early disadvantages strongly hinder early cognitive and social abilities, attending a more academically effective primary school reduces these negative effects when estimating later educational outcomes at age 11.

Thus although more academically effective primary schools do not eradicate the impacts of disadvantage, they can make a significant positive contribution to the longer term educational outcomes of children who experienced more disadvantages before the start of school by partially mitigating the associated negative consequences.

Keywords: *Multiple Disadvantage, Protection, Primary School*

PAPER 2: Heterogeneity and development of achievement in elementary schools.

- *Hartmut Ditton, Institut für Pädagogik, Bildungs- und Sozialisationsforschung, Ludwig-Maximilians-Universität München, Germany; ditton@lmu.de*

Abstract:

In this paper the development of pupils academic performance in reading and mathematics from second to fourth grade in elementary schools in Germany is examined. In addition the stability resp. change of social disparities over time is tested. Data from a longitudinal study with N=1.400 pupils from N=71 classrooms were used, including Rasch scaled test scores from the end of 2nd, 3rd and 4th grade and measures of social background. Two complementary methods for analyzing the data were used: growth curve and quasi-simplex modeling. The analyses were conducted using MPlus to reflect the hierarchical structure of the data. The results show an impressing (non-linear) growth in academic performance and a substantial decrease in heterogeneity over time. Nevertheless there is also evidence for a slight increase in social disparities over time. This effect only comes up if path dependent processes are taken into account, as is the case in the quasi-simplex models in contrast to the growth curve models. Besides substantial questions on development of academic performance and heterogeneity of performance, the two different methods to analyze longitudinal data are reflected.

Keywords: *Academic Performance, social disparities, longitudinal study*

**PAPER 3: Home-based child development interventions for preschool children
from socially disadvantaged families.**

- Sarah Miller & Lisa K. Maguire, Centre for Effective Education, Queen's University Belfast, United Kingdom; s.j.miller@qub.ac.uk; lisa.maguire@qub.ac.uk.
- Geraldine Macdonald, Institute of Child Care Research, School of Sociology, Social Policy and Social Work, Queen's University Belfast, United Kingdom; geraldine.macdonald@qub.ac.uk.

Abstract:

The early years of a child's life are extremely important in terms of development and growth. Children from a deprived family background are at greater risk of developmental problems and poor health. Parenting and the quality of the home environment can help boost young children's development and reduce the negative consequences of deprivation. The purpose of this Cochrane systematic review was to examine whether home-based parenting programmes, which aim to improve child development by showing parents how to provide a better quality home environment for their child, are effective in doing so. Seven randomised controlled trials (RCTs) met the inclusion criteria for this review. It was possible to combine the results from four of the seven studies, which showed that children who received the programme did not have better cognitive development than a control group (standardised mean difference (SMD) 0.30; 95% confidence interval -0.18 to 0.78). Socioemotional development was measured in three studies but the data could not be synthesised in a meta-analysis to help reach a conclusion about effectiveness. None of the studies measured adverse effects. The quality of the evidence in the studies was difficult to assess due to poor reporting and more high quality research is needed. The shift in the last 20 years from improving cognitive outcomes to behavioural and social emotional outcomes is discussed, as well as the utility of various theories of development in explaining the effectiveness of such programmes, as included in this review, in particular drawing upon Vygotsky's theory of development. The paper concludes by emphasising the importance of intervention programmes being theory based and evidence informed.

Keywords: *Child development, parenting, systematic review*

Paper Session: Reading and Literacy (Room: KO2-F-172)**PAPER 1: The Effectiveness of Class Practices in Improving Reading Comprehension in High-Risk Students.**

- *Gudrun Vanlaar, Machteld Vandecandelaere, Katrijn Denies, Maarten Pinxten, Jan Van Damme & Bieke De Fraine, Centre for Educational Effectiveness and Evaluation, Faculty of Psychology and Educational Sciences, University of Leuven, Belgium; gudrun.vanlaar@ppw.kuleuven.be, machteld.vandecandelaere@ppw.kuleuven.be, katrijn.denies@ppw.kuleuven.be, maarten.pinxten@ppw.kuleuven.be, jan.vandamme@ppw.kuleuven.be, bieke.defraine@ppw.kuleuven.be*

Abstract:

This study investigated the effect of class practices on students' learning gains in reading-comprehension in the fifth grade. A sample of 4,344 students in 283 classes in 176 schools was studied. Several class practices that have previously been demonstrated to be effective were tested while controlling for student characteristics and socio-economic and ethnic class composition. Differential effects were tested to identify class practices that can contribute to narrowing the achievement gap between high-risk and low-risk students. Most class practices turned out to have a similar effect for both low- and high-risk students. However, discovery learning and well-organised and attractive instruction appeared to be more beneficial for low-risk than for high-risk students.

This study revealed that a high-risk school population does not have a significant impact on learning gains. The high-risk students' performance at the end of the fifth grade was significantly lower than that of low-risk students. But the gap between high- and low-risk students did not resize during the fifth grade; the cause of the high-risk students' lower performance seems to lie at an earlier stage in their lives.

Keywords: *Reading comprehension, high-risk students, class practices*

PAPER 2: The effects of Booktime on the reading attitudes and behaviours of children aged 4-5 years old and their parents in Northern Ireland: A Cluster randomized controlled trial.

- *Paul Connolly & Liam O'Hare, Centre for Effective Education, Queen's University, Northern Ireland, United Kingdom; paul.connolly@qub.ac.uk, l.ohare@qub.ac.uk*
- *Denise Mitchell, Department of Teacher Education, Stranmillis University College, Northern Ireland; d.mitchell@stran.ac.uk*

Abstract:

This paper presents the findings of an evaluation of Booktime, a national free books programme for reception-aged children (aged 4-5). Through gifting a free book pack to all reception-aged children, the programme seeks to promote the pleasure of books by encouraging families to have fun reading together. The paper reports the findings of a cluster-randomised controlled trial involving reception classes in 30 primary schools that sought to test whether Booktime was having a measurable effect in relation to five key outcomes: parents' attitudes to reading; the frequency of shared reading between parents and children; parents' and children's use of their local libraries; and relationships between parents and their children's schools. The schools were randomly assigned either to deliver the Booktime packs to children or to continue as normal and to delay the delivery of the packs until after the trial was completed. Data were collected via a self-complete questionnaire sent to parents at pre-test and post-test (10 weeks later). Data from the trial were analysed using multilevel modeling to account for the clustering of pupils within schools. Overall, while the Booktime programme was found to be extremely well received by parents, teachers and children, the trial found no evidence that it was having any measurable effect on the parents or children in relation to the five outcomes identified. Additional post-test data gathered from the parents in the intervention group indicated that very few schools followed-up the distribution of the Booktime packs to children through organizing additional activities and events for parents. It was this lack of follow-up that also emerged through the qualitative interviews as one of the main likely reasons for the programme not having an effect. The paper concludes by considering the implications of these findings for the future development of book-gifting programmes.

Keywords: *Book-gifting programmes, effectiveness, cluster randomized control trial*

**PAPER 3: When less is more:
Educational Effectiveness of English as a Foreign Language Instruction in Germany.**

- *Michael Leucht, Leibniz Institute for Science and Mathematics Education (IPN), Kiel, Germany; leucht@ipn.uni-kiel.de*
- *Julia Buchheit, Department of Education, Christian-Albrechts-University, Kiel, Germany; buchheit@paedagogik.uni-kiel.de*
- *Hans Anand Pant, Humboldt University, Berlin, Germany; IQBoffice@IQB.hu-berlin.de*
- *Olaf Köller, Leibniz Institute for Science and Mathematics Education (IPN), Kiel, Germany; koeller@ipn.uni-kiel.de*

Abstract:

This paper evaluates the effect of amount of schooling differences on outcomes of lower secondary education. Two groups of German students are compared starting with English as either their first (EFFL; n = 2,771) or second (ESFL; n = 345) foreign language learned throughout secondary school. While EFFL students receive one school year more of EFL instruction, ESFL students are known to be positively selected in terms of cognitive aptitudes and socio-economic background. The paper evaluates the impact of amount of schooling differences on EFL achievement accounting for student selectivity within a potential outcomes framework. Corresponding results illustrate no such impact. Competing explanation factors are discussed and implications regarding the field of educational effectiveness research (EER) are highlighted.

Keywords: *EFL instruction, amount of schooling differences, selection of foreign language choice*

4. Session II: 17:00 – 18:30

Symposium: How institutional arrangements affect academic achievement: Evidence from Germany (Chair: Hanna Dumont, Kathrin Jonkmann; Discussant: Sean Reardon) (Room: KOL-F-117)

- *Gabriel Nagy*: Achievement Growth in Different School Tracks in Germany: Results for Mathematics, Reading Comprehension, and Reading Speed
 - *Hanna Dumont*: Taking a closer look at the effects of tracking: Differential effects, individual and compositional determinants
 - *Kathrin Jonkmann*: English Achievement in Lower Secondary Tracks: A Quasi-Experimental Study of the Long-Term Effects of Foreign Language Instruction in Elementary School
-

Paper Session: Secondary School (Room: KO2-F-175)

- *Katalin Toth*: Homework and academic attainment and progress in secondary school.
 - *Sirkku Kupiainen*: Finnish students' choice of academic vs. professional track at age 16. A look behind the small Finnish between-school differences in PISA.
 - *Maximilian Pfost*: Reading literacy development in secondary school and the effect of differential institutional learning environments
-

Paper Session: Teacher Effectiveness and Quality (Room: KO2-F-172)

- *Benjamin Caspar Fauth*: Reliability and validity of student rating of instructional quality in primary school.
 - *Leonidas Kyriakides*: Using student ratings to measure quality of teaching in six European countries.
 - *James Ko*: Examining the Formal Principles and Cross-level effectiveness in a school: A revisit of Cremer's (1994) Comprehensive Model.
-

Paper Session: Student Achievement I (Room: KO2-F-174)

- *Yu-Jing Ni*: To Feel It in Order to Learn It: Effect of Instructional Tasks on Mathematics Learning Outcomes in Primary Students
 - *Katrijn Denies*: School differences in French reading achievement at the end of Grade 8
 - *Machteld Vandecandelaere*: Ready or not? Evaluation of a Kindergarten Retention Policy. Effects on Growth in Mathematics.
-

Symposium: How institutional arrangements affect academic achievement: Evidence from Germany. (Room: KOL-F-117)

Chair: *Hanna Dumont & Kathrin Jonkmann, Center for Educational Science and Psychology, University of Tübingen, Germany; hanna.dumont@uni-tuebingen.de, kathrin.jonkmann@uni-tuebingen.de*

Discussant: *Sean Reardon, School of Education, Center for Education Policy Analysis, Stanford University, United States; sean.reardon@stanford.edu*

Abstract:

The symposium examines how two specific institutional arrangements that have recently been targeted by educational policy – tracking and English as a foreign language instruction in elementary school – affect students' academic achievement over time. All three papers are based on the on-going longitudinal study TRAIN that aims at investigating achievement and psychosocial development in non-academic secondary school tracks in Germany. In the first paper, Nagy et al. analyze achievement growth in mathematics and reading from grades 5 to 7. Their main objective is to compare the development of achievement means and dispersion across school systems and school tracks. In the second paper, Dumont et al. further substantiate these findings by investigating if tracking has differential effects for low- and high-achieving students and by analyzing whether characteristics of the students attending different tracks and the composition of the different student populations can account for tracking effects on achievement. In the third paper, Jonkmann et al. investigate the long-term effects of learning English as a foreign language in elementary school on English achievement development in secondary school, drawing on a quasi-experimental design.

Keywords: *academic achievement, tracking, educational policy*

**PAPER 1: Achievement Growth in Different School Tracks in Germany:
Results for Mathematics, Reading Comprehension, and Reading Speed.**

- *Gabriel Nagy, Leibniz Institute for Science and Mathematics Education, Germany; nagy@ipn.uni-kiel.de*
- *Michael Becker & Marko Neumann, University of Potsdam, Germany; michael.becker.v@uni-potsdam.de, marko.neumann@uni-potsdam.de*
- *Hanna Dumont, Kathrin Jonkmann & Ulrich Trautwein, Center for Educational Science and Psychology, University of Tübingen, Germany; hanna.dumont@uni-tuebingen.de, kathrin.jonkmann@uni-tuebingen.de, ulrich.trautwein@uni-tuebingen.de*

**PAPER 2: Taking a closer look at the effects of tracking:
Differential effects, individual and compositional determinants.**

- *Hanna Dumont, Center for Educational Science and Psychology, University of Tübingen; Germany; hanna.dumont@uni-tuebingen.de*
- *Gabriel Nagy, Leibniz Institute for Science and Mathematics Education, Germany; nagy@ipn.uni-kiel.de*
- *Marko Neumann & Michael Becker, University of Potsdam, Germany; marko.neumann@uni-potsdam.de, michael.becker.v@uni-potsdam.de*
- *Norman Rose & Ulrich Trautwein, Center for Educational Science and Psychology, University of Tübingen, Germany; norman.rose@uni-tuebingen.de, ulrich.trautwein@uni-tuebingen.de*

**PAPER 3: English Achievement in Lower Secondary Tracks:
A Quasi-Experimental Study of the Long-Term Effects of Foreign Language Instruction
in Elementary School.**

- *Kathrin Jonkmann & Ulrich Trautwein, Center for Educational Science and Psychology, University of Tübingen, Germany; kathrin.jonkmann@uni-tuebingen.de, ulrich.trautwein@uni-tuebingen.de*

Paper Session: Secondary School (Room: KO2-F-175)**PAPER 1: Homework and academic attainment and progress in secondary school.**

- *Katalin Toth, Institute of Education, University of London, United Kingdom; k.toth@ioe.ac.uk*
- *Pam Sammons & Kathy Sylva, Department of Educational Studies, University of Oxford, United Kingdom; pamela.sammons@education.ox.ac.uk, kathy.sylva@edstud.ox.ac.uk*
- *Edward Melhuish, Institute for the Study of Students, Families and Social Issues, University of London, United Kingdom; e.melhuish@bbk.ac.uk*
- *Iram Siraj-Blatchford & Brenda Taggart, Institute of Education, University of London, United Kingdom; i.siraj-blatchford@ioe.ac.uk, b.taggart@ioe.ac.uk*

Abstract

The relationships between the time students spend on homework, their self-regulation and academic attainment and progress in Key Stage 3 (age 14) of English secondary education are explored. Although the links between homework and academic outcomes have been the subject of research in many countries and different phases of education, the conclusions are not always convergent. A meta-analysis of the U.S. research showed a modest positive effect of homework on academic outcomes, stronger in the middle and high school (Cooper, Robinson, & Patall, 2006). Recently, more complex statistical models have explored the relationship between homework and academic progress in maths (Trautwein, Koller, Schmitz, & Baumert, 2002; Trautwein, 2007). These studies found that at school level there was a positive relationship between homework and progress in mathematics, but at student level this relationship was negative. The present paper used MLM and SEM to investigate the relationships between homework and academic achievement and progress in English, mathematics and science during secondary school using data from the longitudinal educational effectiveness study (EPPSE) conducted in England. Multi-level analyses showed that time spent on homework was a statistically significant, positive and moderately strong predictor of attainment and progress in all core subjects in KS3 even when students' individual (age, gender, birth weight etc.), family (SES, FSM, salary) and home learning characteristics were controlled. Additionally, strong effects for time spent on homework were obtained even when the students' perceptions of the attended school's emphasis on learning and behavioural climate were also controlled. SEM modeling explored possible causal relationships between time spent on homework and academic outcomes in year 9 and the role of prior self-regulation (year 6). The models identify important direct and indirect relationships between gender, mother's qualification level, self-regulation, time spent on homework and academic outcomes.

Keywords: *homework, self-regulation, academic attainment*

**PAPER 2: Finnish students' choice of academic vs. professional track at age 16.
A look behind the small Finnish between-school differences in PISA.**

- *Sirkku Kupiainen, Jukka Marjanen, Mari-Paoliina Vainikainen & Jarkko Hautamäki,
Centre for Educational Assessment, University of Helsinki, Finland; sirkku.kupiainen@helsinki.fi,
jukka.marjanen@helsinki.fi, mari-paoliina.vainikainen@helsinki.fi, jarkko.hautamaki@helsinki.fi*

Abstract:

The study looks at differences between Finnish students opting for the different upper secondary tracks after the nine year compulsory education, common to all. The interest in the question is due to the apparent contradiction between the findings of a recent large scale assessment of students' learning to learn competence (Kupiainen et al, 2011a) and the fame the Finnish education system has gained due to the small between-school differences in the OECD PISA studies.

The results of the present assessment of 1800 students, representing the full ninth grade cohort of an urban municipality in the Helsinki metropolitan region, indicate that differences between the groups of students aiming at different educational tracks after the nine year common education are quite comparable to those found in countries with a system where students' allocation to academically divergent tracks takes place earlier. The findings seem to counter the policy conclusion commonly drawn from PISA that the higher between-school differences in student attainment in countries with earlier tracking are due to this earlier tracking. However, if the differences between students choosing different tracks three or more years later can be shown to be of the same magnitude and kind as they are between students allocated to comparable tracks earlier, the policy questions have to be formulated (and found answers to) quite differently.

The focus of the presentation will be on the found differences in cognitive competence, learning-related attitudes, gender, school achievement and social background of the groups of students choosing the academic or the professional upper secondary track. Attention will also be given to between-school and between-class differences in students' choices, with the discussion extended to the educational implications of the findings.

Keywords: *upper secondary schools, tracking, student attainment*

**PAPER 3: Reading literacy development in secondary school and the effect
of differential institutional learning environments.**

- *Maximilian Pfof, Department of Educational Research, University of Bamberg, Germany;
maximilian.pfof@uni-bamberg.de*

Abstract

The German secondary school system is characterized by a relatively early separation of the students into different types of schools providing different types of curricula in accordance with the demands of the learners. The stratification of the students into these school types is mainly based on student's achievement in elementary school but takes also further factors, e.g. the socio-economic status of the family, into account. As upper academic track schools should provide more favorable developmental conditions with regard to the students' cognitive competencies due to institutional characteristics and student's composition, pre-existing differences in reading literacy between students of the different school tracks should further increase in the course of secondary school. Results tracing the development of reading literacy between Grade 5 and Grade 7 indicate a widening gap between students attending upper, middle and lower academic track schools. In a second analysis, the effect of attaining different school tracks controlling for the selectivity into the different secondary schools is investigated. Results indicate substantial positive effects of attaining upper academic track school in comparison to lower and middle academic track school in terms of effect sizes. Inference based on testing statistical significance however showed mixed results. Taken together, favorable learning environments seem to support reading literacy development, but results should be generalized with caution.

Keywords: *Reading literacy, secondary school, tracking*

Paper Session: Teacher Effectiveness and Quality (Room: KO2-F-172)**PAPER 1: Reliability and validity of student rating of instructional quality in primary school.**

- Benjamin Caspar Fauth* (fauth@dipf.de), Jasmin Warwas**, Svenja Rieser*, Gerhard Büttner* & Eckhard Klieme**

*IDeA Research Center; Goethe-University Frankfurt, Germany; **IDeA Research Center; German Institute for International Educational Research, Germany

Abstract

Student ratings are an important source for assessing learning environments and are frequently used in educational research. Nevertheless, they have often been criticised for lacking reliability and validity especially if questionnaires are applied to primary school students.

In video-observation studies, Klieme, Pauli, and Reusser (2009) identified three basic dimensions of instructional quality: cognitive activation, supportive climate, and classroom management. As of today, instructional quality according to the three basic dimensions has not been measured from the perspective of primary school students.

With regard to instructional features, previous studies in secondary school found relatively low correlations between the perspectives of students, teachers, and external observers even when comparable measures were used. Again there is a lack of research when considering the agreement between perspectives in primary schools.

Research questions:

1. Are the subscales of our questionnaire reliable measures of instructional quality in primary school? (Reliability)
2. Is it possible to assess perceived instructional quality according to the three-dimensional structure conceptualised by Klieme et al.? (Factorial validity)
3. How is the student perspective related to ratings from teachers and external observers? (Convergent validity)

Results of multilevel confirmatory factor analyses (N=1576 students; 89 classes) showed the best fit for a three-dimensional model indicating that even third grade students distinguish between different aspects of instructional quality. The subscales obtained were reliable measures. Analyses using aggregated student ratings (N=53 classes) showed substantial correlations with the perspective of teachers and external observers in the domain of classroom management. Regarding cognitive activation and supportive climate, we found correlations with the teachers' perspective.

These results suggest that student ratings can be a reliable and valid measure of instructional quality. Taking the perspective of theoretical development into account, the three dimensional framework of instructional quality was successfully applied to student ratings – even in primary school.

Keywords: *Instructional quality, student ratings, primary school*

PAPER 2: Using student ratings to measure quality of teaching in six European countries.

- *Leonidas Kyriakides, University of Cyprus, Cyprus; kyriakid@ucy.ac.cy*
- *Bert Creemers, University of Groningen, The Netherlands; b.p.m.creemers@rug.nl*
- *Anastasia Panayiotou, University of Cyprus, Cyprus; panayiotou.anastasia@ucy.ac.cy*
- *Jan Van Damme, KU Leuven, Belgium; Jan.VanDamme@ppw.kuleuven.be*
- *Michael Pfeifer, TU Dortmund, Germany; Pfeifer@ifs.tu-dortmund.de*
- *Gašper Cankar, National Examinations Centre, Slovenia; gasper.cankar@ric.si*
- *Lean McMahon, Economic and Social Research Institute (ESRI), Ireland; Lean.McMahon@esri.ie*

Abstract:

This paper argues for the importance of using student ratings of teacher behaviour to measure quality of teaching in international studies on educational effectiveness. In this respect, we present results of an international study testing the validity of the dynamic model of educational effectiveness. In each participating country (i.e., Belgium/Flanders, Cyprus, Germany, Greece, Ireland, and Slovenia) a sample of at least 50 primary schools was drawn. Written tests in mathematics and science to all grade 4 students of the school sample (n=9967) were administered at the beginning and at the end of school year 2010-2011. Regarding, the student level factors, data on prior-knowledge, SES, ethnicity and gender were collected. Moreover, all classroom and school level factors of the model were measured. In this paper, we present results concerned with the functioning of classroom factors in the six European countries. Classroom factors refer to teachers' instructional role and were measured by asking students to complete a questionnaire concerned with the behavior of their teacher in the classroom in regard to the eight factors of the dynamic model (i.e., orientation, structuring, questioning, teaching-modelling, applications, management of time, teacher role in making classroom a learning environment, and classroom assessment). A Generalisability study on the use of students' ratings was conducted. It was found that the data which emerged from all the questionnaire items could be used for measuring the quality of teaching of each teacher. Structural equation modeling techniques were used to test the construct validity of the student questionnaire. Both across and within country analyses reveal that student ratings can be used to measure the functioning of the teacher factors included in the dynamic model. The paper also refers to country-differences in the functioning of teacher factors. Finally, implications of findings for teacher professional development programs in each country are drawn.

Keywords: *Teacher Effectiveness; International Studies on Educational Effectiveness; Testing Educational Theories*

**PAPER 3: Examining the Formal Principles and Cross-level effectiveness in a school:
A revisit of Creemer's (1994) Comprehensive Model.**

- *James Ko, Department of Education Policy and Leadership & Asia Pacific Centre for Leadership and Change, The Hong Kong Institute of Education, China; Jamesko@ied.edu.hk*

Abstract:

Creemers (1994) has proposed four formal principles to explain the significance of maintaining educational effectiveness through interacting cross level factors. Harris (2001) also suggested that department improvement may be a missing link between effective teaching and school improvement. The present study has attempted to show how differential teacher effectiveness may contribute to or undermine department effectiveness. Using two classroom observation instruments developed by international researchers, differential teacher effectiveness of four ESL teachers of the same department in a secondary school was established. Findings indicated teacher effectiveness varied across different school years and year groups in the same teachers. Thus, it is argued that school improvement has to be achieved through maintaining high levels of consistency in delivering quality teaching in individual teachers and across different school years.

Keywords: *teacher effectiveness, school improvement, consistency*

Paper Session: Student Achievement I (Room: KO2-F-174)**PAPER 1: To Feel It in Order to Learn It:
Effect of Instructional Tasks on Mathematics Learning Outcomes in Primary Students.**

- Yu-Jing Ni, *The Chinese University of Hong Kong, Faculty of Education, Hong Kong HKSAR, China; yujing@cuhk.edu.hk*
- De-Hui Zhou, *The Baptist University of Hong Kong, HKSAR, China; dh_zhou@hkbu.edu.hk*
- Xiaoqing Li, *The Chinese University of Hong Kong, HKSAR, China; xiaoqingligd@hotmail.com*
- Qiong Li, *Beijing Normal University, Beijing, China; qiongli@bnu.edu.cn*

Abstract:

One of the goals for the new millennium mathematical curriculum reform in Mainland China is to develop in students the competence to solve mathematics problems and the positive attitude towards learning mathematics by using instructional tasks that set high cognitive demands, use multiple representations, and require multiple solution strategies. Our recent study showed that teachers in reformed mathematical classes turned to employ more high-level cognitive demand tasks, use more multiple representational means to present tasks, and utilize more multi-solution strategies than in non-reformed mathematical classes. However, the empirical question remains of how these cognitive features of learning tasks promoted by the reform relate to students' mathematics learning outcomes. The present study investigated this question involving 1,902 Chinese students of six-grade from 32 reformed mathematical classrooms. The results showed that, with the variable of student family SES and of students' prior achievement controlled, the high-level cognitive demand tasks did not show a direct positive influence on students' cognitive domain of learning outcome. Instead, the high-level cognitive demand tasks exerted positive effect on students' affective learning outcome including their expressed interests in learning mathematics, classroom participation, view of mathematics, and view of learning mathematics. In addition, tasks of multiple representations showed positive influence on improving students' performance on solving open-ended mathematics problems.

Keywords: *Mathematics instructional tasks, Cognitive learning outcome, Affective learning outcome, Primary mathematics*

PAPER 2: School differences in French reading achievement at the end of Grade 8.

- *Katrijn Denies, Rianne Janssen & Lien Willem, Centre for Educational Effectiveness and Evaluation, University of Leuven, Belgium; katrijn.denies@ped.kuleuven.be, lien.willem@ped.kuleuven.be, rianne.janssen@ped.kuleuven.be*

Abstract:

The present paper will explore the dataset from the Flemish national assessment of the attainment targets for French reading in Grade 8. Its aim is to identify and explain possible between-school differences. The assessment involved a representative sample of 9357 students in 585 classes in 103 schools. Background questionnaires were administered to students, parents and teachers. The students' French reading ability was estimated using models from Item Response Theory, following which multilevel analyses were conducted within the framework of the CIPO-model. The null model revealed that 23% of the variance in the students' achievement was situated at the school level. Input and context variables that were added to the net model explained about 90% of these differences. Among them were the students' gender, SES, learning difficulties, family reading habits and home language; the class' field of study; and the schools' type, educational authority and location. Next, other student-level variables were added to the net model, of which the strongest predictor of student achievement was the students' own evaluation of their French skills, followed by the time needed for homework and the degree to which students described learning French as 'fun'. The students' extracurricular contact with the French language, the degree to which they found French important, the grade in which students had started learning French, their preferred class activity, and the time they reportedly spent on their homework also correlated significantly with their achievement. Only few school- and class-level process factors turned out to be significant when added to the net model. The study's main strength is the fact that it presents EER research on a rather atypical outcome. Second language education has indeed only rarely been the subject of EER studies, while studies on mathematics and the mother tongue seem to have been dominating the field.

Keywords: *Reading, second language, Grade 8.*

**PAPER 3: Ready or not? Evaluation of a Kindergarten Retention Policy.
Effects on Growth in Mathematics.**

- *Machteld Vandecandelaere, Gudrun Vanlaar, Mieke Goos, Bieke De Fraine & Jan Van Damme, Centre for Educational Effectiveness and Evaluation, University of Leuven, Belgium; Machteld.Vandecandelaere@ppw.kuleuven.be, Gudrun.Vanlaar@ppw.kuleuven.be, Mieke.Goos@ppw.kuleuven.be, Bieke.DeFraine@ppw.kuleuven.be, Jan.VanDamme@ppw.kuleuven.be*

Abstract:

Every year, many children make the transition from kindergarten to first grade, a period in which children develop rapidly. Children of this age differ tremendously in their readiness to learn, saddling parents and educators with the question of 'what to do when a child seems barely ready to meet the expectations of primary education'. One option is to adopt a practice of retaining struggling children in kindergarten rather than promoting them to first grade. This policy is based on the belief that granting a child more time to mature will prevent failure and frustration in later academic life. However, opponents argue that kindergarten retention deprives children of access to meaningful intellectual challenges and disrupts children's academic growth. This controversy is reinforced by previous research, yielding inconsistent research findings and often facing methodological shortcomings. Using multilevel propensity score stratification, we attempt to face these shortcomings and to answer the question of 'how kindergarten repeaters develop throughout primary education with regard to mathematics achievement in comparison to equally at-risk but promoted (1) younger grade-mates and (2) age-mates who are in a higher grade'. We control for several covariates by utilizing three-level estimated propensity scores. Preliminary results suggest that in the repeated year, repeaters perform better compared to equally at-risk younger grade-mates who will promote to first grade. However, this academic advantage already disappears by the end of first grade, where kindergarten repeaters do not perform better in mathematics achievement compared to equally at-risk, but promoted, grade-mates.

Keywords: *Kindergarten retention, Propensity score matching, Mathematic achievement*

5. *Aperitif: As from 18:30 (Room: Zoological Museum)*

The aperitif takes place at the Zoological Museum next to the ground sloth:



The Zoological Museum is placed on floor KO2-E right under the conference venue. You will find the entrance by going downstairs in front of the luggage storage.

D. Thursday, 30th August 2012

Time	Description
9:00 - 10:00	Keynote Speaker II - Prof. Dr. Eckhard Klieme (Room: KO2-F-180)
10:00 - 10:30	Coffee break (Room: KO2-F-152)
10:30 - 12:00	Session III <ul style="list-style-type: none"> • Symposium: Making Upper Secondary Education More Effective?! Evidence from reform efforts in Germany and Switzerland (Room: KOL-F-117) • Papers: Inclusion and After-School-Programmes (Room: KO2-F-172) • Papers: (School) Effectiveness (Room: KOL-F-123) • Papers: Web-Based Learning and Effective Technology (Room: KOL-F-103) • Papers: Teaching Quality (Room: KO2-F-174) • Papers: Achievement Gaps (Room: KO2-F-175)
12:00 - 12:45	Lunch (Room: KO2-F-152)
12:45 - 13:30	SIG-Meeting (Room: KOL-F-117)
13:30 - 15:00	Session IV <ul style="list-style-type: none"> • Papers: Use and Value of Educational Effectiveness Research (Room: KO2-F-175) • Papers: Student Achievement II (Room: KO2-F-174) • Papers: Teacher Education and Development (Room: KO2-F-172) • Papers: Methods II (Room: KOL-F-117) • Posters: Effectiveness I (KO2 Floor F, in front of Room KO2-F-155) • Posters: Effectiveness II (KO2 Floor F, in front of Room KO2-F-159)
15:00 - 15:30	Coffee break (Room: KO2-F-152)
15:30 - 17:00	Session V <ul style="list-style-type: none"> • Symposium: New Impulses for Linking School Effectiveness and School Improvement (Room: KOL-F-117) • Papers: Class Size and Class Composition (Room: KO2-F-174) • Papers: Student Achievement III (Room: KO2-F-175) • Posters: Context and School Factors (KO2 Floor F, in front of KO2-F-180) • Posters: School Inspections and Management (KO2 Floor F, in front of KO2-F-180)
17:00 - 17:15	Transfer
17:15 - 18:15	Keynote Speaker III - Prof. Dr. Bieke De Fraine (Room: KO2-F-180)
As from 19:00	Banquet

1. Keynote Speaker II – Prof. Dr. Eckhard Klieme: 09:00 – 10:00 (Room: KO2-F-180)**Qualities and Effects of Teaching: Integrating findings across subjects and cultures.**

Prof. Dr. Eckhard Klieme, German Institute for International Educational Research, Germany

Abstract:

Educational Science knows three different approaches to the study of teaching quality: (1) Traditional didactical and pedagogical principles that convey professional wisdom on the art of teaching. (2) Empirical research, mostly based in the process-(mediator)-product-paradigm of effectiveness studies, and (c) psychological theories such as self determination theory and constructivist theories that explain the effects of teaching and learning activities on both cognitive and affective student outcomes.

The presentation will start by elaborating an integrative theoretical framework that discriminates three basic dimensions of teaching quality: (1) Structure and efficient classroom management, (2) supportive climate and socio-emotional environment, (3) cognitive activation by deep content and challenging tasks. The framework has been developed from video-based research in the context of the TIMSS Video study, and since then has been shown to be replicable in various studies, addressing primary and secondary education in various subjects, applying different methods such as video-based observation, teacher and student ratings. The three-dimensional structure is in line with international research on classroom environments. Longitudinal studies have proven the dimensions of teaching quality to have specific predictive validity for cognitive and motivational student outcomes.

Finally, based on results from international studies such as TALIS and PISA, the cross-cultural validity of the framework will be discussed.

2. Session III: 10:30 – 12:00

Symposium: Making Upper Secondary Education More Effective?! Evidence from reform efforts in Germany and Switzerland (Chair: Svenja Mareike Kühn; Discussant: Esther Dominique Klein) (Room: KOL-F-117)

- *Maren Oepke*: Evaluation of the upper secondary school reforms in Switzerland: Is the educational goal of general study ability reached?
- *Norman Rose*: A comparison of students' proficiency levels before and after the upper secondary school reform in the German state of Saxony.
- *Britta Oerke*: Long-time changes in students' performance, attitudes and motivation in Bremen math courses after implementing central exit exams.

Paper Session: Inclusion and After-School-Programmes (Room: KO2-F-172)

- *Andy Biggart*: The Effectiveness of the 'Doodle Den' After School Literacy Programme for Beginning Readers: A Randomised Controlled Trial.
- *Sarah Wieckert*: Inclusive education and visual impairment.
- *Gudrun Vanlaar*: Math Learning in the First Years of Special and Mainstream Primary Education: A Propensity Score Matching Application.

Paper Session: (School) Effectiveness (Room: KOL-F-123)

- *Daniel Muijs*: Towards Franchising in Education? An Empirical Investigation Of Chains of Academies in England.
- *Sally Thomas*: Range and Extent of School Effects in China: examining two student cohorts and three regions.
- *Christine Saelzer*: Can school effectiveness be measured by student attendance rates?

Paper Session: Web-Based Learning and Effective Technology (Room: KOL-F-103)

- *Egon Werlen*: E-learning environments and self-regulation influence the effectiveness of e-learning online activity.
- *Eleanor C. Sayre*: A Web-Based System for Between-Student Testing in University Physics.
- *Bette Chambers*: Effective Technology-Supported Formative Assessment: Linking empirical analyses to an extended model of educational effectiveness in a small-scale randomised control.

Paper Session: Teaching Quality (Room: KO2-F-174)

- *Charalambos Y. Charalambous*: Reflections on Educational Effectiveness Research and an Innovative Approach for Exploring Teaching Quality.
- *Mechteld F. Van Kuijk*: Teacher's achievement goals for pupil performance: the importance of high goals.
- *Drew H. Gitomer*: Challenges in Perceiving and Providing Good Instruction in Algebra Classrooms: Lessons from a Classroom Observation Protocol.

Paper Session: Achievement Gaps (Room: KO2-F-175)

- *Steve Strand*: School effects on ethnic, gender and socio-economic achievement gaps.
 - *Jan Van Damme*: A Cross-country Comparison of Social Capital Effects Based on PISA 2009.
 - *Hans Luyten*: Systematic underestimation of achievement gaps in grade-based surveys?
-

Symposium: Making Upper Secondary Education More Effective?! Evidence from reform efforts in Germany and Switzerland. (Room: KOL-F-117)

Chair: *Svenja Mareike Kühn, Faculty of Educational Sciences Educational System & School Development Research, University of Duisburg-Essen, Germany; svenja.kuehn@uni-due.de*

Discussant: *Esther Dominique Klein, Research Group & Graduate School 'Teaching and Learning of Science', University of Duisburg-Essen, Germany; dominique.klein@uni-due.de*

Abstract:

The tension between flexibility on one hand and more standardization on the other hand has recently been subject to negotiations in scientific as well as political discourses on school effectiveness. In this context, recent models of school effectiveness postulate an interaction between contextual factors of schooling and student achievement. In this respect, upper secondary education has experienced increasing attention, especially because of its mission to prepare students for tertiary education. During the past decades, several measures have been taken in order to assure school quality in upper secondary schools, for instance the development of common standards and changes in the organization of exit exams. Using a variety of methods, and taking an international perspective, this symposium examines whether and to what extent curricular and structural changes of the school systems in Germany and Switzerland can affect student learning. The results of the presented papers are not only relevant for education research, but can also inform and support future education policy decisions.

Keywords: *Educational Reform, Quality Assurance, Upper Secondary Education*

**PAPER 1: Evaluation of the upper secondary school reforms in Switzerland:
Is the educational goal of general study ability reached?**

- *Maren Oepke & Franz Eberle, Department for Teacher Education, Institute of Education, University of Zurich, Switzerland; maren.oepke@igb.uzh.ch*

PAPER 2: A comparison of students' proficiency levels before and after the upper secondary school reform in the German state of Saxony.

- *Norman Rose, Wolfgang Wagner, Anna-Lena Dicke & Ulrich Trautwein, Center for Educational Science and Psychology, University of Tübingen, Germany; norman.rose@uni-tuebingen.de, Wolfgang.Wagner@ife.uni-tuebingen.de, anna-lena.dicke@uni-tuebingen.de, ulrich.trautwein@uni-tuebingen.de*

PAPER 3: Long-time changes in students' performance, attitudes and motivation in Bremen math courses after implementing central exit exams.

- *Britta Oerke, Elisabeth Maué, Katharina Maag Merki & Monika Holmeier, Department of Education, University of Zurich, Switzerland; b.oerke@ife.uzh.ch*

Paper Session: Inclusion and After-School-Programmes (Room: KO2-F-172)**PAPER 1: The Effectiveness of the 'Doodle Den' After School Literacy Programme for Beginning Readers: A Randomised Controlled Trial.**

- *Andy Biggart, Liam O'Hare, Karen Kerr & Paul Connolly, Centre for Effective Education, School of Education, University Belfast, United Kingdom; a.biggart@qub.ac.uk*

Abstract:

The paper presents the methodological approach and the findings of a randomised control trial pilot evaluation of the Doodle Den literacy after-school programme for children aged 5-6 years. Doodle Den was delivered by service providers in an area of significant socio-economic disadvantage in Dublin, Ireland. The Doodle Den programme sought to make moderate improvements in children's literacy utilising a manualised curriculum in after school settings, drawing on a newly developed balanced literacy framework.

The results of the three year evaluation of children in the study (N=464) provided strong evidence that the programme successfully improved children's literacy outcomes. The children who attended Doodle Den showed significant improvements in their overall literacy, particularly in relation to the reading comprehension items. There was also evidence to suggest that it also had a positive impact on improving children's concentration and behaviour in school (particularly among the boys), family library activity and the child's reading at home. The importance of the development of children's early literacy skills has been widely recognised internationally and is very much related to its role as a gateway subject. Literacy skills are recognised as an important precursor to general academic achievement as well as in relation to broader participation in society. There is good quality evidence that shows literacy interventions can have a positive impact on beginning readers; in particular, one-to-one tutoring programmes show most promise. However, the body of evidence in relation to RCT evaluations shows limited evidence of after school programmes in general impacting on academic outcomes such as reading. The current evaluation therefore makes an important contribution to this limited body of evidence of the effects of well designed structured after school programmes focusing on literacy outcomes through a balanced literacy framework for beginning readers in an area of socio-economic disadvantage.

Keywords: *Literacy, After-School Programme, Randomised Control Trial*

PAPER 2: Inclusive education and visual impairment.

- *Sarah Wieckert, Institute for General Didactics and School Pedagogy (IADS), TU Dortmund, Germany; sarah.wieckert@tu-dortmund.de*

Abstract:

The encouragement of the development of a realistic self-concept of the children in their classes is an important challenge for school teachers (Beutel & Hinz, 2008; Kammermeyer & Martschinke, 2003; Krause, Wiesmann & Hannich, 2004; Prücher, 2002). Children who know about their strengths and weaknesses can work on the competences, which need to be improved, more effectively.

The study accompanied first-grade students and their teachers looking at the development of the children's self-concepts concerning their mathematical competences. Looking at inclusive classes with children who have visual impairments, the aim has been to find out whether there are differences in the self-concept development of the children with and without visual impairment and how teachers cope with the special needs of their students.

Keywords: *Inclusion, Visual Impairment, Self-concept*

**PAPER 3: Math Learning in the First Years of Special and Mainstream Primary Education:
A Propensity Score Matching Application.**

- *Gudrun Vanlaar, Machteld Vandecandelaere, Mieke Goos, Jan Van Damme & Bieke De Fraine, Centre for Educational Effectiveness and Evaluation, Faculty of Psychology and Educational Sciences, University of Leuven, Belgium; gudrun.vanlaar@ppw.kuleuven.be, machteld.vandecandelaere@ppw.kuleuven.be, mieke.goos@ppw.kuleuven.be, jan.vandamme@ppw.kuleuven.be, bieke.defraigne@ppw.kuleuven.be*
- *Katja Petry, Centre for Parenting, Child Welfare, and Disabilities, Faculty of Psychology and Educational Sciences, University of Leuven, Belgium; katja.petry@ppw.kuleuven.be*

Abstract:

Special education is controversial due to its high costs and due to a lack of evidence that supports its effectiveness. This study aims at filling the existing gap in methodologically sound research on the effectiveness of special education by creating a quasi-experimental design. Using a propensity score matching approach, we compared the mathematics outcomes of pupils who were referred to special education after kindergarten (age 5-6) to the math outcomes of equally at-risk peers who were promoted to the first grade in mainstream education. Our results indicate that pupils who were referred to special education in general achieved less in mathematics in the following two years than pupils equally at-risk of being referred to special education but following mainstream education.

Keywords: *Special education, Propensity score matching, Mathematics*

Paper Session: (School) Effectiveness (Room: KOL-F-123)**PAPER 1: Towards Franchising in Education?
An Empirical Investigation Of Chains of Academies in England.**

- *Daniel Muijs & David Reynolds Southampton Education School, University of Southampton, United Kingdom; d.muijs@soton.ac.uk, d.reynolds@soton.ac.uk*
- *Chris Chapman, University of Manchester, School of Education, United Kingdom; chris.chapman@manchester.ac.uk*

Abstract:

Education reforms in England since 2000 have created Academies, schools that are independent of local authority control. Many academies are run by a single sponsor, thus creating chains of schools. This paper will report on a study of the functioning and effectiveness of these chains, with a focus on the extent of central control and autonomy in these chains.

A mixed methods approach is used, with three main elements:

- Analysis of existing national quantitative datasets
- Analysis of documentary evidence
- Telephone interviews with central chain staff

Initial analyses suggest that over 50% of academies are part of 21 different chains, which differ in educational and management philosophies and practices, not least in terms of degrees of centralisation. A positive relationship was found between degree of centralisation and pupil achievement, and between degree of centralisation and value added achievement.

Keywords: *Collaboration, franchising, effectiveness*

**PAPER 2: Range and Extent of School Effects in China:
examining two student cohorts and three regions.**

- *Sally Thomas & Wen-Jung Peng, Graduate School of Education University of Bristol, United Kingdom; s.thomas@bristol.ac.uk, Wj.peng@bristol.ac.uk*
- *J. Li, H. Tian, J. Feng, X. Ma & C. Ren, National Institute for Educational Sciences, Beijing, China*

Abstract:

This paper presents selected findings from two UK DFID/ESRC funded studies: Improving Educational Evaluation and Quality in China (IEEQC) and Improving Teacher Development and Educational Quality in China (ITDEQC). The paper seeks to provide new insights about (i) the impact of student and school characteristics and other factors on students attainment and progress at senior secondary school, (ii) the relevance of these factors in the evaluation of school effectiveness in China and (iii) patterns in school effects across 2 student cohorts (2009-2010) and 3 regions (east and west). The methodology involves exploring the nature and extent of school effectiveness in three separate Chinese regions. Innovative quantitative methodology (multilevel modelling) is used to analyse longitudinal datasets comprising students' examination, prior attainment and background information as well as school process and context data from 120+ schools and 180,000+ students.

The findings replicate, validate and extend previous similar research (using data from only one student cohort) that indicated significant differences in value added measures of school effectiveness between schools and regions in China. Key findings presented include differences in results observed across two consecutive student cohorts in each of the three regions investigated - in order to estimate the extent to which school effects may vary over time. The implications of the findings are discussed in terms of educational policy and practice in mainland China and internationally. Drawing on additional evidence from key stakeholders (national and local policy makers, teachers, students) the paper also outlines different approaches to develop innovation in school evaluation and guidelines for implementation to enhance school improvement efforts in mainland China.

Keywords: *School Effectiveness, China, Educational Quality*

PAPER 3: Can school effectiveness be measured by student attendance rates?

- *Christine Saelzer, TUM School of Education (ZIB), Germany; christine.saelzer@tum.de*

Abstract:

This paper examines if and how a school's way of handling student absences is related to truancy. The main question is whether educational research could and should use truancy rates as a measure for school effectiveness. This question is relevant because lessons do not 'just happen', they only take place for those who attend them. I hypothesize that a school's plan of action with regard to truancy substantially contributes to explaining truancy. If this holds true, absence rates may be a useful element of school effectiveness. The data used here are self-reports from 7th to 9th grade students in Switzerland (N=3491) in 202 classes as well as the principals of their schools (N=28). A three-step hierarchical linear model is specified, where in a first step, individual student characteristics are inserted, then class-level aggregations and finally school-level self-reports from the principals. This theory-driven model controls for the students' background factors and analyzes the schools' role in the students' decision whether to play truant or not. The most striking finding is that a school's intervention in cases of truancy both at the classroom and the school level plays a significant role for the students' decision whether to truant or not. First, if a teacher delegates cases of truancy to professionals outside the classroom (such as school psychologists), students in this class tend to truant less than in classes where the teacher deals with truancy cases inside the classroom. At the school level, active prevention strategies in schools are negatively correlated with truancy. Hence, schools do play a role which is important for explaining student truancy. The conclusion drawn in this study is therefore that truancy (or attendance) rates should be considered a relevant aspect of school effectiveness.

Keywords: *Truancy, Schools, Sanctions*

Paper Session: Web-Based Learning and Effective Technology (Room: KOL-F-103)**PAPER 1: E-learning environments and self-regulation influence the effectiveness of e-learning online activity.**

- *Egon Werlen & Per Bergamin, Institute for Distance Studies and eLearning (IFeL) of the Swiss Distance University of Applied Sciences (FFHS), Switzerland; egon.werlen@ffhs.ch, per.bergamin@ffhs.ch;*

Abstract:

Based on Reinmann-Rothmeier's (2003) classification of e-learning environments (distribution, interaction, collaboration) and the conclusion of Bernacki et al. (2010) that increased e-learning online activity needs opportunity and propensity, we hypothesised that e-learning instruction approaches and self-regulated learning predict the online learning activity measured with log-files. Ninety-nine students of a distance learning university filled in Barnard's Online Self-regulated Learning Questionnaire (OSLQ). The courses visited by these students were analysed following the Reinmann-Rothmeier classification, resulting in three types: distribution (of information), indirect interaction (exercises to resolve offline), and direct interaction (online interaction with teacher and other students). The log-files of the student's online learning activity were measured following Hamuy & Galaz (2010) classification in information and communication levels. The results confirm our hypotheses: E-learning environment and self-regulated learning predict the online activity on the communication level. On the information level only e-learning environment predicts online activity. This confirms the conclusion of Bernacki et al. (2010): increased e-learning online activity needs opportunity (interactive e-learning environment) and propensity (self-regulation).

Keywords: *self-regulation, e-learning, online learning activity*

PAPER 2: A Web-Based System for Between-Student Testing in University Physics.

- *Eleanor C. Sayre, Department of Physics, Kansas State University, United States; esayre@ksu.edu*
- *Stephanie Dymek & Nathan A. Popham, Department of Physics, Rochester Institute of Technology, United States*
- *Conor Frame, Department of Physics, Wabash College, Crawfordsville, United States*
- *Scott V. Franklin, Department of Physics, Rochester Institute of Technology, United States*

Abstract:

We report on an online implementation of a between-student study on student response to instruction in introductory physics at the university level. The study tracks student understanding of conceptual and procedural physics problems by sampling different groups of students each week, within the constraints that each student is tested on each topic only once and each topic is tested (with a different group of students) each week. The study involved approximately 2500 university students enrolled in a year-long physics sequence. Demographic analysis justifies our claim that participation is section and instructor independent, and note a small gender bias towards women. There is a strong correlation between participation and course grade and GPA. Our first research result is a divergence in student response to two questions on vector products. Vector products are integral to understanding university physics and follow-on courses. While understanding of the difference between dot and cross products increases steadily throughout the year, the ability to determine the sign of a dot product shows no improvement, despite an increasing emphasis from one quarter to the next.

Keywords: *vectors, learning and forgetting, introductory physics*

PAPER 3: Effective Technology-Supported Formative Assessment: Linking empirical analyses to an extended model of educational effectiveness in a small-scale randomised control.

- *Bette Chambers & Mary Sheard, Institute for Effective Education, University of York, United Kingdom; bette.chambers@york.ac.uk, mary.sheard@york.ac.uk*

Abstract:

A development in the use of learner response devices allows pupils to answer questions at their own pace, providing instantaneous feedback to the pupils and their teachers about the pupils' understanding of the concepts just taught. Teachers should then be able to provide differentiated support to pupils, improving their learning. A small-scale randomised evaluation of the self-paced learning strategy (SPL) was conducted to determine if this form of technology-supported formative feedback increases pupil learning. Seven primary schools in the North of England were randomly assigned to experimental (4 schools) or control (3 schools) conditions for a 12-week trial period during the Spring and Summer terms, 2011. Each of the schools had one Year 5 class, except one control school, which had 2, making 4 classes for each condition. There were 221 pupils in total, 109 in the experimental condition and 112 the control condition. Learning Clip, a mathematics programme delivered on the interactive whiteboard, provided the mathematical content for the lessons for participating classes in both the experimental and control groups.

Equivalent pre- and post-tests reflecting the Year 5 lesson content were the measures used. Training and support in Learning Clip and SPL using ActiveExpression learner response devices was delivered by Learning Clip personnel to groups of teachers in their locality and reinforced by ongoing support.

Results of the analyses showed no statistically significant difference between pupils' scores at pre-test and a statistically significant difference in their post-test scores, favouring the experimental group. The paper concludes that this relatively small evaluation indicates a great potential for technology-supported self-paced learning in increasing primary children's mathematics achievement. In addition, the paper suggests how the empirical analyses relate to an extended theoretical model of educational effectiveness.

Keywords: *Self-paced learning feedback*

Paper Session: Teaching Quality (Room: KO2-F-174)**PAPER 1: Reflections on Educational Effectiveness Research and an Innovative Approach for Exploring Teaching Quality.**

- *Charalambos Y. Charalambous, Department of Education, University of Cyprus, Cyprus; cycharal@ucy.ac.cy*

Abstract:

Research during the last two decades has consistently documented teachers' role in explaining student learning. However, most of the work in this area seems to have focused on generic teaching practices, with little attention paid to domain-specific teaching practices. There also seems to be a need for closer attention to situation characteristics that can impact the quality of teaching and consequently student learning. This methodological paper proposes a novel approach that can help address both issues—at least to some extent—and most critically, do so at scale. Although the proposed approach—a teaching simulation—is still in its nascent form, a preliminary exploratory study in which the simulation has been put in practice has yielded moderate correlations with teachers' knowledge for teaching, thus providing some evidence about its concurrent validity. The paper points to the strengths and limitations of the proposed approach and discusses how it can be used in educational effectiveness studies.

Keywords: *domain-specific teaching practices, teaching quality, teaching simulation*

**PAPER 2: Teacher's achievement goals for pupil performance:
the importance of high goals.**

- *Mechteld F. Van Kuijk, Marjolein I. Deunk & Roel J. Bosker, Groningen Institute for Educational Research (GION), University of Groningen, The Netherlands; m.f.van.kuijk@rug.nl*

Abstract:

A teacher Professional Development (PD) intervention study was conducted in the Netherlands to help teachers implement goal setting in their teaching. Eight second- and third-grade teachers set achievement goals for their 139 pupils. These achievement goals were found to be higher for some pupils than for others. The current paper investigates the consequences of these differences in ambition. The research question is as follows: to what degree can achievement goals predict academic performance, and do higher goals correspond to higher performance? Pupils were allocated to five performance categories according to the achievement goal their teacher had set (being below minimum, minimum, basic, proficient or advanced). The average performance demonstrated per category was expected to be lower than that of the consecutive higher categories. An ANCOVA was used to investigate whether there were differences between category averages while controlling for the covariates prior achievement, sex and teacher. Here, a significant difference between category averages was found. A Helmert contrast was conducted to see whether each performance category average was lower than the average of subsequent higher categories. The results show that each level had a lower average performance than the subsequent levels, but only the highest two contrasts (contrasting the basic category to all consecutive higher categories, and contrasting the proficient category to the highest category) were significant. The non-significant findings for the lowest two categories (contrasting below minimum to all higher categories, and contrasting minimum to all higher categories) is expected to be due to their large within-group variations and relatively small sample size, although the ANCOVA's homoscedasticity-assumption was not violated. Summarizing, academic performance was significantly predicted by the achievement goal teachers had set for their pupils, even after accounting for pupils' prior performance, sex and teacher. Relatively higher achievement goals were found to correspond to higher academic performance.

Keywords: *achievement goals, academic performance*

**PAPER 3: Challenges in Perceiving and Providing Good Instruction in Algebra Classrooms:
Lessons from a Classroom Observation Protocol.**

- *Drew H. Gitomer, Rutgers University, New Brunswick, United States; drew.gitomer@gse.rutgers.edu*
- *Courtney A. Bell, Educational Testing Service, Huntington Woods, United States; cbell@ets.org*

Abstract:

This paper, which comes from a study of the validity of tools to evaluate teaching, has three related purposes. First, the paper presents data on dimensions of instructional quality in 84 algebra classrooms as measured by an observation protocol, the CLASS-S. Observing each classroom 4-5 times, we find that while classroom organization is generally strong, the instructional and emotional support of classrooms is much weaker.

Second, the paper describes the absolute magnitude and range of learning in algebra classrooms using pre- and post-test measures of algebra achievement. Average classroom gains are approximately two items on a 50-item test after a year of algebra instruction.

Third, the paper presents data on rater reliability and teacher self-reports for different dimensions of instruction. Rater agreement is much stronger and stabilizes much more rapidly for classroom organization than for the other two domains. Teachers' reports of their own practice are much more highly correlated with observed scores for classroom organization than for the other domains.

Together, the paper makes the argument that students are not learning very much, that particular aspects of instruction are carried out at relatively low levels, and that these aspects of instruction are the ones that observers have the most difficulty making sense of in a consistent manner. While classrooms are basically well managed and well behaved, there is much less evidence that students are engaged in the cognitive activities represented in the instructional support domain. These findings have implications for the design of evaluation systems as well as for professional development.

Keywords: *teacher quality, classroom observation, mathematics instruction*

Paper Session: Achievement Gaps (Room: KO2-F-175)**PAPER 1: School effects on ethnic, gender and socio-economic achievement gaps.**

- *Steve Strand, Institute of Education, University of Warwick, United Kingdom;*
steve.strand@warwick.ac.uk

Abstract:

Perhaps the most prevailing inequalities in educational achievement in England are those associated with socio-economic status (SES), ethnicity and gender. However relatively little research has sought to explore interactions between these factors or evaluate school effects on such equity gaps. This paper analyses the national test results of 2,875 pupils aged 11 year olds attending 68 mainstream primary schools in an ethnically diverse inner London borough, along with data on their prior attainment at age 7. The results indicate substantial interactions, particularly between ethnic group and SES, on both attainment and progress. The groups with the lowest educational achievement and poorest progress were both White British and Black Caribbean low SES students. In most minority ethnic groups high and low SES pupils make roughly similar progress age 7-11. However White British high SES pupils make substantially more progress than White British low SES pupils, significantly increasing the SES gap over time. School effects on pupil progress were large with a 0.60 SD difference between the less and more effective schools, accounting for 25% of the measured variation in pupil progress. For example in the more effective schools (as determined by the value-added model) low SES pupils actually scored significantly better than high SES pupils in the less effective schools. However all pupils (both low and high SES) benefit from attending the more effective schools and so these schools do not eliminate the SES gap. In contrast to previous research school composition variables had no significant association with student progress. The implications for accounts of equity gaps in achievement and the limits to what can be achieved by schools alone are discussed.

Keywords: *Achievement gap, school effects, equity*

PAPER 2: A Cross-country Comparison of Social Capital Effects Based on PISA 2009.

- *Jan Van Damme, Sarah Gielen & Hongqiang Liu, Education and Training, KU Leuven, Belgium; jan.vandamme@ppw.kuleuven.be, sarah.gielen@kuleuven.be, hongqiang.liu@ppw.kuleuven.be*

Abstract:

Social capital theory has been widely used in educational effectiveness research. However, the studies on social capital theory are mainly US-based and focus on family-based social capital. The effects of school-based social capital and the cultural dimension of social capital theory are understudied. PISA 2009 allows a cross-country comparison on the effects of both family- and school-based social capital in 14 countries, through hierarchical linear modelling (HLM). The results suggest that the explaining power of family- and school-based social capital varies from country to country. With respect to the raw effects, family-based social capital on average explains 11% of differences in student reading literacy, with the strongest in Qatar (25%) and the weakest in Korea, Macau and Hong Kong (5%), while school-based social capital on average explains 23 % of differences in reading literacy, with the strongest in Hungary (39%) and weakest in Portugal (4%). After factoring out the effects of economic capital and human capital on both the student level and the school level, the effects of both family- and school-based social capital substantially decline, to varying extents in different countries. However, the effects of social capital indicators derived from Coleman's social capital theory are only partially confirmed, in that the effects of some aspects of social capital are not significant or the directionality of some effects are opposite to the expected. The effects of school-based social capital are more often confirmed than family-based social capital. Therefore, the cultural dimension of social capital theory is in need of further studies.

Keywords: *comparative study, social capital, PISA 2009*

PAPER 3: Systematic underestimation of achievement gaps in grade-based surveys?

- *Hans Luyten & Laura Staman, Faculty of Behavioural Sciences, University of Twente, The Netherlands; j.w.luyten@utwente.nl, l.staman@utwente.nl*

Abstract:

Achievement gaps in education are nearly always assessed by means of grade-based surveys. As a result, only pupils within the same grade are compared. This method fails to take into account that the school careers of certain categories of pupils (e.g. boys, immigrants and low SES pupils) are more often delayed than that of others. Delayed pupils are in lower grades than their non-delayed same age peers and their achievement levels are probably markedly below that of their non-delayed counterparts. This suggests that in a country like the Netherlands with a considerable percentage of delayed pupils (OECD, 2009) the achievement gaps for certain groups of pupils would turn out to be much larger when the comparison is based on an age-based sample rather than a grade-based sample. This hypothesis is taken to the test for a large sample of Dutch primary school pupils. The findings show that the achievement gap is considerably larger for Dutch low SES and immigrant pupils with regard to mathematics, technical reading, spelling and reading comprehension when the assessment relates to an age-based sample. With regard to gender differences the impact of grade-based versus aged-based samples is more moderate, but still the position of boys is less favourable in age-based samples. Their advantages on mathematics decreases and their disadvantage on the three language measures increases.

Keywords: *Achievement gap, Age-based sampling, grade retention*

3. **Lunch: 12:00 – 12:45 (Room: KO2-F-152)**

We offer a tasty buffet lunch which is free for all conference participants. You will find the buffet lunch in Room KO2-F-152. In the adjoining room (KO2-F-153) you have the chance to sit down, to check your mails or to talk to the other participants. There is also the chance to enjoy the free time on our terrace next to the social lounge (KO2-F-152, KO2-F-153).

As the main building is smoke free, please do not smoke in any room. However, it is allowed to smoke on the terrace.



4. SIG-Meeting: 12:45 – 13:30 (Room: KOL-F-117)

Every conference participant is warmly invited to take part in the SIG-Meeting.



5. Session IV: 13:30 – 15:00

Paper Session: Use and Value of Educational Effectiveness Research (Room: KO2-F-175)

- *Denise Demski*: 1. School Practitioners' Use of School Effectiveness Research? Empirical Evidence from Germany.
 - *Sebastian Wurster*: Organizational preconditions of evaluation data use.
 - *Joanna Marciniak*: Value of the International System for Teacher Observation and Feedback (ISTOF) questionnaire as an instrument for educational effectiveness research.
-

Paper Session: Student Achievement II (Room: KO2-F-174)

- *Daniel Muijs*: The Relationship between Collaboration and Pupil Achievement: A Quantitative Study of the Federations Programme in England.
 - *Barbara Belfi*: Inequality in language achievement growth? An investigation into the impact of pupil socio-ethnic background and school composition.
 - *Katalin Toth*: Influences on students' attainment and progress in Key Stage 3: Academic outcomes in English, maths and science in Year 9.
-

Paper Session: Teacher Education and Development (Room: KO2-F-172)

- *Sarah Werth*: Teaching teachers how to teach self-regulated learning: Effects of a training program on the promotion of self-regulation and instructional quality.
 - *Silke Hertel*: Preparing pre-service teachers for dealing with students' diversity related to learning in the classroom: An intervention study in teacher education.
 - *Alena Friedrich*: Diagnostic competence of teachers: Assessing student motivation and personality from two perspectives.
-

Paper Session: Methods II (Room: KOL-F-117)

- *Keith Zvoch*: The Use of Piecewise Growth Models to Estimate Intervention Effects in a Staggered Interrupted Time Series Design.
 - *Panayiotis Antoniou*: Using Multilevel SEM in an experimental design towards teacher professional development to identify causal and mediating effects upon student achievement gains.
 - *Jan Hochweber*: Detecting correlates of schools' change in repeated multi-stage sampling designs? A Monte Carlo study.
-

Poster Session: Effectiveness I (KO2 Floor F, in front of Room KO2-F-155)

- *Masayuki Suzuki*: Exploring the mechanism of the effects of presenting a rubric and fact patterns.
 - *Christoph Michael Müller*: Is there an effect of class composition on individual antisocial behaviour? Preliminary findings from the project FRI-PEERS.
-

Poster Session: Effectiveness II (KO2 Floor F, in front of Room KO2-F-159)

- *Beate Baltes*: Identifying Discrepancies between Expertise and Expert Status in Academic Virtual Communities of Practice.
 - *Anja Zwingenberger*: Effectiveness of multimedia learning.
 - *Daniel H. Bowen*: An Experimental Study on the Benefits of School Art Museum Visits: First Year Results.
-

**Paper Session: Use and Value of Educational Effectiveness Research
(Room: KO2-F-175)**

**PAPER 1: 1. School Practitioners' Use of School Effectiveness Research? Empirical Evidence
from Germany.**

- *Denise Demski, Department of Educational Sciences, Institute of Education, University of Duisburg-Essen, Germany; denise.demski@uni-due.de*
- *Christoph Rosenbusch, Center for Quality Assurance and Development (ZQ), Johannes Gutenberg-University Mainz, Germany; christoph.rosenbusch@zq.uni-mainz.de*
- *Isabell van Ackeren & Marten Clausen, Department of Educational Sciences, Institute of Education, University of Duisburg-Essen, Germany; isabell.van-ackeren@uni-due.de, marten.clausen@uni-due.de*
- *Uwe Schmidt, Center for Quality Assurance and Development (ZQ), Johannes Gutenberg-University Mainz, Germany; uwe.schmidt@zq.uni-mainz.de*

Abstract:

Despite the demand for output control and data-driven school improvement, empirical findings show that evidence cannot be turned into successful evidence-based practice directly.

The project at hand (EviS) aims at analyzing how different types of data on school effectiveness are perceived and used by teachers and headteachers in German schools. Furthermore, it identifies individual and organizational factors that enhance or impede the use of evidence-based data. Whereas most studies focus on the effects of single instruments such as standardized tests or external evaluation, evidence here is understood in a broad sense and may comprise information such as social research findings, formative or summative evaluation data, school and student performance data, school statistics, parental or pupil input as well as peer observation of teaching.

The study combines a quantitative with a qualitative approach. Giving credit to the idea of school as a multilevel system, teachers and headteachers in the German Land of Rhineland-Palatinate are interviewed concerning their attitude towards and their use of various kinds of evidence. Regression models and multilevel analyses are used to analyze the impact of different factors on individual as well as on school level.

Furthermore, face-to-face-interviews validate the survey findings. Thus a detailed description and analysis of evidence-based practice in German schools is provided.

The analysis reveals a significant variance in the amount and intensity of evidence-based practice both on individual and on school level. Moreover it shows that external data from state-mandated evaluations (e.g. school inspections, standardized tests) are considered less useful than internally obtained information gained through e.g. pupils' feedback or feedback by colleagues. Thus, with regard to school improvement, the former are neglected to a large extent.

Keywords: *evidence-based practice, data-driven school improvement, research-practice gap*

PAPER 2: Organizational preconditions of evaluation data use.

- *Sebastian Wurster, Institute for Educational Quality Improvement (IQB), Humboldt Universität zu Berlin, Germany; sebastian.wurster@iqb.hu-berlin.de*
- *Katja Thillmann & Felicitas Thiel, Freie Universität Berlin, Germany; k.thillmann@fu-berlin.de, felicitas.thiel@fu-berlin.de*
- *Hans Anand Pant, Institute for Educational Quality Improvement (IQB), Humboldt Universität zu Berlin, Germany; IQBoffice@iqb.hu-berlin.de*

Abstract:

Due to the new educational policies, which are often described as a shift from input to output-centred governance, schools are considered the most important units of accountability. In this view, assessment of performance and interpretation of data are the most crucial factors for establishing systems of self-monitoring and self-governance. In our project we will scrutinize preconditions for using evaluation data to improve organizational performance in terms of student learning outcomes. We assume that the organizational characteristics are important preconditions for using evaluation data. The paper refers to results from a research project ("schools as accountability units") which is sponsored by the Federal Ministry of Education and Research and conducted cooperatively by the Freie Universität and the Humboldt Universität of Berlin. On the basis of an online survey of principals and teachers (school department leaders), four different user-types were identified using a cluster analysis. Further, it was shown that the four types differ with regard to central organizational characteristics.

Keywords: *School effectiveness, organizational model of school, evaluation data use*

PAPER 3: Value of the International System for Teacher Observation and Feedback (ISTOF) questionnaire as an instrument for educational effectiveness research.

- *Joanna A. Marciniak & Rianne Janssen, Centre for educational effectiveness and evaluation, Catholic University of Leuven, Belgium; joanna.marciniak@ppw.kuleuven.be*

Abstract:

The presented study was conducted to statistically evaluate the utility of the International System for Teacher Observation and Feedback (ISTOF) in the framework of educational effectiveness research. The ISTOF questionnaire was constructed in order to allow international comparison and facilitate the use of statistical techniques in teacher effectiveness research (Teddle, Creemers, Kyriakides, Muijs & Yu, 2006). Evaluation of the ISTOF scale sheds light on theoretical and methodological issues concerning construction and possible problems in application of instruments aiming for international validity.

Statistical analyses were conducted by means of multilevel factor analyses and multilevel regression models. The following findings were revealed. A priori scales were not confirmed by multilevel confirmatory factor analysis. Instead, a 1-factor model was constructed, suggesting teacher behavior being a rather one-dimensional construct in the perception of students. In multiple regression analyses, 3 scales were found to have an effect on the achievement in biology when predictors on student level were used. Observed variance in teacher perception can be attributed mainly to the student level (68%). For class mean centred predictors effects were found for 2 scales. The effect of Country of Origin of a Student was found to be a significant predictor concerning some of the significant scales. Therefore, perception of teacher behavior seems to depend rather on individual or cultural differences among students than differences in teacher behaviors.

Keywords: *ISTOF, student perception, teacher behavior*

Paper Session: Student Achievement II (Room: KO2-F-174)**PAPER 1: The Relationship between Collaboration and Pupil Achievement: A Quantitative Study of the Federations Programme in England.**

- *Daniel Muijs, Southampton Education School, University of Southampton, United Kingdom; d.muijs@soton.ac.uk*
- *Chris Chapman, School of Education, University of Manchester, United Kingdom; chris.chapman@manchester.ac.uk*
- *Paul Armstrong, Institute of Education, University of London, United Kingdom; paul.armstrong@ioe.ac.uk*

Abstract:

Governments around the world have invested significant resources to develop collaborative approaches to school improvement. However, to date there is very little quantitative evidence to link collaboration to school improvement and. This study aims to examine the link between Federations and student outcomes. Federations are groups of schools that agree to work together to raise standards, promote inclusion, and build capacity, in part through structural changes in leadership and management structures such as joint governing bodies or Executive Headteachers.

A quantitative methodology was used to explore the question of Impact of Federations. National pupil and school level datasets were collected to allow us to look at performance measures controlled for student background over time.

In order to look at the impact of Federation on performance, we opted for a quasi-experimental design where each Federation school was matched to a school as similar as possible on key characteristics prior to Federating. The final sample contains a total of 50 LA's, and 264 schools. 264 comparator schools were selected to match these. Multilevel modelling was used for data analysis. Data were analysed for three years prior to Federation and for the years following Federation.

Results showed a significant relationship between performance and Federation. with no relationship in the years prior to Federating, but a significant relationship from 1 to 2 years post Federation onwards. In particular, Federations where a strongly performing school federates with a poorly performing school appear to lead to higher levels of performance than would exist in the individual schools, especially in low performing schools.

Keywords: *Collaboration, achievement, attainment*

PAPER 2: Inequality in language achievement growth? An investigation into the impact of pupil socio-ethnic background and school composition.

- *Barbara Belfi, Mieke Goos, Maarten Pinxten, Jean Pierre Verhaeghe, Sarah Gielen, Bieke De Fraine, & Jan Van Damme, Centre for Educational Effectiveness and Evaluation, KU Leuven, Belgium; Barbara.Belfi@ppw.kuleuven.be*

Abstract:

This paper investigates how pupils' growth trajectories in three language domains (reading fluency, spelling, and reading comprehension) are related to their socio-ethnic background and the socioeconomic and ethnic composition of their school throughout primary education. For this purpose, a sample of approximately 8,000 students from 190 schools was divided into six socio-ethnic groups. Multilevel piecewise growth curve analysis was applied to estimate pupils' growth in language achievement. The results of the present study point out that primary school pupils' language achievement and growth is dependent upon their own socio-ethnic background and the language domain under investigation. Furthermore, socioeconomic school make-up was found to be associated with a lower achievement at the first measurement occasion of all three language domains, but only with a lower growth in spelling. Once socioeconomic school composition was accounted for, ethnic school composition only had a negative association with pupils' achievement score at the first measurement of reading comprehension. The research findings of this study imply that in combatting ethnic-minority pupils' arrears in language proficiency, priority should be given to investments in individual intervention programs over policy plans to desegregate schools. Moreover, our study shows in which specific points in time of the primary school period intervention programs are needed the most.

Keywords: *growth curve modeling; language achievement; segregation*

PAPER 3: Influences on students' attainment and progress in Key Stage 3: Academic outcomes in English, maths and science in Year 9.

- Pam Sammons, Kathy Sylva, Department of Educational Studies, University of Oxford, United Kingdom; pamela.sammons@education.ox.ac.uk, kathy.sylva@edstud.ox.ac.uk
- Edward Melhuish, Institute for the Study of Students, Families and Social Issues, Birkbeck University of London, United Kingdom; e.melhuish@bbk.ac.uk
- Iram Siraj-Blatchford, Brenda Taggart, Katalin Toth & Diana Draghici, Institute of Education, University of London, United Kingdom; i.siraj-blatchford@ioe.ac.uk, b.taggart@ioe.ac.uk, k.toth@ioe.ac.uk, d.draghici@ioe.ac.uk
- Rebecca Smees, Department of Education, University of Oxford, United Kingdom

Abstract:

For almost 15 years, the Effective Pre-school, Primary and Secondary Education Project (EPPSE) has contributed to the international debate on what influences student outcomes. EPPSE followed in a longitudinal study 3000 children from pre-school until secondary school and beyond. This paper focuses on the relationships between a range of individual student, family, home, pre-, primary and secondary school characteristics and students' academic attainment in English, maths and science in year 9 at secondary school (age 14). It also compares the latest findings with those found for students' attainment at younger ages and highlights the influences of secondary school on students' attainment in the core curriculum areas and studies their academic progress across Key Stage 3 between the ages of 11 and 14. Analyses using MLM revealed that differences in attainment related to background influences which emerged early (at age 3) have remained fairly stable through to the end of year 9. Both mothers' and fathers' (to a lesser extent) educational level strongly predicted attainment. Girls had significantly better attainment in English than boys and also made more progress in English, maths and science over KS3. Other moderately strong predictors of attainment in all core subjects included the early years home learning environment (HLE), birth weight, family income and free school meal (FSM) status. Additionally, the effects of pre-school and primary school continued to predict students' later academic attainment in year 9, even after controlling for background characteristics. There is also evidence of secondary school effects on EPPSE students' progress across KS3. The Ofsted inspection indicator of school 'quality' predicted both attainment and progress over and above individual, family, HLE and neighbourhood characteristics. Attending a school judged to be 'outstanding' provided a moderately large boost to student attainment outcomes in all three core areas of the curriculum.

Keywords: *academic attainment, academic progress, school effectiveness*

Paper Session: Teacher Education and Development (Room: KO2-F-172)**PAPER 1: Teaching teachers how to teach self-regulated learning: Effects of a training program on the promotion of self-regulation and instructional quality.**

- *Sarah Werth Wolfgang Wagner, Department of Education, Center for Educational Science and Psychology, University of Tübingen, Germany; sarah.werth@uni-tuebingen.de, wolfgang.wagner@ife.uni-tuebingen.de*
- *Bernhard Schmitz, Department of Educational Psychology, TU Darmstadt, Germany, schmitz@psychologie.tu-darmstadt.de,*
- *Ulrich Trautwein, Department of Education, Center for Educational Science and Psychology, University of Tübingen, Germany; ulrich.trautwein@uni-tuebingen.de*

Abstract:

Self-regulated learning can be regarded as an important goal of education and at the same time as a resource that helps to accomplish further goals of education. In line with this importance of self-regulated learning, teacher trainings have been conducted in prior research with the aim to train teachers in fostering their students' self-regulation.

However, research about the development of teaching expertise and instructional quality suggests that such trainings could potentially have unintended effects on aspects of instructional quality. Still, little is known about the way teacher trainings fostering students' self-regulation not only affect the promotion of self-regulation but also aspects of instructional quality. Using teacher- and student-questionnaires, the present paper investigates whether a teacher training aimed at fostering students' self-regulation affects focal training contents and whether also aspects of instructional quality are affected that are not explicitly addressed by the training.

In the current study 47 math teachers from the lowest German school track (Hauptschule) participated in a four-day training on how to enhance self-regulated learning during mathematics education. Additionally, there was a control group of 28 teachers who received no treatment. Effects of the training were measured in pre-, post- and follow-up tests by questionnaires administered to teachers and students. Analyses showed different effects for the training depending on the specific perspective: whereas teachers' self-reports showed an increase concerning the promotion of self-regulation and no change on the assessed aspects of instructional quality, students' ratings indicated positive effects both for the promotion of self-regulation and instructional quality.

Keywords: *Self-regulation, teacher training, instructional quality*

PAPER 2: Preparing pre-service teachers for dealing with students' diversity related to learning in the classroom: An intervention study in teacher education.

- *Silke Hertel, Ina Rieger, Katja Adl-Amini, Sanna-Kristina Djakovic & Lena Hondrich, IDeA Research Center, German Institute for International Educational Research, Germany; hertel@dipf.de*
- *Susanne Mannel, IDeA Research Center, Johann Wolfgang Goethe-University, Germany*

Abstract:

The competent handling of students' individual learning needs plays an important role in everyday school life as well as in teacher education. The present study investigates the effectiveness of a university course on dealing with students' diversity related to learning in the classroom. Important skills for dealing with students' diversity related to learning are taught. The main emphasis is on three didactic-methodological strategies (cognitive apprenticeship, peer learning, formative assessment). The effectiveness of the course is subsequently investigated in the scope of a quasi-experimental study with an experimental-group and a control-group. The control-group received an alternative treatment on parental counseling. 107 students participated in this training experiment, they were free to choose the seminars from the regular university calendar. Data on competence beliefs, beliefs about teachers' role and content knowledge were analyzed conducting ANOVAs with and without repeated measures. The results are in line with our main hypotheses: Student teachers gain knowledge and competence in dealing with students' diversity regarding learning by attending a regular university course on that content. The findings support the conclusion that it is promising to include courses on dealing with students' differences related to learning in the classroom in the early stages of teacher education, already. Our findings contribute to the theory of theoretical development of educational effectiveness highlighting that evidence based teacher education is a worthwhile approach.

Keywords: *Effectiveness of teacher education, Teachers professional development, Dealing with students' diversity related to learning in the classroom*

PAPER 3: Diagnostic competence of teachers: Assessing student motivation and personality from two perspectives.

- *Alena Friedrich, Kathrin Jonkmann & Benjamin Nagengast, Department of Education, Center for Educational Science and Psychology, University of Tübingen, Germany; Alena.Friedrich@uni-tuebingen.de, Kathrin.Jonkmann@uni-tuebingen.de, Benjamin.Nagengast@uni-tuebingen.de*
- *Bernhard Schmitz, Department of Educational Psychology, TU Darmstadt, Germany; schmitz@psychologie.tu-darmstadt.de*
- *Ulrich Trautwein, Department of Education, Center for Educational Science and Psychology, University of Tübingen, Germany; Ulrich.Trautwein@uni-tuebingen.de*

Abstract:

Diagnostic competence is a basic prerequisite for effective teaching (Schrader, 2006). Besides teaching, teachers evaluate students and plan, supervise and promote their learning progress. With respect to student performance, studies comparing teacher ratings with students' results in objective tests showed relatively high accordance (Hoge & Coladarci, 1989). In contrast the accuracy of teacher ratings of students' personality traits and motivation is generally smaller (Federer, Stüber, Margraf, Schneider, & Herrle, 2001; Spinath, 2005). The goal of the current study was twofold: first, we investigated whether teachers have a differentiated perception of students' motivation and learning behavior. Especially we examined if teachers are better able to differentiate and rate separate motivational skills like self-regulated learning, goal setting, self motivation and mathematical self-concept when they are trained to promote these traits. Second we compared the teacher ratings with the self-assessments of their students.

The data are based on an intervention study with teachers from the lowest school track in Germany (Haupt- und Werkrealschule). 78 teachers participated in a training that was aimed at promoting students' use of self-regulated learning. Self-regulated learning is a basic competence for lifelong learning. Studies have shown that particularly students from the lowest school track have low self-regulation skills (Artelt, Baumert & Julius-McElvany, 2003). Teachers were asked to assess personality traits and motivation (e.g. self-regulated learning, goal setting) of their fifth graders (N = 1.409). Teachers assessed their students before, immediately after the training and in a follow-up measurement. Three research questions were assessed: Can teachers differentiate distinct learning and motivational aspects in their student ratings? Does a training in promoting self-regulated learning and motivation also improve teachers' ability to assess students' motivation in a differentiated manner? And is there a significant accordance between teacher and student ratings? Results from multi-level-structural equation modeling will be presented and discussed.

Keywords: *Teacher assessment, student motivation, self-regulated learning*

Paper Session: Methods II (Room: KOL-F-117)**PAPER 1: The Use of Piecewise Growth Models to Estimate Intervention Effects in a Staggered Interrupted Time Series Design.**

- *Keith Zvoch & Joseph J. Stevens, Department of Educational Methodology, Policy and Leadership, College of Education, University of Oregon, United States; kzvoch@uoregon.edu, stevensj@uoregon.edu*

Abstract:

The proposed paper describes the use of piecewise growth models as a means for estimating intervention outcomes associated with a complex interrupted time series (ITS) design. The demonstration utilizes literacy data obtained on three kindergarten student cohorts from a moderately-sized school district located in the U.S. Pacific Northwest. During each academic year, bi-weekly literacy assessments were administered and supplemental literacy instruction was delivered to students as a means to facilitate the attainment of early literacy benchmark goals. However, the timing of the instructional intervention was not constant as the onset and duration of the literacy supplement was purposely differentiated by student. To illustrate the challenges and opportunities associated with the evaluation of staggered ITS designs, a modeling approach as dynamic as the individualized treatment framework is described and implemented. Application of multilevel piecewise growth models to the time series data obtained on struggling readers revealed that the rate of literacy acquisition statistically increased following the initiation of the instructional supplement, but that individual response to the intervention differed initially and in a non-linear manner over time. More generally, the demonstration shows that piecewise growth modeling techniques provide a flexible and powerful approach for capturing the complex structure of individualized treatment regimes while simultaneously documenting the immediate and more distal responses to intervention. The specificity with which individualized instructional regimes can be represented and modelled is argued to maximize the use of repeated measures data, facilitate the estimation of treatment effects, allow correct identification of patterns of inadequate response, and enable educational leaders to use limited resources optimally. Implications for educational policy and practice are discussed.

Keywords: *individualized treatment regimes, interrupted time series, piecewise growth models*

PAPER 2: Using Multilevel SEM in an experimental design towards teacher professional development to identify causal and mediating effects upon student achievement gains.

- *Panayiotis Antoniou, University of Cambridge, Faculty of Education, United Kingdom; pantoniou@cam.ac.cy*
- *Leonidas Kyriakides, Department of Education, University of Cyprus, Cyprus; kyriakid@ucy.ac.cy*

Abstract:

In the last 25 years, research into educational effectiveness has improved considerably. Progress has been made in identifying factors associated with dependent variables, such as student achievement. Nevertheless, identifying cause and effect relations and not mere associations is a methodologically demanding procedure. Even when experimental designs are utilised properly, having the capacity to provide answers to causal questions and to reveal information related with the average effect of an intervention on student achievement, issues related with how or why such effects take place are not usually methodologically justified. To provide answers to such questions, questions of mediation should be taken into consideration. In this paper we argue that Multilevel Structural Equation Modelling (SEM) could be utilised to answer mediation questions explaining progress in student learning. Particularly, in this paper Multilevel SEM is used to identify the impact of a teacher professional development experimental intervention on student achievement gains in mathematics through two mediator variables (i.e., improvement in teaching skills and improvement in teacher perceptions towards teaching). The study was conducted in 2008 – 2009. Teaching skills and teacher perceptions towards teaching of the participating teachers (n=130) and achievement of their students (n=2356) were measured at the beginning and at the end of the intervention. Teachers found to be at a certain developmental stage, were randomly allocated evenly into two groups. The first experimental group employed a newly proposed approach, namely the Dynamic Integrated Approach (DIA), and the second the Holistic Approach (HA). The results of the analysis revealed that the use of the DIA had a significant indirect impact on student achievement, through improvements made in teaching skills. Implications of findings for the use of multilevel SEM in helping researchers to test the validity of theoretical models of educational effectiveness are discussed and suggestions for further research are provided.

Keywords: *Impact of teacher professional development interventions, Multilevel Structural Equation Modelling, Causal and Mediation effects*

**PAPER 3: Detecting correlates of schools' change in repeated multi-stage sampling designs?
A Monte Carlo study.**

- *Jan Hochweber & Johannes Hartig, German Institute for International Educational Research (DIPF), Germany; hochweber@dipf.de, hartig@dipf.de*

Abstract:

Longitudinal analyses of schools frequently make use of variables originally measured at the student level. That is, samples of students are assessed at several time points, and their data is used to capture schools' change. In this setting, a specific type of data structure may arise, where at each time point different students are sampled within the same set of schools. We examine two different ways to deal with this type of data. The first approach takes the hierarchical nature of the data explicitly into account by specifying multilevel structural equation models of a specifically restricted form. The second approach is based on aggregating the student data to the school level and ignores the hierarchical structuring of the data. A Monte Carlo simulation study was conducted to compare the statistical properties of both approaches, and to obtain guidelines on appropriate sample sizes for researchers doing analyses with this type of data. To this end, number of groups, group size, intraclass correlation, growth curve reliability, and effect size were included as design factors. We focused on a situation where linear growth occurs at the school level, and schools' growth is predicted by a single school level variable. We found the power to identify an effect of this school level variable to be moderately to strongly positively related to number of groups, group size, intraclass correlation, effect size, and growth curve reliability. Hardly any evidence was found for the superiority of the multilevel SEM over the aggregate modeling approach with respect to several criteria analyzed (parameter bias, coverage, power).

Keywords: *Longitudinal analysis, Multilevel modeling, Monte Carlo simulation*

Poster Session: Effectiveness I
(KO2 Floor F, in front of Room KO2-F-155)

POSTER 1: Exploring the mechanism of the effects of presenting a rubric and fact patterns.

- *Masayuki Suzuki, The University of Tokyo, Japan; m-suzuki@p.u-tokyo.ac.jp*

Abstract:

In the present study, we investigated the mechanism of the effects of presenting a rubric and fact patterns corresponding to each grading standard. 95 eighth-grade students were randomly assigned to 1 of 3 classrooms, each of which corresponded to an experimental condition. The participants studied mathematics for five sessions: at the end of the first day and the third day, the teacher gave a test on that day's lecture and the previous day's lecture. The feedback methods of their test results varied according to each classroom's experimental condition: (1) the rubric condition in which participants received the rubric; (2) the rubric plus fact pattern condition in which participants received the rubric and fact pattern; or (3) the comment-only condition in which participants received only comments by the teacher and not the rubric. The results showed that students who received the rubric were more likely to consider that the purpose of the test was to show improvement than those who did not receive the rubric, and the rubric influenced intrinsic motivation, learning strategies, and test scores through values of a test. In addition, the results of this study suggested that informed assessment had an important role in changing values of a test. The results also revealed that fact patterns had no effect on the dependent variables.

**POSTER 2: Is there an effect of class composition on individual antisocial behaviour?
Preliminary findings from the project FRI-PEERS.**

- *Christoph Michael Müller, Verena Hofmann & Felix Studer, University of Fribourg, Switzerland; christoph.mueller2@unifr.ch, verena.hofmann@unifr.ch, felix.studer@unifr.ch*

Abstract:

Studies conducted in primary schools give evidence, that classroom composition concerning antisocial behaviour might influence the individual behavioural development of students. In the “Fribourg Study of Peer Influence in Schools” (FRI-PEERS) it is examined, if such findings also apply to students in lower secondary schools, using a longitudinal research design. In order to generate first hypotheses on this topic, there was conducted a cross-sectional pre-study with a sample of 493 7th- to 9th-graders.

It was found, that the level of antisocial behaviour within the classroom peer environment (mean of all classmate`s behaviour without the individual`s value) predicted individual aggressive-oppositional and delinquent-criminal behaviour. These effects remained significant, even when controlling for sex, antisocial attitudes, academic track and grade. Interaction effects showed that the classroom peer environment was especially relevant for the behaviour of boys and students with positive attitudes towards delinquent-criminal behaviour.

The results of this study indicate a significant relationship between classmates` and individual`s behaviour which should be examined more closely using a longitudinal research design. The findings are discussed in the light of studies on class composition and the question of adequate educational placements for students with antisocial behaviour.

**Poster Session: Effectiveness II
(KO2 Floor F, in front of Room KO2-F-159)**

**POSTER 4: Identifying Discrepancies between Expertise and Expert Status in Academic Virtual
Communities of Practice.**

- *Beate Baltes, Walden University, United States; beate.baltes@waldenu.edu*
- *Nic Nistor; University of Munich, Germany; Walden University, United States; nic.nistor@uni-muenchen.de, nicolae.nistor@waldenu.edu*
- *George Smeaton, Walden University, United States; george.smeaton@waldenu.edu*

Abstract:

To mimic the collegial relationships common in brick-and-mortar universities, an online university facilitates the interaction of faculty and the relationship they develop with each other in virtual Communities of Practice (vCoP). One of the unique features of vCoP is that not all participants have to be actively contributing but nevertheless, all participants can benefit from the accumulated knowledge and experience. As long as there are some active participants, vCoP are not only a place for teaching and learning but also a place for knowledge construction, negotiation, and expansion among the participants.

This study is based on the quantitative causal model of academic communities where participation mediates the influence of expertise on expert status as well as the Unified Theory of Acceptance and Use of Technology where participation in online learning environments is influenced by the technology use intention and the facilitating conditions. The former is further determined by the performance expectancy, effort expectancy, and social influence. This particular study combines the two models to investigate if there is a discrepancy between expertise and expert status due to a technology acceptance deficit, meaning that low performance and effort expectancy or social influence, as well as poor facilitating conditions may lead to low intention to use the educational technology and in turn, to low participation in the vCoP.

The purpose of the proposed study is to identify the magnitude and bases of such discrepancies so as to facilitate formulation of means of minimizing them. This study will investigate potential correlations between knowledge descriptors (participants' perceptions of their domain knowledge and interest as well as the critical thinking index) and their expert identity determined through a Social Network Analysis. Further knowledge of the actual interactions and content knowledge presented in the vCoP will foster positive social change by facilitating the formation of bottom-up social structures that allow members to share their experiences, expertise, resources, and best practices without unduly dismissing actual expertise or giving credence to novice contributions.

POSTER 5: Effectiveness of multimedia learning.

- *Anja Zwingenberger, University of St. Gallen, Switzerland; anja.zwingenberger@unisg.ch*

Abstract:

This study considers the state of the field of research into multimedia learning. The trajectory of technology in multimedia learning is illustrated through the evaluation of 38 meta-analyses published between 1991 and 2011 while contemporary multimedia technology is assessed through an original meta-analysis of 29 recent primary publications. The factors differentiated in our original meta-analysis, to our knowledge, for the first time can contribute significantly to the evaluation of multimedia learning, where materials are grouped into four non-overlapping formats, and non-multimedia comparators into three, including 'no intervention' in addition to print materials and lectures.

Of the 38 previously published meta-analyses relevant to this study, 28 met our standards. During the two decades encompassed by these meta-analyses, the technology underlying multimedia learning materials has evolved dramatically, but research so far seems to indicate that multimedia learning materials tend to make learning more effective than traditional approaches. Mean effect sizes were clustered around 0.3, and four factors were identified as significant in more than one published meta-analysis. These were 'form of multimedia learning material', 'mode of application', 'duration of intervention', and 'teaching materials of comparison group'.

We coded variables suitable to describe the primary research in three dimensions: 1) form of learning material, 2) whether it was used alone or in combination with traditional teaching material, and 3) comparator. Using the categorical model of fixed effects, five variables had differentiating power: 'instruments of assessment', 'form of multimedia learning material', 'mode of application', 'teaching materials of comparison group', and, importantly, 'nature of the knowledge to be acquired'. These factors aided in the formation of causal hypotheses for successful learning. Three of the five crucial variables in our sample have previously and repeatedly been identified as 'significant'. This shows consistency with existing research. In addition, important new factors have been unveiled. This accumulating evidence provides the basis for forthcoming confirmative trials of what we believe are real, fundamental mechanisms explaining successful learning

**POSTER 6: An Experimental Study on the Benefits of School Art Museum Visits:
First Year Results.**

- *Jay P. Greene, Brian Kisida, Daniel H. Bowen & Dirk C. Van Raemdonck, University of Arkansas, United States; jpg@uark.edu, bkisida@uark.edu, dhbowen@uark.edu, dvanraem@uark.edu*

Abstract:

The Crystal Bridges Museum of American Art opened in the fall of 2011. A primary goal of the Museum is to encourage students to engage with art, art history, and cultural education in order to transform these students into cultural consumers. The main educational offering of the Museum is the School Visit Program (SVP) that offers opportunities for schools to take students on tours of the museum as well as provide classrooms with educational materials aligned with school curricula. As a result of a grant, schools can visit the Museum without the cost barriers usually associated with off-campus school visits. For the first year of the SVP, demand has exceeded the supply of slots. As a result, a lottery will be used to determine which grades within schools obtain the slots, providing the opportunity to conduct a large-scale, randomized controlled field experiment--the gold standard in evaluation research. We assess the educational effectiveness of the Crystal Bridges SVP and determine if it produces significant increases in students' appreciation and knowledge of art, art history, and culture. We also examine whether the SVP facilitates an improvement in the likelihood that teachers will incorporate the importance of art and art history into their curricula. The results of this evaluation provide invaluable guidance for policymakers, school officials, philanthropists, and the public as decisions are made about devoting limited available resources to support cultural institutions such as the Crystal Bridges Museum of American Art.

6. Session V: 15:30 – 17:00

Symposium: New Impulses for Linking School Effectiveness and School Improvement (Chair: Tobias Feldhoff, Linda Marie Bischof, Falk Radisch; Discussant: Leonidas Kyriakides) (Room: KOL-F-117)

- *Bieke De Fraine*: School Effectiveness and School Improvement: A Plea for Evidence-Based School Improvement.
- *Tobias Feldhoff*: The purpose of the second input is the presentation and discussion of existing models and main outlines from the development of a new integrative model of school effectiveness and school improvement.
- *Linda Marie Bischof*: School Improvement within a Decade.

Paper Session: Class Size and Class Composition (Room: KO2-F-174)

- *Pascal Bressoux*: "Immediate" and long-term effects of a large-scale class size reduction.
- *Spyros Konstantopoulos*: Class Size Effects on Reading Achievement Using PIRLS Data: Evidence from Greece.
- *Katja Scharenberg*: Do students learn more in homogeneous or heterogeneous classes? Classroom composition and development of Science achievement in German primary schools.

Paper Session: Student Achievement III (Room: KO2-F-175)

- *Almar M. Halldórsson*: An explanatory model of long-term school-level trends in reading and math literacy in a high-equity education system.
- *Mieke Goos*: First-grade retention, peer relationships, and academic achievement: An analysis of causal mediation effects.
- *Katrin Lintorf*: Composition of grades. A question of context?

Poster Session: Context and School Factors (KO2 Floor F, in front of Room KO2-F-180)

- *Katrijn Denies*: Adding 'environment factors' to models of educational effectiveness: a case study of second language learning.
- *Michał Modzelewski*: Differentiation of metropolitan lower secondary schools in Poland? A case study.
- *Pai Peng*: The Inter-temporal Instability of Value-added Measures of School Effectiveness in China.

Poster Session: School Inspections and Management (KO2 Floor F, in front of Room KO2-F-180)

- *Eyvind Elstad*: Antecedents of teachers' fostering of students' effort within two different management regimes: An assessment-based accountability regime and one with no external accountability devices.
 - *Sebastian Wurster*: The relationship between school improvement and school inspections. Empirical insights from Germany.
 - *Franziska Perels*: Lesson observation in the context of school inspection: Is there a difference between 20 and 45 minute lesson observations?
-

**Symposium: New Impulses for Linking School Effectiveness and School Improvement
(Room: KOL-F-117)**

Chairs:

- *Tobias Feldhoff & Linda Marie Bischof, German Institute for International Educational Research, Germany; feldhoff@dipf.de, bischof@dipf.de*
- *Falk Radisch, Institute for Educational Research at the School of Education, Bergische Universität Wuppertal, Germany; radisch@uni-wuppertal.de*

Discussant:

- *Leonidas Kyriakides, Department of Education, University of Cyprus, Cyprus; kyriakid@ucy.ac.cy*

Abstract:

A review of the literature on school effectiveness and school improvement shows a discussion over the last decades on linking these two traditions, which is based on the idea that a combination of knowledge on school effectiveness and knowledge on school improvement is fruitful for practitioners, decision makers and researchers. Within this debate a more or less detailed description of the differing foci and approaches of the two paradigms is given and the resulting problems and difficulties one faces when merging school effectiveness and school improvement are pointed out. Beyond this, attempts at an integration of the two traditions have been made (e.g., Creemers, Reezigt and Stoll, 2007). Additionally efforts at linking the two fields can also be found in empirical projects from both paradigms.

In this symposium, the first paper focuses on evidence-based education and the differences between and the possibilities of bringing school effectiveness and school improvement closer. In presentation two, based on research, theory and models on the integration of the two fields, first outlines of an alternative integrative model will be given. Furthermore, an empirical paper from a school effectiveness perspective is presented, which has been extended to cover elements from the school improvement tradition.

**PAPER 1: School Effectiveness and School Improvement:
A Plea for Evidence-Based School Improvement.**

- *Bieke De Fraine & Sarah Gielen, Centre for Educational Effectiveness and Evaluation, KU Leuven, Belgium; Bieke.DeFraine@ppw.kuleuven.be, Sarah.Gielen@kuleuven-kulak.be*

PAPER 2: Linking School Effectiveness and School Improvement – another try.

- *Tobias Feldhoff, German Institute for International Educational Research, Germany; feldhoff@dipf.de*
- *Falk Radisch, Institute for Educational Research at the School of Education, Bergische Universität Wuppertal, Germany; radisch@uni-wuppertal.de*
- *Linda Marie Bischof, German Institute for International Educational Research, Germany; bischof@dipf.de*

PAPER 3: School Improvement within a Decade.

- *Linda Marie Bischof, Jan Hochweber, Johannes Hartig & Eckhard Klieme, German Institute for International Educational Research (DIPF), Germany; bischof@dipf.de, hochweber@dipf.de, hartig@dipf.de, klieme@dipf.de*

Paper Session: Class Size and Class Composition (Room: KO2-F-174)**PAPER 1: "Immediate" and long term effects of a large scale class size reduction.**

- *Pascal Bressoux & Laurent Lima, Pierre-Mendès-France University, Grenoble, France; pascal.bressoux@upmf-grenoble.fr; laurent.lima@upmf-grenoble.fr*
- *Christian Monseur, University of Liège, Belgium; cmonseur@ulg.ac.be*

Abstract:

This paper aims at evaluating the "immediate" and long-term effects of a large scale class size reduction experiment in France. The experimental device contrasted 100 reduced-size 1st-grade classes (average 10.5 students; range 8-12) with 100 full-size 1st-grade classes (average 21.3 students; range 15-27) that have been used as control. After the experiment was finished, all students were assigned to full-size 2nd-grade classes. The students have been followed up from the beginning of grade 1 till the end of grade 2. Over the two years period, the students' literacy achievement has been assessed 5 times (beginning, middle and end of grade 1; beginning and end of grade 2). We used Rasch models for equating achievement scores and we used multilevel growth curve models to estimate the shape and rate of students' achievement growth across the two years according to whether they were assigned to reduced or full-size 1st-grade classes. This device allowed us to estimate the "immediate" (during grade 1) and long-term (during grade 2) effects of class size reduction on literacy achievement growth. The results show a positive but moderate "immediate" effect of reduced class size at the end of grade 1 ($d = 0.22$). However there is no evidence for a long-term effect: the gap between the two groups fades away by the end of grade 2. Limitations of the results will be presented and scientific significance of the study will be discussed.

Keywords: *Class size, long term effects, multilevel growth curve models*

PAPER 2: Class Size Effects on Reading Achievement Using PIRLS Data: Evidence from Greece.

- *Spyros Konstantopoulos & Anne Traynor, Michigan State University, United States; spyros@msu.edu*

Abstract:

Class size reduction has been considered a promising school resource that can promote student achievement. However, the findings that have been produced by analyses of experimental and observational data in the U.S. have been mixed. Perhaps the most consistent evidence about the benefit of small classes on student achievement has been produced by analyses of Project STAR data. In this study we used fourth grade data from PIRLS to examine the association between class size and reading achievement in public and private schools in Greece, a country where curricula are standardized. We employed multilevel and instrumental variables (IV) models to examine class size effects on fourth grade reading achievement. The results indicated a positive association between class size and achievement, but the association became insignificant when classroom and school variables were taken into account. Multilevel and IV results were similar and suggested a weak non-significant relationship between class size and reading achievement. However, we observed a significant gender gap favoring females, and a large parental education advantage which was a proxy for higher SES. Items in the home, another SES proxy, were positively related to student achievement as well. Teacher education had a positive effect on reading achievement, suggesting a benefit of training teachers in four-year as opposed to two-year education schools in Greece. Finally, school urbanicity such as schools in large cities and school sector such as private schools were also significantly associated with reading achievement.

Keywords: *Class size, student achievement, multilevel models*

**PAPER 3: Do students learn more in homogeneous or heterogeneous classes?
Classroom composition and development of Science achievement in German primary schools.**

- *Katja Scharenberg, Heinz Günter Holtappels & Wilfried Bos, Institute for School Development Research, TU Dortmund, Germany; scharenberg@ifs.tu-dortmund.de; holtappels@ifs.tu-dortmund.de; bos@ifs.tu-dortmund.de*

Abstract:

How to best adjust education to meet the students' various preconditions and needs for learning has controversially been discussed among teachers as well as in educational research and politics. On the one hand, various measures at the institutional level work towards reducing the differences of educational achievement within learning groups. On the other hand, variance in achievement is increasingly considered as a chance and enrichment for the students' cognitive and psychosocial development. The question, however, is if all students can equally benefit from heterogeneous learning groups or if the gains for some students are at the expense of other students.

Four key questions are in the focus of our interest: Does classroom heterogeneity affect the students' individual achievement at all? Do students learn more in homogeneous or heterogeneous classes? To what extent is achievement heterogeneity confounded with other compositional effects? Can high- and low-ability students equally benefit from heterogeneous classes? Analyses are based on the European Collaborative Research Project ADDITION. Measurements were taken at two points of measurement at the beginning and at the end of grade 4. Multi-level analyses control for gender, sociocultural background and prior knowledge in Science on the individual level ($n = 1,117$) as well as for mean achievement, mean SES and achievement heterogeneity on the class level.

According to our own previous research we expect to find a small, but positive effect of classroom heterogeneity on students' achievement in Science. Moreover, we expect to find a negative interaction effect between classroom heterogeneity and individual achievement indicating that especially low-ability students can profit in heterogeneous classes. The results are discussed in the context of theoretical and empirical models of educational effectiveness.

Keywords: *ability grouping, classroom composition, multi-level modelling*

Paper Session: Student Achievement III (Room: KO2-F-175)**PAPER 1: An explanatory model of long-term school-level trends in reading and math literacy in a high-equity education system.**

- *Almar M. Halldórsson, Educational Testing Institute, Iceland; almarmh@namsmat.is*

Abstract:

This presentation describes a prediction model of the inner workings of a small high-equity education system in Europe, Iceland. Here high equity refers to low school variance in student achievement and little influence of student background such as SES or parent education. Results are presented from the second year of a 3-year research project that evaluates school-level trends in student achievement and the explanatory power of contextual factors at student and school level. Linear and non-linear trends are considered for both short- and long-term. Cross-sectional indicators are used as predictors at different time points from 2000 to 2009 as well as growth modelling plotting change in contextual indicators against change in achievement. Results are analysed using multilevel multivariate regression modelling to identify strong indicators of positive and negative trends at school and student level. A unique feature of this analysis is that it is census based, not sample based, and covers all schools in the system. A decade of near perfect system-wide records are available of all schools in Iceland for both achievement and contextual indicators from four cycles of PISA and the TALIS survey 2007. Results are forthcoming, but the first stage of the project identified only school climate as a consistent predictor of positive trends in schools, in particular negative long-term trends are predicted by higher student sense of belonging to the school. Improvement or decline in reading literacy in schools across years seemed not to be predicted by student background, learning strategies, school structure, school policy or availability of resources in the school. Methodological and compatibility issues in international surveys are considered.

Keywords: *Multivariate model, Trends, Achievement*

**PAPER 2: First-grade retention, peer relationships, and academic achievement:
An analysis of causal mediation effects.**

- *Mieke Goos & Jan Van Damme, Education and Training Research Group, KU Leuven, Belgium; mieke.goos@ppw.kuleuven.be, jan.vandamme@ppw.kuleuven.be*
- *Patrick Onghena, Methodology of Educational Sciences Research Group, KU Leuven, Belgium; patrick.onghena@ppw.kuleuven.be*
- *Katja Petry, Parenting and Special Education Research Group, KU Leuven, Belgium; katja.petry@ppw.kuleuven.be*

Abstract:

This study investigates the short-run effects of repeating first grade on children's math and reading fluency achievement, and whether and to what extent these effects can be explained by the break in peer relationships experienced by repeaters in their retention year. Data were collected from a representative sample of 3,624 first-grade students (121 schools) and their teachers in Flanders, Belgium. Mediation analyses were conducted within the counterfactual framework of causal inference. In these analyses, children's conditional propensity of being retained in first grade, based on 83 preretention child-, class-, and school-level characteristics, was controlled for. Results indicate that, at the end of the retention year, first-grade repeaters would have performed better in math and reading fluency if they had been promoted to second grade instead of been held back, in part by getting along better with classmates, being more popular, having more friends, and being less bullied, if promoted. Practical implications are discussed.

Keywords: *grade retention, causal mediation, peer relationship*

PAPER 3: Composition of grades. A question of context?

- *Katrin Lintorf & Stefanie van Ophuysen, Institute of Education, Westfälische Wilhelms-Universität Münster, Germany; lintorf@uni-muenster.de, vanOphuysen@uni-muenster.de*
- *Wilfried Bos, TU Dortmund, Institut für Schulentwicklungsforschung, Germany; officebos@ifs.tu-dortmund.de*

Abstract:

Grading practices are shaped by a dilemma. From an administrative perspective, usually a criterion-related grading is required. On the instructional level, however, evaluation criteria are insufficiently concretized and the pedagogical responsibility of teachers is explicitly emphasized. The dilemma extends to the measurement perspective where grades have been criticized as unreliable and invalid measures which are contaminated by evaluations of non cognitive behaviour (Cross & Frary, 1999; Stiggins, Frisbie, & Griswold, 1989). Reversely, exactly this is appreciated as a multidimensional, informative assessment (Bowers, 2011) which also considers the consequences of grading and hence reflects a certain understanding of validity (Brookhart, 1993).

The dilemma of grading implies not only the questionable consideration of non cognitive behaviour but also differential correlations between the considered student characteristics and grades. Indeed, surveys with mainly US teachers suggest that among high performing classes or individuals, cognitive characteristics are of high predictive power, whereas among low performing classes or individuals, non cognitive behaviour gains relevance (McMillan, 2001; Zeidner, 1992). Further evidence, especially from field studies and other countries is rare. Thus, the objective of the present study is to explore differential grading practices within a large German sample of students using the example of the mathematics grade (TIMSS 2007/TRANSITION: Bos, et al., 2008; Maaz, et al., 2010).

The results confirm that apart from the cognitive predictors mathematics achievement and intelligence, also aspects of non cognitive behaviour proved to be significant predictors of the grade in mathematics. Furthermore, a differential weighting of achievement is documented within classes and a differential weighting of achievement and learning motivation is documented between classes. While the within-class variability is partly attributable to differences in individual achievement, an explanation of the between-class variability did not succeed. The results' implications will be discussed with regard to standards-based grading and the informative potential of grades.

Keywords: *differential grading practices, cognitive and non-cognitive predictors, large scale assessment*

**Poster Session: Context and School Factors
(KO2 Floor F, in front of Room KO2-F-180)**

**POSTER 7: Adding 'environment factors' to models of educational effectiveness:
a case study of second language learning.**

- *Katrijn Denies Centre for Educational Effectiveness and Evaluation, University of Leuven, Belgium;
katrijn.denies@ppw.kuleuven.be*

Abstract

Models of educational effectiveness recognize that learning outcomes are associated with factors within the education system (such as the teachers' didactic approach or certain policy characteristics) as well as factors outside the education system (such as the students' socio-economic status and the language spoken at home). Regarding the latter, most models do not refer to characteristics of the students' environment beyond the school or family context. For most school subjects this seems appropriate as learning them is generally restricted to the classroom and to homework activities. Yet for several non-cognitive outcomes and for subjects such as the mother tongue or a second language, the students' contact with the media and friends and student's daily experiences 'on the street' can potentially also contribute. Some students may benefit from such environment factors more than others. It therefore seems relevant to also include environment factors in models of educational effectiveness and to control for them in analyses. The current poster investigates the need to do so for the case of second language acquisition (SLA). It relies on the Flemish data from the European Survey on Language Competences, namely on test results for French listening in Grade 8 (N = 1880) and for English listening in Grade 10 (N = 1776). Significant differences were found between the outcomes of students in Flemish schools in Flanders (where Dutch is the only official language) and outcomes of students in Flemish schools in Brussels (where French is also an official language that is commonly spoken on the street and at home). This was the case for both French (where students in Brussels scored higher than students in Flanders) and English (where the opposite effect was found). This effect of region persisted in multilevel analyses that controlled for the language the students speak at home and for other context and input factors beyond the schools' control (such as the students' SES, field of study and gender, and the schools' urbanization, type, student body composition, etc.). It is unlikely that these differences can fully be explained by differences in teaching method between schools in Brussels and schools in Flanders. Awaiting further analyses, our preliminary conclusion is therefore that environment factors indeed impact on SLA outcomes.

POSTER 8: Differentiation of metropolitan lower secondary schools in Poland? A case study.

- *Roman Dolata, Aleksandra Jasińska & Michał Modzelewski, Educational Research Institute, Poland; dolata58@gmail.com, ola.jasinska@gmail.com, michal.modzel@gmail.com*

Abstract:

In 1999, in Poland, one of the more massive educational reforms in Europe was introduced. According to the assumptions the 1999 reform was built upon, after six years of education in primary school students were meant to be put – without any selection – in three-year long lower secondary school, so-called gimnazjum [plural: gimnazja]. The creation of gimnazja was meant to help with better adjustment of educational processes to developmental needs of 12-15-year-olds. Has the split of uniform education into elementary school and gimnazjum started any hidden selection processes? The analysis of the scores of national exams taking place at the end of primary school (so called sprawdzian, in theory its role is purely diagnostic) and those taking place at the end of gimnazjum leaves no doubts: when it comes to the schools located in big cities, the 1999 reform has put in motion massive, hidden selection processes at the doorstep of gimnazjum. In effect, in big cities (24 % of students population) we are dealing with highly selective system (with selective threshold at the age of 12, or 11 – considering plans to lower the school-starting age), but in rural areas (about 36 % of students population) we are facing the creation of 9-year long uniform school.

Monitoring processes of differentiation of schools, possible due to the analyses of national exam scores for consecutive cohorts of students, leads to the conclusion that when it comes to the big cities we are dealing with the strong, and dynamic process of polarization of gimnazja.

Hypothesis claiming that good schools get better and low-performing schools get worse is verified during analyses of the fortunes of particular schools. The poster will present the results of analyses showing mechanisms of school differentiation in a city, where the described process is particularly strong and shows high dynamics.

POSTER 9: The Inter-temporal Instability of Value-added Measures of School Effectiveness in China.

- *Pai Peng & Eckhard Klieme, German Institute for International Educational Research (DIPF), Germany; peng@dipf.de*

Abstract:

This paper examines the inter-temporal stability issues on value-added measures (VAMs) of school effectiveness in a Chinese Local Education Authority (LEA). Using 4 waves of longitudinal test score data for the same cohort of all lower-secondary students (about 4800 students in 25 schools) in the LEA over a 2-year period of time, we apply the multilevel modelling to estimate the value-added school residuals/effectiveness for different phases of schooling in the lower secondary education.

Our study shows that the estimated VAMs of school effectiveness for three subjects is instable over shorter time spans (term-to-term). The estimated school residual correlations are near zero, or even negative. The year-to-year stability of VAMs is somewhat higher than the term-to-term one, but it is still moderate at best.

We conclude the test-based VAMs of school effectiveness fluctuate markedly over short time spans and we should not use this information for high-stakes purposes (such as school accountability).

**Poster Session: School Inspections and Management
(KO2 Floor F, in front of Room KO2-F-180)**

**POSTER 10: Antecedents of teachers' fostering of students' effort
within two different management regimes:**

An assessment-based accountability regime and one with no external accountability devices.

- *Eyvind Elstad, Department of Teacher Education and School Development, University of Oslo, Norway; eyvind.elstad@ils.uio.no*
- *Knut-Andreas Christophersen, Department of Political Science, University of Oslo, Norway; k.a.Christophersen@stv.uio.no*
- *Are Turmo, Department of Teacher Education and School Development, University of Oslo, Norway; are.turmo@gmail.com*

Abstract:

This study focuses on the comparison of antecedents of teachers' fostering of students' effort in two quite different accountability regimes: one management regime with an external-accountability system and one with no external accountability devices.

The methodology involved was cross-sectional surveys from two different management systems: (1) teachers working under assessment-based accountability and (2) folk-high-school teachers who work without tests and examinations and thereby without external accountability devices.

The purpose of the study was to estimate the path coefficients in structural equation modeling in the two regimes and compare the strength of relationships between concepts in the structural models. The management systems for Oslo schools and for folk high schools represent the extreme ends of a scale running from high accountability strength to almost no accountability strength. Through this comparison, we draw inferences suggesting how the strength of accountability repercussions and other leadership antecedents may influence the teacher's fostering of student effort and how strength in qualitative aspects among school professionals may influence the fostering of effort. In both instances it was pathway Principal-Teacher- trust → Social exchange → Commitment → fostering of effort. A possible interpretation is that the quality of relationships among school professionals is the most central prerequisite for typical "school" quality-ensuring processes. If this is the case, it indicates a limitation of New Public Management techniques, or at least a complementary quality for human relationships, which a management system should take into account. Furthermore, the results show that the relationship between teacher commitment and pressure in teaching is the strongest in the Oslo sample (.71) followed by folk high schools (.38). The results further indicate that clear leadership has positive effects on both social exchange (.33) and economic exchange (.19) in the Oslo sample, while no corresponding positive effects are established in the folk high school sample. If the statistical associations reflect causal mechanisms, our survey can be seen as an argument suggesting that the head teacher's relationship building (perhaps in combination with clear leadership) is more useful in persuading teachers to give more than either a purely confrontational line or an approach involving financial incentives. The challenges of a school are often so complex that the scope for meaningful bureaucratic control and incentive management is not great. The significance of relational trust appears as a complementary factor to that which is the popular chorus of today: accountability repercussions, target management, and control.

**POSTER 11: The relationship between school improvement and school inspections.
Empirical insights from Germany.**

- *Sebastian Wurster, Institute for Educational Quality Improvement (IQB), Humboldt Universität zu Berlin, Germany; sebastian.wurster@iqb.hu-berlin.de,*
- *Holger Gärtner, Institute for School Quality Improvement (ISQ), Freie Universität Berlin, Germany; holger.gaertner@isq-bb.de*

Abstract:

Recently school inspections have become an important instrument in managing education. They were implemented for two reasons: to improve and to control school quality. To this day empirical findings do not provide a clear answer to the question whether inspections have a positive impact on school quality improvement. A current summary of the state of research is given by de Wolf and Janssens (2007). Studies on satisfaction suggest that the majority of school principals of inspected schools are satisfied with the inspection of their own school. Side-effects of inspections are mentioned in a number of works. For example stress caused by the visits is pointed out as empirical evidence. But other side-effects like strategic behavior are described as theoretically plausible but not sufficiently empirically explored. Studies on behavioral effects normally confine themselves to statements about which measures will be introduced in future in response to the results of the inspection. The inconsistent picture of the impact of school inspections can also be illustrated with studies on student performance. While English studies tend to point out the negative effects of inspection on student performance, a Dutch study recently reported a positive effect in relation to student performance (Luginbuhl, Webbink & de Wolf, 2007). Ehren and Visscher (2006) developed a theoretical framework to systemize different impacts of school inspections and to explain the different effects. They pointed out that feedback should be given differently depending on the context of each school. For low innovation capacity schools inspection feedback should include clear instructions for action. In contrast for high innovation capacity schools school inspection should only feedback strengths and weaknesses to promote an organizational learning process. Referring to the hypothesis that schools deal in different ways with school inspection and its results, this study focuses on the relationship between schools' ways of using results and dealing with inspections on the one hand and school improvement on the other hand.

**POSTER 12: Lesson observation in the context of school inspection:
Is there a difference between 20 and 45minute lesson observations?**

- *Franziska Perels, Institute for Educational Sciences, Saarland University, Germany;
f.perels@mx.uni-saarland.de*

Abstract:

In Germany, school inspection, as one kind of external school evaluation, is a new field of scientific investigation. In the framework of school inspection lesson observation is one important method to evaluate the quality of instruction. In this context, there is a discussion in Germany about the length of these observation sequences. In most German states evaluators observe the lesson for a period of 20 minutes (e.g. Hesse), but there are also states in which they use 45 minute lesson observations (e.g. Saxony). Therefore, the aim of the study was to analyse whether there is a significant difference in the evaluation of lesson quality comparing 20 and 45 minute lesson observations.

Regarding the content, the study is based on the Hessian Framework for School Quality (Hessischer Referenzrahmen Schulqualität (HRS), 2007) which describes seven different quality domains. One of these domains is VI "Learning and Instruction", which includes criteria of good instruction. This quality domain is theoretically based on well-known models of school quality such as the QuAIT-Model by Slavin (1996) or the German standards of school and instruction quality (i.e. Helmke, 2004). All instruments of the school inspection in the state of Hesse are based on the HRS. An observation sheet is developed which allows to assess all criteria of the quality domain "Learning and Instruction" (e.g., structured and transparent teaching and learning processes, handling heterogenic learning requirement, supportive learning atmosphere). This instrument is the basis for the lesson observations in this study.

The study was conducted with two independent observers that use the Hessian lesson observation sheet to analyse 20 anonymised lesson sequences after they finished an observer training. To compare the two observations the ratings were appraised by computing Cohen's (1960) Kappa coefficient.

In the present study the assessment of quality of lesson showed in 39 of 43 items an acceptable to excellent consistency by comparing 20 minute with 45 minute lesson observation between the two raters. Therefore it can be assumed, that in this study 20 minute lesson observation was sufficiently significant to assess the quality of lesson as well as 45 minute lesson observations. Even though there are methodical limitations, the findings of this preliminary study can be used in further research.

7. Keynote Speaker III – Prof. Dr. Bieke De Fraine: 17:15 – 18:15 (Room: KO2-F-180)**School effectiveness: Lessons from theory and evidence.**

Prof. Dr. Bieke De Fraine, KU Leuven, Belgium

Abstract

After about four decades of educational effectiveness research, we have learnt that teachers have a greater relative importance than schools. Differences between schools are generally smaller than differences within schools. Despite the rather small school effects, it remains interesting and important to study school-related factors.

One of these factors is school leadership. Research on school leadership has focused on theoretical models such as managerial leadership, instructional leadership, transformational leadership and distributed leadership. In this keynote, we will give an overview of empirical studies comparing these types of leadership in their effect on student and teacher outcomes. In discussing these results, we will highlight the importance of the effectiveness criterion (consistency) and the impact of the school context (contingency).

We will combine the results of leadership studies with the results of an emerging topic in educational effectiveness research: data-based decision making in schools. The central idea is that school leaders and teachers should be able to interpret data, in order to make more informed decisions because data can support school self-evaluation, school policy and school improvement. In this keynote, we will make a plea for studying data-wise leadership and we will draw conclusions for further research.

8. *Banquet: As from 19:00*

The conference dinner takes place in an old traditional building and nice garden. Apart from the dinner, the banquet offers a good opportunity to get into conversation with colleagues and be magically entertained.

The Location:

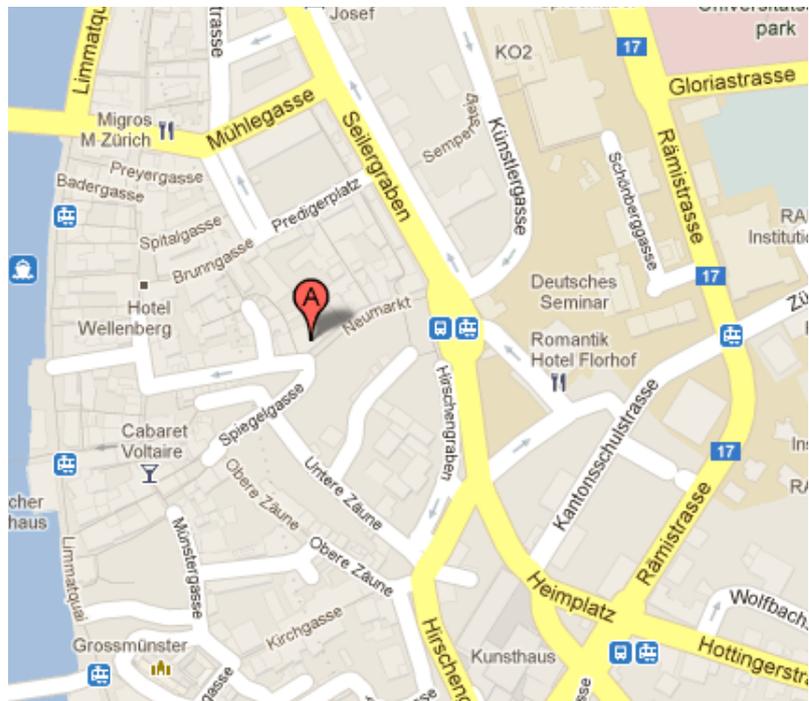
Wirtschaft Neumarkt

Neumarkt 5

8001 Zurich

+41 44 252 79 39

<http://wirtschaft-neumarkt.ch/>



Those, who subscribed for dinner at the registration, please **do not forget to bring your dinner voucher**. For those who did not subscribe for dinner but still want to join, there is a limited number of extra vouchers for 45 EUR / 55 CHF available. For more information, see the Conference Office (Room KO2-F-155).

E. Friday, 31st August 2012

Time	Description
8:30 - 9:30	Keynote Speaker IV – Prof. Dr. Sean Reardon (Room: KO2-F-180)
9:30 – 10:00	Coffee break (Room: KO2-F-152)
10:00 – 11:30	Session VI <ul style="list-style-type: none">• Symposium: The Impact of School Inspections on School Improvement (Room: KOL-F-117)• Papers: Drop-out and Engagement (Room: KO2-F-175)• Papers: Value added in Education (Room: KO2-F-172)• Papers: Competencies and Behaviour (Room: KO2-F-174)• Papers: Early Childhood and Instruction (Room: KOL-F-123)
11:30 – 11:45	Transfer
11:45 – 12:45	Keynote Speaker V – Prof. Dr. Bert Creemers (Room: KO2-F-180)
12:45 – 13:00	Awarding of the Best Poster & Closing (Room: KO2-F-180)

1. Keynote Speaker IV – Prof. Dr. Sean Reardon: 08:30 – 09:30 (Room: KO2-F-180)**Income inequality, schooling, and educational outcomes:
US and international evidence.**

Prof. Dr. Sean Reardon, Stanford University, United States

Abstract:

It is now well known that income inequality among the families of school-age children in the US (and in some other developed countries) has grown sharply in the last 40 years. But how has this rising income inequality affected patterns of educational outcomes? In this talk, I will try to answer this question, using evidence from three recent studies.

First, I describe trends in the 'income achievement gap' (the test score gap between children from high- and low-income families) in the U.S. over the last 50 years. The evidence shows that the association between income and achievement has grown by 40% in the last several decades. Second, I describe trends in the relationship between family background (especially income) and the quality of the colleges in which students enroll. Here the trend evidence suggests that the income has become more predictive of college quality over time, largely because of the growing association of income and academic achievement. Third, I investigate the cross-national association between national income inequality levels and a country's income achievement gap, using data from 19 OECD countries in 2001-2009. The international data indicate that the income achievement gap is largest in the countries with the greatest inequality.

I will conclude the talk with some discussion of the reasons for the widening income achievement gap. In particular, I argue that rising income inequality and the growing importance of education in the labor market have made schooling a much more competitive process; and as schooling grows more competitive, family resources—and inequalities in family resources—matter more

2. Session VI: 10:00 – 11:30

Symposium: The Impact of School Inspections on School Improvement (Chair: Peter Tymms; Discussant: Eckhard Klieme) (Room: KOL-F-117)

- *Herbert Altrichter*: The Impact of School Inspections: Analysing Assumptions of European Inspectorates of Education.
 - *Stephan Huber*: The Swiss Case: Securing Good Education and Equal Opportunities through Different Cantonal Approaches of External Evaluation.
 - *Melanie Ehren*: Dutch risk-based school inspections; their role and impact in a polycentric steering context.
-

Paper Session: Drop-out and Engagement (Room: KO2-F-175)

- *Phil Abrami*: Evaluation of New Approaches, New Solutions Intervention Strategy.
 - *Carl Lamote*: Different pathways towards dropout; the role of engagement in early school leaving.
 - *Virginie Hospel*: The effect of autonomy-supportive and guidance practices on engagement and learning: a longitudinal multi-level study.
-

Paper Session: Value added in Education (Room: KO2-F-172)

- *Anneke C. Timmermans*: Value added based on educational careers in Dutch secondary education.
 - *Rianne Janssen*: Student, class and school differences in retrieving information in Grade 8.
-

Paper Session: Competencies and Behaviour (Room: KO2-F-174)

- *Tibor Vidákovich*: The analysis of cognitive and affective effects of competence-based trainings.
 - *Karen Kerr*: The Effects of the Mate-Tricks Programme on Pro-social Behaviour Outcomes of Children aged 8-9 Years of Age: A Randomised Controlled Trial.
-

Paper Session: Early Childhood and Instruction (Room: KOL-F-123)

- *Corina Wustmann Seiler*: Systematic Observation and Documentation of Children's Learning? Effects on Professionalization and Childcare Quality in Early Childhood Settings.
 - *Maryse Bianco*: Teaching oral text comprehension at early grades: empirical evidence from a 3 years longitudinal study and theoretical implications.
 - *Caroline Theurer*: Measuring creativity-supportive climate in the classroom: The impact of environmental conditions on creativity development during elementary school.
-

**Symposium: The Impact of School Inspections on School Improvement
(Room: KOL-F-117)**

Chair: Peter Tymms, Durham University/CEM, United Kingdom; Peter.Tymms@cem.dur.ac.uk

Discussant: Eckhard Klieme, German Institute for International Educational Research (DIPF), Germany; klieme@dipf.de

Abstract:

The recent decade has shown an increased quest for quality of education as a result of economic globalization and the availability of international assessments of student performance providing measures for comparative appreciation of education results. School inspection is used by most European education systems as a major instrument for controlling and promoting the quality of schools. This session begins by presenting an overarching conceptual model that describes the commonalities and differences of a number of distinctive European inspection models and the mechanisms of these European Inspectorates on how inspection is supposed to work and the effects it should have. The model describes different types of school inspection, their role in setting expectations, providing feedback and public reports and motivating stakeholders that operate in the external context of schools to act on inspection findings and standards. The second and third paper present evidence of two of these specific cases in Switzerland and the Netherlands that enhance our understanding of the extent to which these assumed mechanisms and effects are valid.

Keywords: *Inspection, accountability, cross-country*

**PAPER 1: The Impact of School Inspections:
Analysing Assumptions of European Inspectorates of Education.**

- *Herbert Altrichter, Johannes Kepler Universität Linz, Austria; herbert.altrichter@jku.at*
- *Melanie Ehren, University of Twente, The Netherlands; m.c.m.ehren@utwente.nl*
- *Joe O'Hara & Gerry McNamara, School of Education Studies, Dublin City University, Ireland; Joe.OHara@dcu.ie, gerry.mcnamara@dcu.ie*

**PAPER 2: Title: The Swiss Case: Securing Good Education
and Equal Opportunities through Different Cantonal Approaches of External Evaluation.**

- *Stephan Huber & Guri Skedsmo, University of Teacher Education Central Switzerland, Switzerland; stephan.huber@phz.ch, guri.skedsmo@phz.ch*

**PAPER 3: Dutch risk-based school inspections;
their role and impact in a polycentric steering context.**

- *Melanie Ehren, University of Twente, The Netherlands; m.c.m.ehren@utwente.nl*

Paper Session: Drop-out and Engagement (Room: KO2-F-175)**PAPER 1: Evaluation of New Approaches, New Solutions Intervention Strategy.**

- *Phil Abrami, Department of Education, Concordia University, Canada; abrami@education.concordia.ca*
- *Michel Janosz, Jean Bélanger, Christian Dagenais, François Bowen, Sylvie C. Cartier, Roch Chouinard, Jean-Sébastien Fallu, Nadia Desbiens, Gilles Roy, Sophie Pascal & Louis Turcotte, School Environment Research Group, University of Montreal, Canada; michel.janosz@umontreal.ca, belanger.j@uqam.ca, christian.dagenais@umontreal.ca, francois.bowen@umontreal.ca, sylvie.cartier@umontreal.ca, roch.chouinard@umontreal.ca, jean-sebastien.fallu@umontreal.ca, nadia.desbiens@umontreal.ca, gilles.roy5415@videotron.ca, sophie.pascal@umontreal.ca, sophie.pascal@umontreal.ca*
- *Larysa Lysenko, Department of Education, Concordia University, Canada; lysenko@education.concordia.ca*

Abstract:

Introduced in 2002, the New Approaches, New Solutions Intervention Strategy (NANS) aimed to reduce the impacts of social inequalities on the school success of students from 197 secondary schools in the province of Quebec (Canada), through mobilization around a structured collective problem-solving approach. From the onset, an evaluation program and team were set up, with the task of assessing the implementation and effects of the Strategy. The evaluation of implementation was based on a combination of quantitative and qualitative methods to answer two main questions: Was the Strategy implemented as expected? What explains the gaps between expectations and achievements? The evaluation of effects was based on quantitative methods (annual surveys) and aimed to answer the following questions: Did the intervention Strategy produce the expected changes on the educational potential of schools and student success (achievement, psychosocial adjustment, dropout)? The progress of 66 sampled NANS schools (30 000 students, 4000 staff members), selected to represent the 197 schools of the Strategy, was compared to 11 comparison schools between 2002 and 2008. To improve the ability to attribute observed changes to the intervention of NANS, we verified how the magnitude of these changes varied according to the quality of the Strategy's implementation in schools. Results showed that few schools have managed to put all the recommended NANS steps into practice or achieve the desired level of rigour. Consequently, the Strategy has only partially achieved its objectives regarding the educational potential of schools and only very partially in terms of student success. However, schools where the principles fostered by the NANS strategy were most respected showed the most convincing results. Overall, the findings provided some empirical support to the Strategy's potential and helped identify the organizational and education actions needed to better support school capacity building

Keywords: *School success, School dropout, Large-scale prevention*

PAPER 2: Different pathways towards dropout; the role of engagement in early school leaving.

- *Carl Lamote & Jan Van Damme, Centre for Educational Effectiveness and Evaluation, The Education and Training Research Group KU Leuven, Belgium; carl.lamote@ppw.kuleuven.be, jan.vandamme@ppw.kuleuven.be*
- *Wim Van Den Noortgate, Methodology of Educational Sciences Research Group, KU Leuven, Belgium; wim.vandennoortgate@kuleuven-kulak.be*
- *Sara Speybroeck, Centre for Educational Effectiveness and Evaluation, The Education and Training Research Group, KU Leuven, Belgium; sara.speybroeck@ppw.kuleuven.be*

Abstract:

In this study, we address the effect of school engagement on dropout in secondary education. In the literature, school engagement is a central theme in most of the dropout theories. However, when engagement was included, the variable referring to the engagement of the student was a time-invariant variable, ignoring the fact that disengagement is a gradual process. By making use of a discrete-time survival mixture model (DTSMA, Muthén & Masyn, 2005), we take this gradualness into account, and we are able to distinguish different groups in the development of engagement and relate these to dropout. The DTSMA combines the strengths of a growth mixture model and a discrete-time survival model. Combining these elements allowed us to identify different subgroups with different engagement trajectories. For every subgroup, we could then estimate the hazard to dropout. We conducted this analysis on two conceptualisations of engagement: emotional engagement and behavioural engagement. Our results indicate that for both constructs, a two-class model (with a high-level and a low-level group) yielded the best model fit. These subgroups differed significantly on the hazard to dropout. Students in the high-level subgroup of emotional engagement and behavioural engagement had a significantly lower chance to dropout. Class membership of these subgroups was mainly predicted by gender, grade retention in primary/secondary education, SES and the initial cognitive ability of the student.

Keywords: *dropout, mixture, engagement*

**PAPER 3: The effect of autonomy-supportive and guidance practices
on engagement and learning: a longitudinal multi-level study.**

- *Virginie Hospel & Benoît Galand, Université Catholique de Louvain, Belgium;
virginie.hospel@uclouvain.be, benoit.galand@uclouvain.be*

Abstract:

The cognitive load theory (CLT) and the self-determination theory (SDT) are two preeminent theoretical frameworks which aim at explaining the impact of teaching practices on students. Based on research which shows our limited cognitive resources, the CLT highlights the importance of teacher guidance (structure) in learning. Research on educational effectiveness also stresses the efficiency of direct, structured teaching (Klahr & Nigam, 2004). However, these studies paid little attention to the effects of teachers' practices on students' engagement, another process largely documented as crucial for achievement. The SDT stress the interest of autonomy-support (provision of choice, student participation) for students' engagement. If these frameworks seem to have opposite implications, some authors suggest that structure and autonomy could be two orthogonal dimensions (Reeve, Deci & Ryan, 2004). However, the effects of their interaction have never been tested. The aim of the current study is to determine the effects (main effects and interaction) of the autonomy-support teaching and structure on engagement and learning. Five hundred and seventy-five students were asked to complete two questionnaires about engagement and perceived teaching practices in mathematics course and their knowledge in mathematics), in 7th grade and in 8th grade. A multi-level analytical framework was used to take the classroom level into account. Results displayed a main effect of teacher guidance on 8th grade engagement, controlling for 7th grade engagement. No main effect of autonomy-support was found on engagement. No direct effect of teacher practices on learning was found. However, engagement was found to be a significant predictor of learning. No effects of interaction of autonomy and structure were found on 8th grade engagement and learning when taking 7th grade engagement or learning into account. The results stress the key role of structure. This is consistent with CLT and research on direct teaching.

Keywords: *autonomy, guidance, engagement*

Paper Session: Value added in Education (Room: KO2-F-172)**PAPER 1: Value added based on educational careers in Dutch secondary education.**

- *Anneke C. Timmermans**, *Roel J. Bosker*, *Inge F. De Wolf*, *Simone Doolaard* & *Margaretha P.C. Van Der Werf*, *Groningen Institute for Educational Research, University of Groningen, The Netherlands; A.C.Timmermans@rug.nl

Abstract:

Estimating added value as an indicator of school effectiveness in the context of educational accountability often occurs using test or examination scores of students. This study investigates the possibilities of using educational careers instead. A number of advantages of value added model based on educational careers of students can be formulated, such as, (a) the possibility to estimate value added for entire schools in differentiated educational systems, and (b) the expectation that value added based on educational careers is more robust against strategic behavior. Empirical analysis of Dutch cohort data (VOCL'99) for secondary education showed considerable differences in effectiveness between schools in the careers of students. Furthermore, differential school effects were found for socio-economic status and prior achievement. The phenomena of differential school effects for socio-economic and prior achievement are clearly linked to differences in school composition in terms of the tracks the schools offer. This current study shows a number of supposed advantages of value added based on educational careers of students, although the differential school effects and complex statistical modelling remain important limitations of this indicator. Therefore, it might be considered to use value added based on educational careers and test or examination scores as complementary indicators in educational accountability, because despite several flaws both indicators provide valuable information concerning the effectiveness of schools and tracks.

Keywords: *Value added, educational careers, educational accountability, strategic behaviour, differential school effects*

PAPER 2: Student, class and school differences in retrieving information in Grade 8.

- *Rianne Janssen, Lien Willem, Sarah Gielen & Daniël Van Nijlen, Centre for Educational Effectiveness and Evaluation, University of Leuven, Belgium; rianne.janssen@ppw.kuleuven.be, lien.willem@ppw.kuleuven.be, sarah.gielen@ppw.kuleuven.be, daniel.vannijlen@ppw.kuleuven.be*

Abstract:

Differences among students of Grade 8 in their ability to retrieve information from various sources (reference works; tables and graphs plans, drawings, and maps) and to structure verbal information were investigated. As an important background characteristic the student's level of fluid intelligence was taken into account. The data were from a large-scale assessment in which 2927 students from 174 classes of 97 secondary schools from Flanders (Belgium) participated. School and class differences were largely accounted for by students background characteristics. Most of the effects remained significant after controlling for intelligence.

Keywords: *large-scale assessments, added value, multilevel modeling*

Paper Session: Competencies and Behaviour (Room: KO2-F-174)**PAPER 1: The analysis of cognitive and affective effects of competence-based trainings.**

- *Tibor Vidákovich, Institute of Education, University of Szeged, Hungary;*
t.vidakovich@edpsy.u-szeged.hu

Abstract:

Our research was carried out in the framework of an experimental project, aimed at the development of text processing and mathematical competences of students. The project was heavily practice-oriented, and included the competence-based transformation of school materials and the renewal of teaching and learning methods.

The frameworks of development and assessment were based on combined models. Cognitive skills and abilities, motivation and attitudes underlying text processing and mathematical competences were not developed directly, but it was hypothesised that these factors will be indirectly affected by the intervention. The indirect effects of competence-based trainings were analysed on the basis of empirical benchmarks.

Our hypotheses were: over and above the development of text processing and mathematical achievements, (1) significant improvements will be found in the performances of cognitive components, (2) slower decreases will be detected in the results of motivation and attitudes, and (3) some cognitive and affective variables can be used as indicators of indirect effects of competence-based trainings.

Two tests covered the cognitive skills and abilities of the applied competence models, two tests assessed the affective factors, and two tests assessed some competence-components targeted in the training programs. The analysis presented in the paper is based on data from the sample of 5th graders, from 90 volunteering primary schools. The number of subjects who participated in both the pre- and the post-test was about 2,100.

Regarding the cognitive skills and abilities, the text processing as well as the mathematics program could accelerate development, and their combination resulted in yet stronger acceleration. As concerns the affective factors, the text processing program could slow down the decrease of learning motivation, and improved learning attitudes. These differences can be interpreted as indirect effects of competence trainings. But the effect sizes are low, therefore the effects of the trainings are relatively small.

Keywords: *competence-based training, cognitive and affective factors, indirect effects*

PAPER 2: The Effects of the Mate-Tricks Programme on Pro-social Behaviour Outcomes of Children aged 8-9 Years of Age: A Randomised Controlled Trial.

- *Karen Kerr, Andy Biggart, Paul Connolly & Liam O'Hare, Centre for Effective Education, School of Education, Queen's University Belfast, United Kingdom; l.ohare@qub.ac.uk*

Abstract:

This paper presents the findings of an evaluation of Mate-Tricks After-school programme. It is a manualised curriculum providing 59 child only, 6 parent only and 3 family sessions conducted over a one year period. The curriculum is a bespoke programme utilising components of two existing behavioural interventions, i.e., the Strengthening Families Program and the Coping Power Program.

Generally, there is a lack of evidence for the effectiveness of after-school behaviour programmes. Furthermore, recent research on this type of programme has shown a lack of positive effects with negative effects occasionally being found.

The paper reports the findings of a Randomised Controlled Trial of 592 children who participated in a three year (rolling cohort) pilot of the programme that sought to test whether the programme was having a measurable effect in relation to 6 primary and 15 secondary outcomes.

Data were collected via self-complete questionnaires from children, their parents and teachers at pre-test (in September) and post-test (in June the following year). The participants for which there was full data were found to still be well-matched at pre-test.

Alongside the trial, a comprehensive process evaluation was conducted with all stakeholders including: qualitative interviews, focus groups, document analysis and setting observations.

Overall, while the Mate-tricks programme was found to be extremely well received by all stakeholders, but the trial found no evidence that it was having any measurable effect on 19 out of the 21 outcomes. Furthermore, it was found to have a small negative effect on two outcomes.

The paper concludes with the evaluation recommendations, which was to end the programme and replace it with a traditional youth service. There is also a discussion on how the dissemination of the results was managed in a community context as well as the theoretical contributions of the study.

Keywords: *Pro-social Behaviour, After-School Programme, Randomised Controlled Trial*

Paper Session: Early Childhood and Instruction (Room: KOL-F-123)**PAPER 1: Systematic Observation and Documentation of Children's Learning?
Effects on Professionalization and Childcare Quality in Early Childhood Settings.**

- *Corina Wustmann Seiler & Heidi Simoni, Marie Meierhofer Institute for the Child, Switzerland;*
wustmann@mmi.ch, simoni@mmi.ch

Abstract:

Systematic observation and documentation of children's learning processes is understood as a quality criterion of professional practice as well as an important professional competence. The method of systematic observation and documentation of children's learning called "Learning Stories" developed by Carr (2001) in New Zealand and adapted for German-speaking countries by the German Youth Institute (see Leu et al., 2007) is therefore commonly used in childcare centres as an instrument for promoting early learning processes of children. However, up to now there are no evidence-based findings internationally on the extent to which systematic observation and documentation of children's learning further develop – as it is assumed and implemented in practice – the quality in the early childhood education and care system. Beyond that, there has been no representative study on childcare quality in early childcare centres in Switzerland yet.

The study is based on a control and comparison group design with two respectively three measurement points, with an additional follow-up-measurement for the intervention group: prior to the beginning of implementing systematic observation and documentation of children's learning (baseline t1, autumn 2009), at the end (outcome t2, autumn 2010) and one year after (outcome t3, autumn 2011). The sample consists of N=38 childcare centres in the German-speaking part of Switzerland: n=12 as intervention group working with "Learning Stories", n=13 as a waiting control group and n=13 as a comparison group working with another observation and documentation method, developed by the German INFANS Institute ("Infans Concept", see Andres & Laewen, 2011). Childcare quality is assessed via standardized written questionnaires by the teaching personnel and childcare centre directors and via standardized external observations.

As expected, results demonstrate significant effects of systematic observation and documentation of children's learning on childcare quality. The intervention and comparison groups show higher quality ratings than the control group.

Keywords: *Early childhood education, Quality measurement in childcare settings, Professionalization*

**PAPER 2: Teaching oral text comprehension at early grades:
empirical evidence from a 3 years longitudinal study and theoretical implications.**

- *Maryse Bianco, Pascal Bressoux & Laurent Lima, Université P. Mendès France;
Maryse.bianco@upmf-grenoble.fr*

Abstract:

The relationship between oral language development, early training and reading acquisition was examined in a sample of 1270 French children in a 3-year longitudinal study. Children were entered into three experimental groups. The first one was trained at phonological awareness (Pho group) and the two others received a comprehension training program. One group received an explicit training designed to teach specific comprehension skills (CS group). The other group received an album analysis program (AA group). The Groups were further divided in 2 subgroups to allow the manipulation of training duration: 1/ two semesters, groups Pho1, CS1, AA1 and 2/ one semester, Pho2, CS2, AA2 groups. A further group served as control. Multilevel growth curve models allowed us to model the shape of relative change in oral language skills. The results showed that compared to the control group: 1/ the CS group improved significantly student's oral comprehension while the AA program did not. Moreover, the positive effect of the CS program was effective nine month after the ending of the training period, if the training spanned a relatively long period (CS1). 2/ Training aimed at enhancing specific skills had specific effects: CS program improved comprehension but not phonological skills; the reverse was true for the Pho program. Hierarchical linear models were used to examine the relationships between early language skills, training and reading acquisition at first grade. They showed that both phonological awareness and oral comprehension at 4 years of age are relevant for reading acquisition two years later, while revealing a symmetrical influence on word identification and reading comprehension. Training effects showed that the Pho program had a positive effect on word reading and that the CS program had a positive effect on reading comprehension. These results provide insights for early oral language instruction and effective teaching practices.

Keywords: *effective teaching practice, early education, longitudinal studies, reading*

**PAPER 3: Measuring creativity-supportive climate in the classroom:
The impact of environmental conditions on creativity development during elementary school.**

- *Caroline Theurer & Frank Lipowsky, University of Kassel, Germany; Theurer@uni-kassel.de, Lipowsky@uni-kassel.de*

Abstract:

Creativity, regarded as a skill for unusual problem-solving, can be a meaningful prerequisite for learning processes. Furthermore, creativity is considered to be an educational goal in elementary school. Though, for elementary school age there is still a research gap on investigating creativity and its development. In addition to individual factors, external conditions are mentioned as possible determinants for creativity development. From a theoretical point of view, characteristics of the class, respectively the teacher (such as acceptance of unconventionality, enhancing imaginativeness or a trustful relationship towards classmates and teachers) determine the classroom-climate and, therefore, might have an impact on creativity development. Since the effects of these characteristics on creativity development have not been investigated in a systematic and longitudinal approach there is only little empirical evidence for these assumptions.

One central question addressed in the paper presentation is:

- Is it possible, to measure creativity-supportive climate in the classroom objectively and reliably?

Two further questions are:

- How does creativity develop during elementary school?
- Does creativity-supportive climate affect students' creativity development?

The sample derives from the PERLE-Project and consists of approximately 730 elementary school children. Creativity was measured at the beginning of first, at the end of second and at the end of fourth grade. The video studies were conducted in first and second grade. The creativity-supportive climate was rated by means of video-based observation of Arts-, Mathematics-, and German-lessons (N = 63).

First results show that it is possible to measure creativity-supportive classroom-climate reliably. Furthermore, the children's creativity development is very unstable which emphasizes the need to identify its predictors.

Keywords: *creativity development, video-based observation, elementary school*

3. **Keynote Speaker V – Prof. Dr. Bert Creemers: 11:45 – 12:45 (Room: KO2-F-180)**

**Developing testing and using theoretical models for promoting
quality and equity in education.**

Prof. Dr. Bert Creemers, University of Groningen, The Netherlands

Abstract:

After a short overview of theoretical and methodological developments of Educational Effectiveness Research (EER), this paper concentrates on the development of the dynamic model and provides research evidence supporting its validity. It is argued that the ultimate aim of developing and testing the dynamic model was to establish stronger links between EER and school improvement. Thus, the importance of establishing an evidence-based and theory-driven approach to school improvement is stressed. Moreover, the Dynamic Approach to School Improvement (DASI) that attempts to use of the knowledge-base of EER for improvement purposes is presented. Beyond presenting the essential characteristics and the stages of DASI, studies investigating its impact on promoting student learning outcomes are outlined. Finally, we draw suggestions for further research in developing, testing and using theoretical models for promoting quality in education. These are concerned with two major research areas of EER. First, it is argued that the research agenda of EER should be expanded and cover issues associated not only with modeling and evaluating effectiveness but also with developing theory-driven and evidence-based approaches to school improvement. This implies that we need to investigate the role of the research team in supporting schools to improve their effectiveness and the impact of formative evaluation in school improvement efforts next to the role of summative evaluation. Second it is acknowledged that only few studies investigated the impact of effectiveness factors on promoting equity. Thus, further research is needed to identify whether factors included in the dynamic model are associated both with the quality and the equity dimension of educational effectiveness. Since there is some evidence showing that schools can achieve both dimensions of educational effectiveness, we need to develop further the dynamic model and examine whether DASI can promote both quality and equity in education.

4. **Awarding of best poster and Closing: 12:45 - 13:00 (Room: KO2-F-180)**



The International Journal of Educational Management is pleased to sponsor the Best Poster Award. The author(s) of the winning poster will receive

- a certificate from Emerald endorsed by the journal;
- a Euro 250 prize;
- publicity through Emerald's networks;
- at the editor's discretion, the opportunity to publish in the journal.

The award ceremony will take place on Friday, August, 31st at 12.45. The members of the jury are: Prof. Pam Sammons (coordinator SIG 18), Prof. Leonidas Kyriakides (coordinator SIG 18), Dr. Marcus Emmerich (Chair) and Prof. Dr. Tobias Feldhoff.

F. Register of Persons

A

Abrami, Phil	107, 110
Adl-Amini, Katja	77
Altrichter, Herbert	1, 107, 108
Angehern, Adrienne	1
Antoniou, Panayiotis	69, 80
Armstrong, Paul	73

B

Baltes, Beate	69, 84
Baumert, Jürgen	1
Becker, Michael	34
Bélanger, Jean	110
Belfi, Barbara	69, 74
Bell, Courtney A.	19, 22, 63
Bergamin, Per	58
Bianco, Maryse	107, 118
Biggart, Andy	49, 52, 116
Bischof, Linda Marie	87, 88
Bos, Wilfried	1, 92, 95
Bosker, Roel J.	1, 62, 113
Bowen, Daniel H.	69, 86
Bowen, François	110
Bressoux, Pascal	87, 90, 118
Buchheit, Julia	31
Büttner, Gerhard	39

C

Cankar, Gašper	40
Cartier, Sylvie C.	110
Chambers, Bette	49, 60
Chapman, Chris	55, 73
Charalambous, Charalambos Y.	49, 61
Chouinard, Roch	110
Christophersen, Knut-Andreas	99
Clausen, Marten	70
Connolly, Paul	19, 30, 52, 116
Creemers, Bert	1, 40, 120
Criblez, Lucien	17

D

Dagenais, Christian	110
De Fraine, Bieke	1, 29, 44, 54, 74, 87, 88, 102
De Wolf, Inge F.	113
Demski, Denise	69, 70
Denies, Katrijn	29, 33, 43, 87, 96
Desbiens, Nadia	110
Deunk, Marjolein I.	62
Dicke, Anna-Lena	20, 50
Ditton, Hartmut	1, 19, 27
Djakovic, Sanna-Kristina	77

Dolata, Roman	97
Doolaard, Simone	113
Draghici, Diana.....	75
Dumont, Hanna	33, 34
Dymek, Stephanie.....	59

E

Eberle, Franz.....	50
Ehren, Melanie	107, 108
Elstad, Eyvind	87, 99
Emmerich, Marcus	1

F

Fallu, Jean-Sébastien	110
Fauth, Benjamin Caspar	33, 39
Feldhoff, Tobias	87, 88
Feng, J.	56
Frame, Conor	59
Franklin, Scott V.....	59
Friedrich, Alena	69, 78

G

Galand, Benoît	112
Gärtner, Holger	100
Gielen, Sarah	19, 21, 65, 74, 88, 114
Gitomer, Drew H.	22, 49, 63
Goos, Mieke	44, 54, 74, 87, 94
Gräfe, Linda	19, 25
Greene, Jay P.	86

H

Hall, James	26
Halldórsson, Almar M.....	87, 93
Hartig, Johannes	81, 88
Hautamäki, Jarkko	37
Hertel, Silke	69, 77
Hochweber, Jan	69, 81, 88
Hofmann, Verena	83
Holmeier, Monika	1, 50
Holtappels, Heinz Günter	92
Hondrich, Lena	77
Hospel, Virginie	107, 112
Huber, Stephan	107, 108
Hug, Evelyn	1

J

Janosz, Michel	110
Janssen, Rianne	43, 72, 107, 114
Jarren, Otfried	17
Jasińska, Aleksandra	97
Jonkmann, Kathrin	33, 34, 78

K

Kerr, Karen.....	52, 107, 116
Kisida, Brian.....	86
Klein, Esther Dominique.....	49, 50
Klieme, Eckhard.....	1, 39, 47, 88, 98, 107, 108
Ko, James.....	33, 41
Köller, Olaf.....	31
Konstantopoulos, Spyros.....	87, 91
Kühn, Svenja Mareike.....	49, 50
Kupiainen, Sirkku.....	33, 37
Kyriakides, Leonidas.....	1, 33, 40, 46, 80, 87, 88

L

Lamote, Carl.....	107, 111
Leucht, Michael.....	19, 31
Li, J.....	56
Li, Qiong.....	42
Li, Xiaoqing.....	42
Lima, Laurent.....	90, 118
Lintorf, Katrin.....	87, 95
Lipowsky, Frank.....	119
Liu, Hongqiang.....	65
Luyten, Hans.....	1, 49, 66
Lysenko, Larysa.....	110

M

Ma, X.....	56
Maag Merki, Katharina.....	1, 4, 17, 50
Macdonald, Geraldine.....	28
Maguire, Lisa K.....	28
Mannel, Susanne.....	77
Marciniak, Joanna.....	69
Marciniak, Joanna A.....	72
Marjanen, Jukka.....	37
Maué, Elisabeth.....	50
McMahon, Lean.....	40
McNamara, Gerry.....	108
Melhuish, Edward.....	26, 36, 75
Miller, Sarah.....	19, 28
Mitchell, Denise.....	30
Modzelewski, Michał.....	87, 97
Monseur, Christian.....	90
Muijs, Daniel.....	1, 49, 55, 69, 73
Müller, Christoph Michael.....	69, 83

N

Nagengast, Benjamin.....	20, 78
Nagy, Gabriel.....	33, 34
Neumann, Marko.....	34
Ni, Yu-Jing.....	33, 42
Nistor, Nic.....	84

O

O'Hara, Joe	108
O'Hare, Liam	30, 52, 116
Oepke, Maren	49, 50
Oerke, Britta	49, 50
Onghena, Patrick	94

P

Panayiotou, Anastasia	40
Panek, Eliane	1
Pant, Hans Anand	31, 71
Pascal, Sophie	110
Peng, Pai	87, 98
Peng, Wen-Jung	56
Perels, Franziska	87, 101
Petry, Katja	54, 94
Pfeifer, Michael	40
Pfost, Maximilian	33, 38
Pinxten, Maarten	29, 74
Pohl, Steffi	25
Popham, Nathan A.	59

R

Radisch, Falk	87, 88
Ramseier, Erich	1
Reardon, Sean	16, 33, 34, 105
Ren, C.	56
Reusser, Kurt	1
Reynolds, David	55
Rieger, Ina	77
Rieser, Svenja	39
Rose, Norman	34, 49, 50
Rosenbusch, Christoph	70
Roy, Gilles	110

S

Saelzer, Christine	49, 57
Sammons, Pam	1, 19, 26, 36, 75
Sayre, Eleanor C.	49, 59
Scharenberg, Katja	87, 92
Scheerens, Jaap	1, 18
Schmidt, Uwe	70
Schmitz, Bernhard	76, 78
Schreier, Brigitte	19, 20
Seiler, Corina Wustmann	107
Sheard, Mary	60
Simoni, Heidi	117
Siraj-Blatchford, Iram	26, 36, 75
Skedsmo, Guri	108
Smeaton, George	84
Smees, Rebecca	75
Speybroeck, Sara	111
Staman, Laura	66
Stevens, Joseph J.	19, 23, 79

Strand, Steve	1, 49, 64
Studer, Felix	83
Suzuki, Masayuki	69, 82
Sylva, Kathy	26, 36, 75

T

Taggart, Brenda	26, 36, 75
Televantou, Ioulia	19, 24
Theurer, Caroline	107, 119
Thiel, Felicitas	71
Thillmann, Katja	71
Thomas, Sally	49, 56
Tian, H.	56
Timmermans, Anneke C.	107, 113
Toth, Katalin	33, 36, 69, 75
Trautwein, Ulrich	20, 34, 50, 76, 78
Traynor, Anne	91
Turcotte, Louis	110
Turmo, Are	99
Tymms, Peter	107, 108

V

Vainikainen, Mari-Pauliina	37
van Ackeren, Isabell	70
Van Damme, Jan	1, 29, 40, 44, 49, 54, 65, 74, 94, 111
Van Den Noortgate, Wim	111
Van Der Werf P.C., Margaretha	113
Van Kuijk, Mechteld F.	49, 62
Van Nijlen, Daniël	114
van Ophuysen, Stefanie	1, 95
Van Petegem, Peter	1
Van Raemdonck, Dirk C.	86
Vandecandelaere, Machteld	29, 33, 44, 54
Vanlaar, Gudrun	19, 29, 44, 49, 54
<i>Verhaeghe, Jean Pierre</i>	74
Vidákovich, Tibor	107, 115

W

Wagner, Wolfgang	50, 76
Warwas, Jasmin	39
Werlen, Egon	49, 58
Werth, Sarah	69, 76
Wieckert, Sarah	49, 53
Willem, Lien	43, 114
Wurster, Sebastian	69, 71, 87, 100
Wustmann Seiler, Corina	117

Z

Zhou, De-Hui	42
Zvoch, Keith	23, 69, 79
Zwingenberger, Anja	69, 85