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## Publications

### **Værktøjer til måling af elevers interesse og motivation i naturfagsundervisningen**

Petersen, M. R., Dohn, N. B., Villumsen, N. & Schrøder, T. B., Jul 2024, NAFA. 36 p.

### **Design Principles for Disciplinary Learning Designs with Unplugged Computational Thinking as Pedagogical Means.**

Dohn, N. B. & Dohn, N. B., Jun 2024, *Proceedings of the 18th International Conference of the Learning Sciences - ICLS 2024. Buffalo, USA: International Society of the Learning Sciences.* Lindgren, R., Asino, T. I., Kyza, E. A., Loori, C. K., Keifert, D. T. & Suárez, E. (eds.). Buffalo, NY, p. 2115-2116 2 p.

### **Student Motivation in Unplugged Computational Thinking Activities in Upper Secondary Science Education**

Dohn, N. B. & Dohn, N. B., Oct 2023, *Proceedings of the 17th International Conference of the Learning Sciences - ISLS 2023.* D. Slotta, J. & S. Charles, E. (eds.). Montreal: International Society of the Learning Sciences (ISLS), p. 1767-1768 2 p.

### **A gender perspective on the structure of adolescents' interest in science**

Dohn, N. B., Sept 2022, In: *International Journal of Science Education.* 44, 10, p. 1565-1582 18 p.

### **Student motivation in science learning with embodied Computational Thinking**

Dohn, N. B. & Dohn, N. B., Jun 2022, *Proceedings of the 16th International Conference of the Learning Sciences, ICLS 2022.* Chinn, C., Tan, E., Chan, C. & Kali, Y. (eds.). p. 1850-1851 2 p.

### **Interlab: 11 pædagogiske formater**

Dohn, N. B. (Editor), Madsen, S. R. (Editor), Møller, K. L. (Editor), Sølvberg, J. (Editor) & Thomsen, M. B. (Editor), Feb 2022, DPU - Danmarks Institut for Pædagogik og Uddannelse. 32 p.

### **Predictors of students' interest in a citizen science programme**

Dohn, N. B., Dec 2021, In: *International Journal of Science Education.* 43, 18, p. 2956-2973 18 p.

### **Students' interest in Scratch coding in lower secondary mathematics**

Dohn, N. B., Jan 2020, In: *British Journal of Educational Technology.* 51, 1, p. 71-83 13 p.

### **Naturfag**

Sørensen, H. & Dohn, N. B., Dec 2019, *PISA 2018 : danske unge i en international sammenligning.* Christensen, V. T. (ed.). København: VIVE - Det Nationale Forsknings- og Analysecenter for Velfærd, p. 278-310

### **A comparative study of learning designs for the transformation of knowledge in undergraduate laboratory physics**

Dohn, N. B. & Dohn, N. B., 2019, *Designing for Situated Knowledge Transformation.* Dohn, N. B., Hansen, S. B. & Hansen, J. J. (eds.). Oxon: Routledge, p. 231-248 17 p. (Routledge Research in Education).

### **Elevers selvregulering og interesse i et it-støttet tværfagligt forløb**

Dohn, N. B., Aug 2018, *Innovativ undervisning med IT: forskning i tre demonstrationsskoleforsøg II.* Bundsgaard, J., Georgsen, M., Ting Graf, S., Illum Hansen, T. & Krog Skott, C. (eds.). Aarhus: Aarhus Universitetsforlag, p. 203-219

(Didaktiske studier; No. 4).

#### **Elevers interesse under ekskursion til et rensningsanlæg**

Madsen, K. Ø. & Dohn, N. B., Mar 2018, In: MONA: Matematik og Naturfagsdidaktik. 1, p. 27-39 13 p.

#### **The role of teacher questions in the chemistry classroom**

Dohrn, S. W. & Dohn, N. B., Jan 2018, In: Chemistry Education Research and Practice. 19, 1, p. 352-363 12 p.

#### **Muligheder og udfordringer ved at forene fagmål og innovation i biologiundervisning**

Aude, N. J. & Dohn, N. B., Dec 2017, In: MONA: Matematik og Naturfagsdidaktik. 4, p. 57-72 16 p.

#### **Integrating Facebook in upper secondary biology instruction: a case study of students' situational interest and participation in learning communication**

Dohn, N. B. & Dohn, N. B., 22 Nov 2017, In: Research in Science Education. 47, 6, p. 1305-1329 25 p.

#### **Interest and emotions in science education**

Petersen, M. R. & Dohn, N. B., 2017, *Exploring emotions aesthetics and wellbeing in science education research*. Bellocchi, A., Quigley, C. & Otrell-Cass, K. (eds.). Schweiz: Springer, p. 187-202 (Cultural Studies of Science Education, Vol. 13).

#### **Elevers holdninger og forventninger i forhold til naturvidenskab**

Sørensen, H. & Dohn, N. B., 6 Dec 2016, *PISA 2015: danske unge i en international sammenligning*. Christensen, V. T. (ed.). København: KORA, Det Nationale Institut for Kommuners og Regioners Analyse og Forskning, p. 83-110

#### **Om naturfagene i PISA og i folkeskolen**

Sørensen, H. & Dohn, N. B., 6 Dec 2016, *PISA 2015: danske unge i en international sammenligning*. Christensen, V. T. (ed.). København: KORA, Det Nationale Institut for Kommuners og Regioners Analyse og Forskning, p. 17-47

#### **Students' motivation toward laboratory work in physiology teaching**

Dohn, N. B., Fago, A., Overgaard, J., Madsen, P. T. & Malte, H., Sept 2016, In: Advances in Physiology Education. 40, 3, p. 313-318 6 p.

#### **DiffGame: Game-based mathematics learning for physics**

Pedersen, M. K., Svenningsen, A., Dohn, N. B., Lieberoth, A. & Sherson, J., 20 Jul 2016, In: Procedia - Social and Behavioral Sciences. 228, p. 316-322 7 p.

#### **Using video recording glasses to get a first person perspective**

Dohn, N. B. & Dohn, N. B., Jun 2016, *12th International Conference of the Learning Sciences, ICLS 2016: Transforming Learning, Empowering Learners, Proceedings*. Looi, C.-K., Polman, J., Cress, U. & Reimann, P. (eds.). Singapore: International Society of the Learning Sciences, Vol. 2. p. 1159-1160 2 p.

#### **Genetikrapport - en undersøgelse af elevers genrekompeterer i biologi**

Dohn, N. B., Jan 2015, *Elevskrivere i gymnasiefag*. Krogh, E., Christensen, T. S. & Jakobsen, K. S. (eds.). Odense: Syddansk Universitetsforlag, p. 245-266 21 p.

#### **Motiverende og interesseskabende naturfagsundervisning**

Dohn, N. B., Sept 2014

#### **Naturfagsmaraton: et (interesseskabende?) forløb i natur/teknik**

Dohn, N. B., Jun 2014, In: MONA - Matematik- og Naturfagsdidaktik. 2014, 2, p. 7-22 15 p.

#### **Naturvidenskab**

Sørensen, H. & Dohn, N. B., Dec 2013, *PISA 2012: danske unge i en international sammenligning*. Egelund, N. (ed.). København: KORA, Det Nationale Institut for Kommuners og Regioners Analyse og Forskning, 978-87-7488, p. 97-108 12 p.

**Informal communicative practices in formal settings: Facebook as mediator between contexts**  
Dohn, N. B. & Dohn, N. B., 12 Jun 2013, In: *Ethnicomp*. 13, p. 128-134 7 p.

**Situational interest in engineering design activities**

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**Upper secondary students' situational interest: a case study of the role of a zoo visit in a biology class**

Dohn, N. B., 2013, In: *International Journal of Science Education*. 35, 16, p. 2732–2751 20 p.

**Om at måle elevers interesse: operationaliseringens svære kunst**

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**Situational interest of high school students who visit an aquarium**

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**Interesse: en vigtig forudsætning for biologistuderendes engagement i zoofysiologi**

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**PCR med Lego Mindstorms: hur man bygger en tämligen billig och programmerbar PCR-apparat med Lego-bitar**

Bonderup Dohn, N., 2010, In: *Bioscience Explained*. 5, 2, p. 1-9 9 p.

**PCR with Lego Mindstorms: How to build a fairly inexpensive programmable PCR machine with Lego-bricks**

Bonderup Dohn, N., 2010, In: *Bioscience Explained*. 5, 2, p. 1-9 9 p.

**The formality of learning science in everyday life: a conceptual literature review**

Bonderup Dohn, N., 2010, In: *NorDiNa: Nordic Studies in Science Education*. 6, 2, p. 144-154 11 p.

**The situational interest of undergraduate students in zoophysiology**

Dohn, N. B., Madsen, P. T. & Malte, H., 2009, In: *Advances in Physiology Education*. 33, p. 196-201

**A social constructivist perspective on situational interest in the biology classroom**

Dohn, N. B., 2008. 1 p.

**Biologiekursion - og elevers interesse og læring**

Dohn, N. B., 2007, In: *Nyhedsbrev*. 17, p. 15-18 4 p.

**Elevers interesse i naturfag - et didaktisk perspektiv**

Dohn, N. B., 2007, In: *MONA: Matematik og Naturfagsdidaktik*. 3, p. 7-24 18 p.

**Gymnasieelevers situationelle interesse i forskellige læringsammenhænge i faget biologi**

Dohn, N. B., 2007, Odense: Institut for Filosofi, Pædagogik og Religionsstudier, Syddansk Universitet. 250 p.

**Situeret interesse i biologi**

Dohn, N. B., 2006, *Naturfagsdidaktikkens mange facetter: Proceedings fra Det 8. nordiske Forskersymposium om undervisning i naturfag*. Bering, L., Dolin, J., Krogh, L. B., Sølberg, J., Sørensen, H. & Troelsen, R. (eds.). Danmarks Pædagogiske Universitetsforlag, p. 285-291 7 p.

**Isolering af humant genomisk DNA**

Dohn, N. B. & Bramsen, J. B., 2005, In: *Biofag*. 4, p. 32-39 8 p.

### **Situated interest in biology learning contexts**

Dohn, N. B., 2005, *Proceedings of The First Nordic Network of Researchers in Science Communication*. Michelsen, C. (ed.). Faculty of Science and Engineering, University of Southern Denmark, p. 5-8 4 p.

### **Bicarbonate binding to hemoglobin links oxygen and carbon dioxide transport in hagfish**

Fago, A., Malte, H. & Dohn, N. B., 1999, In: *Respiratory Physiology & Neurobiology*. 115, 3, p. 309-15 6 p.

### **Volume regulation in red blood cells**

Dohn, N. B. & Malte, H., 1998, *The biology of hagfish*. Jørgensen, J. M., Lomholt, J. P., Weber, R. E. & Malte, H. (eds.). London: Chapman /, p. 300-306 7 p.

## **Projects**

### **WinnerS: Wirkungen naturwissenschaftlicher Schülerwettbewerbe**

Dohn, N. B. (Participant)  
01/05/2016 → 31/12/2020

### **Værktøj til måling af interesse og motivation i naturfag**

Dohn, N. B. (PI), Petersen, M. R. (PI), Villumsen, N. (Participant) & Schrøder, T. B. (Participant)  
01/01/2023 → 31/12/2023

### **InterLab: Udviklingsprojekt om interaktive laboratorier**

Thomsen, M. B. (Project manager), Møller, K. L. (Participant), Gislev Kjærsgaard, T. (Participant), Dohn, N. B. (Participant) & Larsen, A. H. (Participant)  
01/09/2020 → 29/07/2022

### **Udviklingsprojekter med demonstrationsskoleforsøg**

Bundsgaard, J. (Project manager), Lindenskov, L. (Participant), Holst, F. (Participant), Fougst, S. S. (Participant), Lund, K. (Participant), Jensen, H. S. (Participant), Hasse, C. (Participant), Allerup, P. N. (Participant), Bremholm, J. (Participant), Iversen, O. S. (Participant), Dohn, N. B. (Participant), Grønbæk, K. (Participant), Jankvist, U. T. (Participant), Jessen, C. (Participant), Lorentzen, R. F. (Participant), Hanghøj, T. (Participant), Misfelt, M. (Participant), Sølborg, J. (Participant), Hansen, T. I. (Project manager), Graf, S. T. (Project manager), Skott, C. K. (Project manager), Georgsen, M. (Project manager), Brahe, T. (Participant), Pettersson, M. (Participant) & Puck, M. R. (Participant)  
01/06/2013 → 31/12/2015

### **STAR: Styrkelse af rekrutteringen til naturvidenskabelige uddannelser**

Højgaard, T. (Participant), Dohn, N. B. (Participant) & Larsen, J. (Project manager)  
01/01/2010 → 31/12/2013

### **Sigurd fortæller om naturvidenskab**

Dohn, N. B. (Participant)  
01/03/2021 → 31/12/2022

### **PISA: Programme for International Student Assessment 2015**

Dohn, N. B. (Participant)  
20/05/2013 → 03/12/2016

### **PISA 2018**

Dohn, N. B. (PI)  
01/04/2016 → 10/12/2019

### **FoS: Faglighed og Skriftlighed**

Dohn, N. B. (Participant), Lindenskov, L. (Participant) & Krogh, E. (Project manager)  
01/08/2010 → 21/01/2015

**Designing for situated knowledge in a world of change**

Dohn, N. B. (Participant)  
01/07/2015 → 30/06/2019

**Designing for situated computational thinking with computational things**

Dohn, N. B. (Participant)  
01/03/2020 → 30/06/2025

**CIN: Contexts and interest in science education**

Dohn, N. B. (Participant), Dohn, N. B. (Project manager), Jensen, J. (Participant), Søndergaard Irminger, S. (Participant) & Haldbo, S. (Participant)  
01/07/2013 → 31/12/2016