# **UiO** Centre for Educational Measurement (CEMO)

**Faculty of Educational Sciences** 

# Annual plan 2022-2024 Centre for Educational Measurement (CEMO)

#### INTRODUCTION

The annual plan for the period 2022-2024 is CEMO's most important steering document and further develops the previous three-year plans. It includes the centre's strategic priorities and documents how CEMO intends to realise the plans of the University of Oslo and the Faculty of Educational Sciences.

The plan has a three-year perspective and will shape CEMO's activities until 2024 (with adjustments made on the fly if necessary). Clear indicators of success shall help in evaluating the centre's short and long-term objectives. CEMO's annual reports will relate back to the objectives outlined here and evaluate to what extent these have been met.

CEMO's main aim is to contribute to solving fundamental social challenges related to learning and development by means of outstanding and relevant research in the field of educational measurement, research-based teaching and targeted dissemination. The centre will also contribute to ensuring that the use of results from educational measurements is knowledge-based and up-to-date.

CEMO intends to become the leading European environment in educational measurement and psychometrics. We will publish at a high international level, work in an interdisciplinary manner, collaborate nationally and internationally with researchers and practitioners, equip Master's students with the knowledge and skills needed for contributing to the field of educational measurement, and support the career development of and provide a good working environment for CEMO team members.

The annual plan is divided into the following main areas:

- 1. Research
- 2. Teaching
- 3. Knowledge in use
- 4. Organisational development

The plan has been discussed with all CEMO employees, adopted by the CEMO board, and discussed with CEMO's International Advisory Board.

Sigrid Blömeke Rolf Vegar Olsen Tara Sarin

Director Deputy Director Administrative Head

# 1) Research

CEMO shall contribute to developing innovative methods for educational measurement and using these methodological innovations to produce new knowledge on education. Key strategic priorities are "modern test design", "statistical methods for innovative assessments", "international large-scale assessments" and "educational measurement in the Norwegian context". The centre shall balance basic and applied research. Research opportunities emerging in conjunction with new technology will play a prominent role in all four strategic priorities.

CEMO aims to have a distinct, internationally unique, and easily recognisable research profile that also addresses national research needs. Synergy and collaboration within the Faculty of Educational Sciences, within Norway and other Nordic countries, and internationally are key priorities. External research funding plays an important role in creating favourable research conditions.

#### **Activity 1.1**

CEMO carries out high-quality research.

## Expected results at the end of 2024

CEMO researchers are internationally recognised for conducting high-quality research.

<u>Indicator:</u> One important research award or highly reputable position (e.g., head of a research organisation, chief editor of a core journal)

Several articles in leading international journals with a CEMO team member as first author that have the potential to be of an agenda-setting nature.

**Indicator:** Four highly-cited articles

Several articles in leading international journals with a CEMO team member as first author.

**Indicator:** Eight articles in Q1 SSCI journals

Several articles in Norwegian and Nordic journals/anthologies.

<u>Indicator:</u> Four articles in Norwegian or Nordic journals/anthologies

Substantial number of publication points.

<u>Indicator</u>: Average number of publication points per academic full-time employee (incl. all PhDs and Postdoctoral fellows) higher than the UiO/UV average; average number of points per permanent academic employee of at least 3.0

CEMO promotes open access to its research.

**Indicator:** Four articles in reputable Gold Open Access journals

#### Responsibility

All academic team members

## **Activity 1.2**

Applications for external funding of academic positions (especially PhDs) strengthen the robustness of CEMO and contribute to high-level research.

#### Expected results at the end of 2024

Participation in ERC applications or support of the development of career plans for an ERC application (e.g., funding of research assistants, course participation).

**Indicator:** Submission of one ERC application

Success with the Research Council of Norway (RCN) applications

<u>Indicator:</u> All permanent academic team members have an RCN project at all times or work on an application for getting one

Application for other external grants

Indicator: Corresponding opportunities have been used

Increased interdisciplinary research collaboration at the highest level

<u>Indicator:</u> Joint application for a Centre of Excellence, or, in the event of not being successful with this, a similar follow-up activity

## Responsibility

All academic team members

#### **Activity 1.3**

FREMO shapes CEMO's research profile and provides support for PhD candidates.

#### Expected results at the end of 2024

FREMO has a clearly recognisable research profile.

<u>Indicator</u>: Research pillars in line with CEMO's strategic priorities: Modern test design, Statistical methods for innovative assessments, International large-scale assessments, Educational assessments in the Norwegian context

Regular collaboration across the pillars strengthens research quality.

<u>Indicator:</u> Feedback for grant applications is actively gathered, co-publishing and joint applications for external funds are common

The FREMO research seminar and CEMO's Brown-Bag seminar support the PhD candidates in their research work.

<u>Indicator:</u> Positive evaluations by PhD candidates and supervisors each year

The FREMO conference has become a brand.

<u>Indicator:</u> Number of participants >80, high quality of presentations after a rigorous peer-review process, and renowned keynote speakers

## Responsibility

FREMO research group leader

#### **Activity 1.4**

Efficient administrative support facilitates research at a high level.

#### Expected results at the end of 2024

Supportive context conditions relating to research at CEMO exist.

<u>Indicator:</u> Clear responsibilities with respect to roles (research leader, FREMO leader, RFS, PFU, administration) and administrative support for CEMO's Brown-Bag seminar

Supportive context conditions relating to applications for external funding exist.

<u>Indicator:</u> Application calendar of relevant external funding sources, regular analysis of previous years' unsuccessful project proposals, and administrative competence related to RCN and EU funding and writing of proposals

Supportive routines with respect to RCN and ERC applications exist.

<u>Indicator:</u> Researchers involve the administration in their planning of applications from the start, the administration supports the writing, budgeting, and submission of applications, and researchers perceive that they receive sufficient support

#### Responsibility

Administrative Head

#### **Activity 1.5**

Research collaboration strengthens the research quality of CEMO and the visibility of the centre, and supports the PhD candidates' work.

#### Expected results at the end of 2024

CEMO has an extensive research collaboration with all departments at the Faculty of Educational Sciences and selected other partners in Norway.

<u>Indicator</u>: Joint applications for external grants and joint publications

The Gustafsson-Skrondal scholarship is an internationally recognised and attractive scholarship.

**Indicator:** At least ten excellent applicants

CEMO is an attractive host for guest researchers with their own funding.

<u>Indicator:</u> Several high-quality applications for research stays each year

Collaboration with international research units is visible through joint symposia at conferences and publications.

<u>Indicator:</u> One joint symposium and a special issue in a recognised journal together with international collaborators

CEMO's International Advisory Board contributes with important feedback.

<u>Indicator:</u> Top researchers in the field accept the invitation to participate

All CEMO announcements attract highly qualified international applicants.

<u>Indicator:</u> The applicants for all advertised positions are so good that the centre is able to fill all positions

#### Responsibility

Director

#### **Activity 1.6**

All CEMO researchers and Master's students exhibit good research practice.

## Expected results at the end of 2024

All CEMO researchers know and follow the research ethics law and provisions on privacy in research.

<u>Indicator</u>: Regular information and professional meetings that address topics related to privacy and ethics in research, participation of everyone in the Faculty's e-learning for basic research ethics and privacy, and knowledge of where to turn to when there are issues with research ethics

Ethical and privacy guidelines are implemented for PhDs and Master's students.

<u>Indicator:</u> System for follow-up of PhD candidates and Master's students who process personally identifiable data

CEMO develops routines and infrastructure that support research staff in data management and open science

<u>Indicator:</u> Good routines in open science and data management

## Responsibility

Administrative Head

# 2) Teaching

Educational measurement is of great importance to society and individuals. Learning challenges in children need to be mapped, and teachers are expected to conduct reliable, valid and fair assessments of student outcomes. International large-scale assessments are used to monitor education systems. Thus, there is an urgent need for people with specific expertise in the field of educational measurement. CEMO's aim is to educate such specialists who can develop, use and critically evaluate different types of measurements. The study programme "Master of Science in Assessment, Measurement and Evaluation" is research-based and offers students up-to-date knowledge and skills on how advanced methods can be used to collect, analyse and interpret results from measurements.

#### **Activity 2.1**

The Master of Science programme in "Assessment, Measurement and Evaluation" strengthens measurement competence nationally, in the Nordic countries and internationally.

## Expected results at the end of 2024

The Master's programme is established and well-known.

<u>Indicator:</u> More than 50 eligible applicants with high quality who could be offered a study place, and 30 applicants accepting the offer

The Master's programme strengthens measurement competence in the Nordic countries.

Indicator: Half of the students have applied from a Nordic country

The Master's programme has good throughput.

**Indicator:** Drop-out rate <35%

The profile of the Master's programme meets societal and academic needs.

<u>Indicator:</u> Regular updates in the programme profile, and all graduates succeed in finding a job

The teaching quality meets participants' expectations.

Indicator: Positive evaluations from students

Master's students are integrated in CEMO research.

**Indicator:** Several students work as research assistants

#### Responsibility

Study leader

## **Activity 2.2**

PhD candidates and postdoctoral fellows receive high-quality training that develops their measurement expertise and supports their career chances.

#### Expected results at the end of 2024

PhDs receive sufficient support to make progress in their career.

<u>Indicator:</u> Developed routines for monitoring the progress of PhD students, PhD coordinator, supervision guidelines and yearly feedback meetings

Postdoctoral fellows receive sufficient support to make progress in their career.

<u>Indicator:</u> Postdoctoral coordinator, mentoring programme, specific courses, and opportunities to develop project management skills (incl. RCN applications)

PhD candidates and postdoctoral fellows have the opportunity to develop important

generic competencies.

<u>Indicator:</u> Presentations at the FREMO research and CEMO's Brown-Bag seminar and participation in outreach activities

International mobility has been strengthened.

<u>Indicator:</u> Several Postdoctoral fellows and PhDs have succeeded with funding of international stays, and have been abroad for a well-prepared and productive stay

A range of job opportunities for CEMO researchers is available nationally or internationally.

<u>Indicator:</u> Career guidance during their last two years, and job offers at appropriate levels nationally or internationally when their contracts expire

The 25% per year allocated for required duties is effectively used for teaching and other purposes.

<u>Indicator:</u> A system is in place to facilitate an overview of time use and to ensure even distribution

## Responsibility

Deputy Director (PhD coordinator) and Postdoctoral fellowship coordinator

# 3) Knowledge in use

CEMO aims to contribute to the development of society by means of active dissemination of the centre's research results in various communication channels and different areas, collaboration with external institutions and organisations on implementing research-based practices related to educational measurement, and counselling or taking over support roles.

## **Activity 3.1**

Collaboration nationally and in the Nordic countries makes CEMO visible in Norway and the Nordic countries and strengthens the measurement quality in the field of practice.

## Expected results at the end of 2024

Good contact with Udir, the national centres responsible for the national tests, and other practitioners in the field of educational measurements.

<u>Indicator:</u> Establishment of a national Board and frequent invitations to contribute with expert knowledge and advice

Good contact with research units and universities in Norway and the Nordic countries relating to national and international measurements.

<u>Indicator:</u> Regular meetings of the NERA network in educational measurement and joint activities at the NERA conference, as well as other Nordic networking activities

#### Responsibility

**Deputy Director** 

## **Activity 3.2**

Improved research communication and dissemination contributes to increased measurement competence in the education sector and the field of practice, and among the public.

#### Expected results at the end of 2024

High communication activity in a wide range of communication channels.

<u>Indicator:</u> Regular posts on Facebook, Twitter and our website, and a substantial number of followers

All PhD candidates present their research in an easily accessible way on CEMO's website, and present their research to an audience outside of academia.

Indicator: One post on forskning.no or a similar dissemination channel

CEMO team members contribute to measurement-related textbooks or other publications targeting non-academics.

<u>Indicator:</u> Publications written by CEMO team members are used in the curriculum in teacher education or other study programmes.

Greater focus on outreach activities

<u>Indicator</u>: Appointment of an outreach coordinator with responsibility to create a communication strategy, and to establish routines for outreach.

## Responsibility

Director

# 4) Organisational development

CEMO is a well-functioning organisation that offers its team members a challenging but supportive working environment that facilitates high quality in research and teaching, and dissemination, well-being and creativity. All team members contribute to a flexible, efficient and knowledge-based working day at the centre. CEMO is a permanent unit at the Faculty of Educational Sciences and collaborates with all three institutes.

The achievement of CEMO's aim to become the leading European centre in educational measurement requires the recruitment of the best researchers and PhD candidates nationally and internationally, in line with anticipated developments in the field of educational measurement, and the development of their expertise so that they can pursue successful academic or other careers. The CEMO administration supports the academic team members effectively so that administrative resources are directed towards primary tasks to the greatest extent possible.

The Covid-19 pandemic had negative effects for both employees and students. Long periods of working from home and digital teaching highlighted the importance of meeting places.

#### **Activity 4.1**

Recruiting at CEMO is effective and helps attract highly qualified researchers.

#### Expected results at the end of 2024

CEMO can fill all positions with highly qualified applicants within a short time.

<u>Indicator:</u> CEMO has developed a routine and timeline for effective recruitment processes that clarify the process from the announcement to an employment

New employees receive support through the UiO centrally and the CEMO administration for important practical needs.

<u>Indicator:</u> Good routines established for receiving new employees, and an A-Z information pack is made, regularly updated and distributed to new employees

#### Responsibility

Administrative Head

#### **Activity 4.2**

Sufficient language skills in Norwegian or a Nordic language among CEMO's academic team members.

## Expected results at the end of 2024

All permanent academic team members and all Postdoctoral fellows and PhD candidates with an interest in remaining in Norway have Norwegian knowledge equivalent to level B2.

<u>Indicator:</u> Several academic team members are represented in committees within or outside UiO that require Norwegian language skills

Funding of Norwegian language classes is offered to all academic team members who do not have Norwegian or a similar language as their mother tongue.

<u>Indicator</u>: Expenses earmarked in the CEMO budget, and information conveyed to all employees

#### Responsibility

Director and Administrative Head

#### **Activity 4.3**

CEMO is a dynamic and inclusive organisation.

#### Expected results at the end of 2024

All employees work towards common goals.

<u>Indicator:</u> Good participation in all CEMO activities

All employees are involved in basic decisions and have a chance to be heard.

<u>Indicator:</u> Two staff meetings at CEMO and an annual team seminar outside
UiO take place where long-term objectives and activities are discussed

#### **Responsibility:**

Administrative Head

#### **Activity 4.4**

CEMO has good information flow, and the employees know where to find relevant information on the centre's websites.

## Expected results at the end of 2024

All employees know where to find relevant information on the websites. <u>Indicator:</u> The CEMO internal websites are actively used

The internal and external websites for CEMO are regularly updated

<u>Indicator:</u> The web pages have relevant and up-to-date information with a
list of the contact persons within different areas, routine descriptions/links
to relevant pages regarding GDPR, and other practical information
(archiving etc.)

## Responsibility

Administrative Head

## **Activity 4.5**

CEMO has good human resource management, where challenges are actively addressed.

#### Expected results at the end of 2024

All team members focus on and contribute to the development of a good working environment.

<u>Indicator:</u> Good participation in CEMO's social events and joint lunches, and all team members contribute to keeping the kitchen and meeting rooms in order

All employees have a good physical working environment.

<u>Indicator:</u> Performance of an ARK survey or PULS survey at least once a year, with follow-ups for the needs and concerns of staff

CEMO facilitates a safe working environment.

<u>Indicator:</u> All employees have reviewed the fire protection instructions, and selected safety representatives have attended basic training (first aid, PLIVO and other relevant HSE - Health, Safety and Environment courses)

#### Responsibility

Administrative Head and all employees

#### **Activity 4.6**

CEMO's administration aims to be a cohesive body that provides excellent support to the research staff.

## Expected results at the end of 2024

Establishment of clear roles and responsibilities.

<u>Indicator</u>: Weekly meetings among administrative staff for planning, prioritising and collaborating on assignments, especially during periods of heavier workload (larger external events, application deadlines)

Improved administrative routines that better meet the needs of research staff.

<u>Indicator</u>: Administrative seminar once a year that has relevant themes or a focus on better collaboration and improvement of administrative routines

Competence development encouraged for all administrative staff.

<u>Indicator</u>: Attending relevant courses, such as those aimed at improving research support and communication, and actively participating in the faculty's research network and other relevant networks at the faculty and UiO and external organisations

## Responsibility

Administrative Head