

Assessment Report

*ICLON Research program
Teaching and Teacher Learning*

Peer Review 2009 – 2014

November 2015

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Preface

This report embodies the findings and recommendations of an international peer review of the ICLON Research program Teaching and Teacher Learning undertaken on October 15, 2015.

The assessments were based on a self-evaluation report provided by ICLON. This review report is both prospective and retrospective. The review also resulted in a number of specific recommendations.

As chair I wish to thank my fellow evaluators for their expert and sincere contributions to the discussions and final findings. The work was not only intense but also socially agreeable and academically rewarding.

We thank all members of ICLON, staff, PhD students, researchers and professors, for their open and constructive participation in the review process.

We hope this report to be the beginning of another successful period of very good research and PhD education in ICLON.

October, 2015

Prof. Jan Vermunt
Chair International Peer Review Committee ICLON Research

1. Introduction

1.1 The evaluation

All publicly funded university research in the Netherlands is evaluated at regular intervals in compliance with the national standard evaluation protocol (SEP 2015-2021), as agreed by the Association of Universities in the Netherlands (VSNU), the Netherlands Organisation for Scientific Research (NWO) and the Netherlands Academy of Sciences (KNAW). The evaluation process, which is applied at the research unit level, consists of a systematic external peer review conducted every six years, based on an internal self-reflection, focused on what is achieved since the last external peer review.

The evaluation system aims to achieve three generic objectives:

- *improvement* in the quality of research through an assessment carried out according to international standards of quality and relevance;
- *improvement* in research management and leadership; and
- *accountability* to the higher management levels of the research organizations and to the funding agencies, government and society at large.

1.2 The assessment procedure

The evaluation procedures followed by the Review Committee were those set out in the NWO/VSNU/KNAW "Standard Evaluation Protocol 2015-2021 for public research organizations". This protocol entails two main characteristics:

- *Three main criteria*: The research program is assessed on the three assessment criteria, i.e. research quality, relevance to society, and viability
- The PhD training program of ICLON and its integrity policy are evaluated.

The assessment was based on and supported by three main components of evidence:

- A self-evaluation report detailing the operation, management, research activities, and SWOT analysis of the research institute;
- A list of all publications of ICLON researchers in the period 2009-2014;
- Discussions with the ICLON Board, management, staff and PhD students about the research program, the aims and the strategy for the future, and the PhD training program.

The site visit was undertaken on a single day, 15th October 2015. The program is summarised in annex 3.

The Peer Review Committee comprised of Professor Jan Vermunt (chair, University of Cambridge, UK), Professor Antonia Aelterman (Universiteit Gent, Belgium), Professor Tina Seidel (Technische Universität München, Germany), and Professor Judith Warren Little (University of California, Berkeley, USA).

Dr. Frans van Steijn (Frans van Steijn Academic Consultancy, The Netherlands) acted as independent secretary.

1.3 Results of the assessment

This report summarises the findings, conclusions and recommendations of an international peer review of the ICLON Research program Teaching and Teacher Learning. The peer review covered the period between 2009 and 2014.

The written and oral information permitted a good understanding of the research institute. The assessment was based and weighted according to the rationale explained in annex 1. The conclusions, as given in chapters 3 and 4 of this report, follow the structure and the criteria which are formulated in the Terms of Reference, annex 2. Chapter 3 gives an impression of the PhD training program and integrity policy of ICLON and Chapter 4 elaborates on the performance of its research.

1.4 Quality of the information

The documentation for the committee consisted of:

- Self-assessment report by ICLON with honest and comprehensive information (66 pages, including appendices).
- Standard Evaluation Protocol 2015 – 2021
- 2009-2011 Mid-term review self-assessment
- 2009-2011 Mid-term review report (in Dutch)
- 2001-2009 External review self-assessment
- 2001-2009 External review report

Prior to the site visit, the committee requested—and received—additional information on:

- A short description of the research strategy for the years ahead
- Additional information on Chapter 2 PhD program
- Ideas about benchmarking related to the ICLON research assessment – 2015
- Brief report within the framework of the mid-term review of the research of ICLON, ‘The knowledge base of teaching’ January 2013
- Summary in English of the Dutch mid-term review report

The committee finds the information adequate and honest.

2 Structure, organisation and mission of ICLON

2.1 Introduction

ICLON Leiden University Graduate School of Teaching is the interfaculty centre of Leiden University for teacher education and educational and professional development in secondary and higher education. In general, ICLON aims to contribute to the quality of (secondary and higher) education.

Although the ultimate goal of education, obviously, is student learning, ICLON focuses on teachers as crucial agents in the educational process. Consequently, the current ICLON research program consists of research in two main themes, Teaching and Teacher learning:

1. *Teaching* with research on the quality of facilitating, supporting and enhancing students' learning processes in secondary and higher education.
2. *Teacher learning* with research on learning processes and learning outcomes of student teachers and teachers in secondary and higher education.

Insights from both research themes are input for the educational activities in teacher education and educational and professional development in secondary and higher education. In both research themes, projects can aim at increasing insights into domain-specific aspects of teaching as well as general teaching aspects, which are understood as equally important for teaching in a particular school subject, domain or discipline. A distinctive character of the ICLON research program is its double focus on developing theory and practice, which means that the research projects of the program aim at simultaneously contributing to the improvement of educational practice and generating knowledge about this practice.

2.2 Mission of ICLON

ICLON research is strongly related to the ambitions of Leiden University. As a research intensive university with a long and rich history, Leiden University aims at a strong connection between its research and educational activities. ICLON research is closely related to the practice of teacher education: Not only the teacher education programs are subject of research, results of research on teaching and teacher learning are disseminated to the program as well. Research outcomes inspire new ways and areas of teacher education. Another priority of Leiden University is internationalization of research and education. ICLON research has a strong international orientation, which is apparent in an emphasis on international publications and collaborations.

The aims of ICLON research, broadly speaking, are twofold: 1) to contribute to academic knowledge and the international discourse in the domain of teaching and teacher learning, and 2) to contribute to the improvement of practices and policies of teaching and teacher education. Within these broad aims, ICLON research has specific targets, and applies strategies to achieve these targets.

2.3 Structure, management and organization

ICLON Leiden University Graduate School of Teaching was formally founded in 1995, merging two institutes within Leiden University, the departments of teacher education (IVLO) and higher education (BOVO). ICLON is directed by the ICLON board (Bestuursraad). Since 2008, this board consists of the deans of all faculties of Leiden

University (i.e., Law, Science, Humanities, Medicine, Archeology, Social & Behavioural Sciences and Campus The Hague). The director and the financial manager of ICLON are advisors to the board. The board mandates the director of ICLON to direct ICLON in all its affairs regarding education, research, consultancy, including financial aspects and human resources. The board acts as a supervisory body, approving the ICLON research program.

ICLON has two departments, Secondary Education and Higher Education, and a support office. The ICLON management team consists of the director, the heads of the two departments, the financial manager, who is also the head of the supporting office and the director of the research program.

The Secondary Education department includes all teacher education programs and other professional development programs for in-service teachers. In a Common Arrangement (Gemeenschappelijke Regeling), the responsibility for all educational and research activities concerning teacher education at Leiden University are commissioned from the faculties to ICLON. ICLON is thus responsible for a PhD program and a teacher education program. Disciplinary training is not included among the responsibilities of ICLON.

The Higher Education department provides teacher training programs for higher education and is engaged in educational development projects and consultancy for faculties of Leiden University and external partners.

Since 1996, all ICLON research is conducted within one research program which is now called Teaching and teacher learning. The ICLON director acts as scientific director. The head of the research program is the program director.

ICLON research staff consists of scientific staff, postdocs and PhD students. The scientific staff members have a direct-funding appointment of 0.4 fte for research and also have duties in the teacher education program, in projects on teachers' professional development or in educational projects in higher education. ICLON has no scientific staff with research as a sole task. Each staff member should be qualified for the national research school ICO, which means that (s)he should publish 6 articles in international journals (indexed in ISI/Thomson Reuters) in a period of 5 years and should supervise PhD students. Currently, the scientific staff consists of two full professors, two associate professors and four assistant professors.

The scientific director of ICLON is responsible for the thematic leadership, output and managerial decisions of the ICLON research program. In effect, the research program was directed by a scientific committee, chaired by the program director and supported by a secretary. This scientific committee consists of all scientific staff members.

3 Assessment of the research program

University	Leiden University
Research Group	ICLON Teaching and Teacher Learning
Leader research group	Prof.dr. W. Admiraal
Research input tenured staff 2014	2.69 fte (8 pers.)

Assessment:

Research quality	2
Relevance to society	2
Viability	2

3.1 Research quality

With its research program ICLON has moved from a more cognitive to a situated approach, which is in line with the current developments in teacher education and teaching research. In this way the institute is positioned to contribute to front-line research as well has broadened its focus. The research program preserves a clear focus and there is ample evidence of a cumulative body of work that builds on the cognitive perspective of the previous program. Given current developments at the University of Leiden as well as in the international educational research community, the committee sees a strong opportunity to also take leadership in higher education research, and to develop the institute in this area from a service unit to one that also conducts high-level research.

ICLON embraces a double focus on theory and practice and states this as the key dual mission of the institute. In doing so, the members of ICLON deserve credit. Teaching and teacher education has long been criticized for the gap between theory and practice and calls are given worldwide to bridge it. Despite this positive side, the review committee also encourages the institute to attend more thoroughly to possible tensions and dilemmas due to this dual focus (as they were already signalled by the previous reviews). An example is the distinction between standard (more often theory-oriented) and contract (more often practice-oriented) PhD students and the tensions arising for qualifying all PhD students according to the broad scholarly level as required in educational science.

ICLON is embedded in a strong international network and has established productive affiliations with well-known scholars abroad such as Walter Doyle, Hilda Borko and Pam Grossman. Some ICLON staff members also write in co-authorship with these colleagues, making the network clearly visible in the research community. ICLON was also successful in establishing long-term visiting professorships. The establishment of these networks is predominantly based on individual activities of scientific staff members and less on a program level of the institute.

Members of the institute are clearly present in the international research community on teaching and teacher learning. They have editorships in and are on the editorial boards of prestigious journals in the field. Research outcomes of ICLON are published in good and relevant journals, as listed in the SSCI (ISI, Web of Science). The review committee sees much strength in the quality of research outcomes, leading to the recommendation to

also aim for submitting manuscripts to the top-10 journals in educational research. Two examples from the past period became evident in which ICLON staff members have done this: *Educational Researcher* (Van Driel & Berry) and *Teachers College Record* (Janssen, Westbroek, Doyle & Van Driel). The scientific productivity in general is very good, however, it also varies to some extent among staff members. In the outreach of research it seems that staff members are complementary in their productivity for scientific versus professional journals. Staff members produce a high number of conference papers but not all of these convert into published journal articles. An economic balance between conference papers and published articles should be achieved.

In the last couple of years the external competitive funding has decreased.¹ At the same time the internal university funding has increased. This is a sensible strategy to compensate for the decrease in external funding. ICLON's strong reputation for research quality will require a sustained focus on research funding, with special efforts focused on bidding for large competitive grants.

3.2 Relevance to society

As mentioned above, the committee highly values ICLON's dual focus of developing theory and practice. An explicit goal of ICLON's strategy is to be relevant for practice, to have a service function to secondary and higher education and teacher education (teacher education in Leiden University and in the university colleges for applied sciences). All faculties in Leiden University need more evidence-based education. Therefore ICLON made the shift towards more collaboration with other faculties and set up more joint educational research, driven by questions in the field.

The committee values the societal relevance as very good. Relevance for society is made concrete by the strategic research partnerships, by building up a sustainable community between higher education and schools on a local and regional level. This strategy facilitates ICLON to find more funding for contract research (which is limited at the moment) and more practice-based research and to enhance the dissemination of its research outcomes. An example of a particular setup of collaborative research is "the research lab". The ICLON scientific staff reported enthusiasm from teachers and schools for their research, teachers' eagerness to participate in their research and to learn about the outcomes of their research (for example teachers as PhD-students). Some research projects have the theory – practice gap as an explicit object of study, with the aim to make theory more practical and to support educational innovations in secondary and higher education and in teacher education (more evidence and theory driven innovations). An example is the project "Kwaliteitskaart School aan Zet", which is an instrument to support teachers in adapting their teaching in an innovative context.

The committee appreciates that ICLON accommodated two Centres of Expertise, which had a major role in disseminating research outcomes to educational practice. In line with the dual focus in the research strategy, the ICLON team publishes on a regular base in professional journals. Staff members give also workshops in schools and lectures for teachers in secondary school or are member in advisory boards. The committee concludes that there is a lot of attention for local and regional relevance, but ICLON can

¹ Indicated is the trend during the assessment period, although the figure went slightly up again in 2014.

take a further step in this strategy. "Train the trainer", a spin-off project, is one way to disseminate the research results in a more cost-effective way. The collaboration with local and regional schools can also be an interesting model in itself to publish about, not only in professional journals but also in international journals, to serve as an example for others and to find out how the ICLON-model can be transferred. This would allow ICLON to have more impact on a national or international scale and to gather more international funding.

ICLON is a research unit with a high level of cohesion and cooperation between the staff members. As noticed in the self-assessment report, ICLON researchers have a high profile reputation, but previous reviewers proposed that this could be better passed on to local and national public media. The committee agrees with this statement and recommends to work out a strategy for more media appearances. The committee also recommends that ICLON moves beyond practice to policy now and then, for example government policy. The role of ICLON in the "Teacher-agenda" and the national work in CLIL are good examples.

3.3 Viability

ICLON is a relatively small and specialised research unit in Leiden University. The research program shows a clear and sharp focus on teaching and teacher learning in secondary and higher education. The specialized nature of their research unit is highly appreciated by all staff and PhD students the committee has spoken with during the site visit. There is important institutional support for ICLON's organization as an independent research unit within the university, with strong links to other faculties, and ICLON is recognized as an important research unit within the university. The leadership of the program is excellent and highly valued by the ICLON board, staff, and PhD students. ICLON researchers show a very good presence in local, regional and national networks of teaching and teacher education. Their scholarly work is highly visible at national and international scientific levels.

Surrounded by mergers of similar groups into larger and broader research programs at other Dutch universities over the last couple of years, ICLON has indicated a clear preference to continue as an independent specialized research unit in the future, focusing on the micro-perspective on teaching and teacher learning in secondary and higher education. The committee considers this a sensible strategic choice, since the chosen focus gives ICLON a unique position in Dutch educational research. The specialised nature and clear focus of its research program makes ICLON an attractive partner to collaborate with on a national and international level.

The committee views collaboration with other research units of vital importance for ICLON to be able to bid successfully for large external competitive funding. Funding bodies both nationally and internationally increasingly announce Calls for large multi-disciplinary research projects on complex societal problems that request consortia of several research groups to prepare a bid. Teaching and teacher learning may often be a very relevant part of these proposals. ICLON's strategic choice to be a dynamic network organisation seems well-thought of and highly viable for the future in this respect. To be better prepared to compete for these large grants, for example from European funding, the committee recommends ICLON to move beyond ad hoc collaborations to more sustainable alliances with other research units on a national and international level. Often

there is only limited time for preparing a large research proposal, and these alliances enable a quick response when a Call is announced. The committee also recommends to collaborate with other educational research units in Leiden university that focus more on student learning, in order to study teaching, teacher learning and student learning in mutual coherence.

The committee supports the establishment of a professorship in higher education at ICLON. Extending the research program into the domain of higher education makes scientific leadership and staff in this area a necessity. The strong links ICLON already has established with other faculties will contribute to a powerful research environment for such a professorship. The fact that the focus in the new higher education research line is also on teaching and teacher learning brings about synergy with the rest of the research program.

All in all, the strategy that ICLON intends to pursue for the years ahead is characterized by a sharp focus on teaching and teacher learning, capitalizing on both internal and external funding, including higher education as a domain of research but within the existing focus on teaching and teacher learning, dynamic networking as a means to collaborate with other research units, continuing its dual focus on both scientific and societal impact, and establishing partnerships with other national and international research units to increase its competitiveness for large external funds. The conclusion of the committee is that with this strategy and the outstanding leadership of the research program, ICLON is very well equipped for the future and very well capable of meeting its targets in research and society during this period.

3.4 Recommendations

The committee rates the ICLON research program very good on the three aspects of quality. The following recommendations were given in the assessment above and may help move ICLON to even higher qualitative levels:

1. ICLON is recommended to submit manuscripts more often to the top-10 journals in the field of educational research.
2. An economical balance should be achieved between conference papers and published articles, in the sense that a higher percentage of conference papers could be converted into published journal articles
3. For the future it is advised to increase the focus on bidding for (large) competitive external grants.
4. To be better prepared to compete for these large grants, for example from European funding, the committee recommends ICLON to move beyond ad hoc collaborations to more sustainable alliances with other research units on a national and international level.
5. The collaboration with local and regional schools can in itself be an interesting model to publish about, not only in professional but also in international journals, to serve as an example for others and to find out how the ICLON-model can be transferred. This would allow ICLON to have more impact on a national or

international scale and to gather more international funding.

6. ICLON researchers have a high profile reputation, but this could be better passed on to local, regional and national public media. The committee recommends ICLON to work out a strategy for more media appearances.
7. The committee recommends ICLON to move its impact endeavors more frequently beyond practice to policy, for example government policy.
8. The committee recommends ICLON to collaborate with other educational research units in Leiden university that focus more on student learning, in order to study teaching, teacher learning and student learning in mutual coherence.

4 PhD program and integrity policy

4.1 PhD training and education program

ICLON places very high value on its PhD program, and invests substantial resources in the selection and mentoring of its PhD students. Students enter the ICLON graduate program via two different pathways and complete their program of study with different sources of funding. Students who are engaged in the standard PhD-track are often selected for the strength of their social science and education background, and the fit they present with funded research projects. Contract PhD students are more likely experienced professionals and emerging leaders in secondary or higher education teaching and teacher education. This latter group of students includes professionals from school systems, institutions, and organizations both within the Netherlands and from a range of international contexts.

Both groups of PhD students highlight the “tailored” and adaptive nature of the PhD program and praise the quality of mentoring and support they receive. Students report having received timely and useful feedback from the scientific staff at every stage of their program. Papers are returned with comments within days — or even hours. Research-related dilemmas (for example, instrument development) receive quick and helpful attention. ICLON’s participation in the National Research School (ICO) provides an important resource and research training venue for the standard PhD students, and ICO courses are also open to contract PhD students.

ICLON capitalizes well on the rich academic and professional diversity of the PhD student population. It provides an inclusive atmosphere for all PhD students, with regular research group meetings and other events in which students can learn about one another’s work, explore special topics, and support one another’s development. This should be noted as an important accomplishment, as doctoral programs elsewhere tend to struggle to place research-oriented and profession-oriented students on equal footing and to integrate them fully with faculty staff and one another.

PhD students in ICLON make a significant contribution to the research program; they are involved not only in data collection but also in the analysis of data, preparation of papers for publication or conference presentations, and conceptual refinement. Their role as authors of published work and their participation in research conferences helps to establish them in the larger international research community at an early career stage.

Most contract PhD students bring a wealth of professional knowledge and experience. Their presence strengthens the connection between research and practice that ICLON has embraced through its “dual mission.” The education field has been plagued by a general disconnect between research and practice, and between researchers and practitioners. The inclusion of practicing professionals in the PhD program helps to give the “practice perspective” a prominent place in ICLON, and may help to shape the formulation of research problems, the design of studies, the details of instrumentation, and strategies for dissemination.

4.2 Recommendations on the PhD program

Overall, the Committee found the PhD program to be very good. However, several issues arose for consideration by ICLON in the future.

1. Educational research has benefited in recent years from a range of methodological advances in the social sciences. Increasingly, funded research entails mixed method studies with strong quantitative and qualitative components. Although ICLON students have access to courses and to other assistance in statistics when they discover that they need it, they do not appear to receive systematic training in quantitative research designs and advanced methods of statistical analysis.

Recommendation: ICLON would benefit from added staff with sophisticated statistical expertise, and from systematic opportunities for PhD students to acquire quantitative knowledge and skill.

2. ICLON is expanding its involvement in higher education research and innovation. PhD students whose interests focus on higher education topics will require mentoring by scientific staff whose research interests focus on higher education.

Recommendation: The university should be encouraged to support the appointment of scientific staff with interests and expertise in higher education research.

3. The PhD students value the individual tailoring of their programs of study. However, too much tailoring to the needs of a specific project may limit the depth of the research training. Robust PhD education is not only about learning what one needs to do to accomplish one specific project.

Recommendation: The scientific staff should be encouraged to review the extent to which and the means by which PhD students attain both breadth and depth of research training, including familiarity with foundational knowledge in the field and with evolving theoretical and methodological developments.

4. The PhD students credit the scientific staff with providing high quality and responsive mentoring by the scientific staff. However, this level of mentoring is time- and labour-intensive, placing heavy demands on the scientific staff. The Committee was concerned that the scientific staff (and particularly the assistant and associate professors) may not have sufficient time to involve themselves directly in the research and to prepare sole-authored or first-authored publications. Such research involvement benefits the quality of mentoring, and such publications help to ensure the continued national and international visibility and stature of ICLON.

Recommendation: ICLON should take steps to ensure that the mentoring expectations and activities of scientific staff are balanced by sufficient time for the staff (and particularly the assistant and associate professors) to demonstrate their own first- or sole-authored contribution to the research literature.

5. International students enrich the intellectual community of ICLON. However, the Committee was unable to determine whether the personal and professional needs of the international students were sufficiently understood and met.

Recommendation: ICLON could take steps to become informed about the particular needs of international students and whether any additional assistance is warranted.

6. ICLON has been very successful in preparing research PhD students for academic careers. However, some PhD students may wish to pursue a career outside academia and would benefit from support in exploring options outside academia.

Recommendation: Consistent with the expectation that Dutch PhD students be offered an orientation on careers outside academia (and with the realities of the job market), ICLON is recommended to establish periodic workshops, other opportunities, and information resources to inform and support students with interests in careers outside academia.

4.3 Integrity

ICLON gives due attention to research integrity issues. Staff and PhD students testify for the open and collaborative research culture within the ICLON research group. In 2014 the ICLON Research Ethics Committee was established which has further heightened the awareness of ethical aspects of doing research with and on humans and the possible pitfalls thereof. ICLON complies with the national and Leiden University regulations and procedures. The (Leiden University) regulations for data management aim at how and where to store data and how to make them accessible for researchers outside the research group. These policies are only presently being translated at ICLON to fit their specific kind of research data and research practices.

The committee is convinced that ICLON takes every measure to ensure a proper and transparent research conduct within this research group.

Annex 1 Criteria and scores of national protocol SEP

2.2 Assessment criteria

The assessment committee assesses the research unit on the three assessment criteria. It ensures that the qualitative assessment (text) and the quantitative assessment (assigned category 1-4) are in agreement. It is important for the committee to relate these criteria to the research unit's strategic targets. The three criteria are applied with a view to international standards.

1 Research quality

The committee assesses the quality of the unit's research and the contribution that research makes to the body of scientific knowledge. The committee also assesses the scale of the unit's research results (scientific publications, instruments and infrastructure developed by the unit, and other contributions to science).

2 Relevance to society

The committee assesses the quality, scale and relevance of contributions targeting specific economic, social or cultural target groups, of advisory reports for policy, of contributions to public debates, and so on. The point is to assess contributions in areas that the research unit has itself designated as target areas.

3 Viability

The committee assesses the strategy that the research unit intends to pursue in the years ahead and the extent to which it is capable of meeting its targets in research and society during this period. It also considers the governance and leadership skills of the research unit's management.

2.3 Categories

The judgements based on the three criteria described above constitute the core of the assessments. These qualitative assessments are supplemented by assigning the research unit to a discreet category (1-4) for each of the criteria as represented in table 1. There are no intermediate categories. The categories in this SEP and the descriptions differ from the scores in prior SEPs and are therefore not comparable.

The meaning of the scores for the three main assessment criteria:

Score	Meaning	Research quality	Relevance to society	Viability
1	World leading/ excellent	The research unit has been shown to be one of the few most influential research groups in the world in its particular field.	The research unit makes an outstanding contribution to society	The research unit is excellently equipped for the future
2	Very good	The research unit conducts very good,	The research unit makes a very good	The research unit is very well

		internationally recognized research	contribution to society	equipped for the future
3	Good	The research unit conducts good research	The research unit makes a good contribution to society	The research unit makes responsible strategic decisions and is therefore well equipped for the future
4	Unsatisfactory	The research unit does not achieve satisfactory results in its field	The research unit does not make a satisfactory contribution to society	The research unit is not adequately equipped for the future

Annex 2 Terms of Reference

The board of Leiden University hereby issues the following Terms of Reference to the assessment committee of the Leiden University ICLON research program Teaching and Teacher Learning.

Assessment

You are being asked to assess the quality and relevance to society of the research conducted by ICLON as well as its strategic targets and the extent to which it is equipped to achieve them. You should do so by judging the unit's performance on the three SEP assessment criteria (a. to c.) below. Be sure to take into account current international trends and developments in science and society in your analysis.

- a. research quality;
- b. relevance to society;
- c. viability

For a description of these criteria, see Section 2 of the SEP.

Please provide a written assessment on each of the three criteria and assign the research unit to a particular a category (1, 2, 3 or 4) in each case, in accordance with the SEP guidelines. Please also provide recommendations for improvement.

In addition, we would like your report to provide a qualitative assessment of ICLON as a whole in relation to its strategic targets and to the governance and leadership skills of its management. Please also make recommendations concerning these two subjects.

In accordance with the SEP, please also reflect on the following two aspects in your report:

- a. PhD programs;
- b. research integrity.

Documentation

The necessary documentation will be available on a secure website no less than 4 weeks prior to the site visit. The documents will include at least the following:

- Self-assessment with appendices
- Standard Evaluation Protocol 2015 – 2021
- These Terms of Reference for the assessment
- The program for the site visit

Site visit

The site visit at Leiden University ICLON research program Teacher and Teacher Learning will take place on October 15 2015. The provisional program for the site visit will be available 4 weeks prior to the visit.

ICLON will contact you about logistical matters approximately 2 months prior to the site visit.

Statement of impartiality

Before embarking on your assessment work, you will be asked to sign a statement of impartiality (see separate document). In this statement, you declare that you have no direct relationship or connection with ICLON.

Assessment report

We ask you to report your findings in an assessment report drawn up in accordance with the SEP guidelines and format. You must send the draft report to ICLON no more than 8 weeks after the site visit. ICLON will check the report for factual inaccuracies; if such inaccuracies are detected, you will see that they are corrected. You will then send (the corrected version of) the assessment report to the board.

Annex 3 Data ICLON research

Research staff ICLON in 2014

Category	Numbers	Fte
Scientific staff ¹	8	2.69
Post-docs ²	4	0.88
Standard PhD students ³	11	7.10
Contract PhD students ⁴	11	
Total research staff		10.67
Support staff		0.5
Total staff ⁵		11.17

1. Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff
2. Comparable with WOPI category Onderzoeker
3. Standard PhD students are employed at ICLON
4. Contract PhDs (externally or internally funded) are not employed; only numbers of PhDs are provided
5. Total staff = research staff employed at ICLON

Funding and expenditure ICLON in 2014

<i>Funding</i>	Fte	Percentage
Direct funding ¹	6.41	57
Research grants ²	0.31	3
Contract research ³	1.28	12
Other ⁴	3.17	28
Total funding	11.17	100

<i>Expenditure</i>	x €1000	Percentage
Personnel costs	753	81
Other costs	176	19
Total expenditure	929	100%

1. Direct funding (basisfinanciering / lump-sum budget)
2. Research grants obtained in national scientific competition (i.c. grants from NOW/NRO)
3. Research contracts for scientific research projects obtained from external organizations, such as industry, government ministries, European organizations and charitable organizations
4. Indirect funding from Leiden University Board and from Centre of Education and Learning (CEL) of the strategic alliance of the universities of Leiden, Rotterdam and Delft

Annex 4 Program Site visit *ICLON*

Site visit Assessment Committee
ICLON research program Teaching and teacher learning
Thursday October 15. 2015

Location: Room A203 Van Einthoven building

- 9.00AM Welcome
9.15AM Committee preparation
- 10.00AM Panel 1: ICLON board and management
Professor Wim van den Doel (chair of the ICLON board)
Professor Jan van Driel (chair of ICLON)
Professor Wilfried Admiraal (research program director)
- 11.00AM Coffee break and preparation panel 2
- 11.30AM Panel 2: scientific staff
Meeting with the associate and assistant professors (6 in total)
- 12.45PM Lunch
1.30PM Preparation panel 3
- 1.45PM Panel 3: PhD students
Meeting with 10 ICLON Leiden University PhD students
(standard and contract PhDs; internally and externally funded,
teacher educators, teachers in higher and secondary education)
- 3.00PM Coffee break
- 3.15PM Session for further information
If the committee has further questions or requests for more information,
Professor Jan van Driel and Professor Wilfried Admiraal are available.
- 3.45PM Committee preparation for feedback and assessment
5.00PM Committee plenary feedback
- 5.30PM Drinks

Annex 5 Curricula vitae of the Committee members

Professor Jan Vermunt (chair)

Faculty of Education, University of Cambridge, Cambridge, United Kingdom

Jan Vermunt is a Professor of Education at the University of Cambridge, Faculty of Education. He is a Fellow of Wolfson College, Deputy Head of Faculty, and Editor-in-Chief of the journal *Learning and Instruction*. He is an educational psychologist whose research interests have evolved from student learning and teacher learning as separate domains to include the way teacher learning and professional development affect processes and outcomes of student learning and vice versa.

Professor Antonia Aelterman

Department of Educational Studies, Ghent University, Ghent, Belgium

Antonia Aelterman, is emeritus professor in educational sciences at Ghent University, Belgium, but she continues some research activities in the field of teacher education. She was running the research unit on the teaching profession and the professionalization of teachers in the Department of Educational Studies. She participates on a regularly basis in advisory committees concerning these aspects. Her teaching activities were mostly situated in initial teacher training. Her research areas include professional orientation, teaching commitment, teachers profile, student's wellbeing and teacher education.

Professor Tina Seidel

TUM School of Education, Technische Universität München, Munich, Germany

Professor Dr. Tina Seidel holds the Friedl Schöller Chair of Teaching and Learning Research at TUM School of Education, Technische Universität München, Germany. Her research focuses on classroom research, teacher and teaching effectiveness, teacher learning and teacher professional development. Her special interest is in video-based analysis of classrooms, teaching adaptivity and aptitude-treatment-interaction and development of multi-media based tools in teacher research.

Professor Judith Warren Little

Graduate School of Education, University of California, Berkeley, USA

Judith Warren Little is Carol Liu Professor of Education Policy, emerita, and former dean at the Graduate School of Education, University of California, Berkeley, USA. Her research focuses on teachers' work and careers, the organizational and policy contexts of teaching, and teachers' professional development. In particular, she investigates the resources and interactions that support or constrain teacher learning in both formal professional development and informal workplace settings. She is also interested in international developments in the composition, quality, distribution and preparation of the teacher workforce, and in cross-field studies of education for the professions. She is an elected member of the National Academy of Education.

Dr. Frans van Steijn

Secretary

Frans van Steijn studied physics (BSc) at the Vrije Universiteit Amsterdam and philosophy (MA) at the University of Amsterdam. He received a PhD at the UvA on a thesis "The Universities in Society; a Study of part-time professors in the Netherlands"(1990). Since 1996 Frans was senior advisor at Vereniging van Universiteiten (VSNU) the Association of Universities in the Netherlands. He was Secretary to the Board and secretary to the Rector's Conference. His expert fields are quality assurance, research policy and research integrity. In September 2014 he retired from VSNU and established an independent office for consultancy and project management, specialized in quality assurance in universities and research organisations.