

Pedagogic Academy

Teaching portfolio

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Acronyms

LUCID	= Lund University Centre of Excellence for the Integration of Social and Natural Dimensions of Sustainability
LUCSUS	= Lund University Centre for Sustainability Studies
LUMES	= Lund University Master's in Environmental Studies and Sustainability Science
LUMID	= Lund University Master's in International Development and Management
SOTL	= Scholarship of Teaching and Learning

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1 Creating an interdisciplinary profile

This portfolio opens below with my first encounter with teaching in higher education and how I eventually took up academic leadership positions. After that I present my career in three chronological steps (early/mid/late) at three Departments (Economic History, Geography, Human Ecology) and two Centres (East and Southeast Asian Studies, LUCSUS) and indicate how courses in teacher training inspired my work. Then follow three chapters on the core themes of my Scholarship of teaching and learning where I weave my educational approach and practice into one: Learning in iterative processes, Interacting with student triplets and in teaching teams, and Examining and Evaluating. I conclude with a brief retrospect and a note on future directions.

In writing the portfolio I had an opportunity to reconstruct, review and synthesise thirty years of experience in teaching, supervision and examination [1], first in undergraduate courses and student counselling in Economic History and Development studies and then, after my PhD in 1995, in graduate courses and programmes in Asian studies, Development, Gender, and Environment. In parallel I did postgraduate supervision in Economic History and since 2008, at LUCSUS, I coordinate and teach graduate courses, supervise postgraduates in Sustainability science, and mentor postdocs.

The *summative product* (Brown 2004) of my portfolio is varied and voluminous (filling many bookcases before the age of power-point). It includes all courses that I have planned, designed, instructed, or participated in as a teacher, examiner or supervisor [2] plus post-graduate supervision at several departments [3]. The *formative process* (Brown 2004) of my scholarship of teaching and learning reflects initiatives, setbacks and problem-solving relating to: how to design, develop and secure integration and progression in international research based interdisciplinary programmes; how to engage with students in constructive feedback, peer-reviewing and peer-teaching; and how to teach, supervise and support graduate and postgraduate students in their learning and in preparing for professional careers.

Becoming a teacher – and an academic leader

As a new PhD candidate in Economic History, I was given a head-start in teaching when, at short notice, I was invited to teach a full undergraduate course (30 students) in World Economic History from the Roman Empire to the global recession of the 1980s – a daunting task. I had to navigate students through longstanding debates on agrarian change, the Black Death, capitalism, colonialism, world trade, and industrialisation in East and West. As some students were experienced history teachers and more knowledgeable than I, I focused less on historical dates, facts and events and more on how social, economic and institutional theory shines light on the dynamics of economic growth, income distribution, and structural change – often in the context of persisting poverty, inequality and ill-health.

In hindsight, and drawing on Kugel (1993) who illustrates progression in teaching careers as a process from ‘self to substance to students’, I realise that despite deep interest in the subject, I focused less on *substance* (or *students*) and more on *self*: how would I survive in the classroom? In Schulman’s (1986)

terms I was obsessed with content knowledge of *what* to teach while only beginning to consider pedagogical content knowledge of *how* to teach, *why*, *who*, and for *what*? Senior colleagues offered little peer guidance beyond the advice to socialise with students in coffee-breaks. Their pedagogic content knowledge (Schulman 1986) and solid repertoire of content and *substance* knowledge, allowed them to focus less on *self* and more on *students* (Kugel 1993) – skills I had yet to acquire.

With time, and inspired by teachers training, professional development, and committee work (see CV), I gained useful networks for pedagogical discussions, increased my awareness of equality and ethics in teaching and evaluation, and took up academic and pedagogic leadership positions involving interaction with colleagues and students in conceiving ideas, turning them into visions, assuring implementation, and supporting everyone in pursuing the new initiatives. This is epitomised by the LUCID PhD-school that, together with LUCSUS colleagues, I was instrumental in applying for and setting up as a novel international interdisciplinary programme in the new research field of sustainability science – one of the first of its kind in the world. Across faculty boundaries we have jointly developed the LUCID PhD-school through courses, frequent seminars, group supervision, and workshops (Ness and Jerneck 2015) [4].

Making an early, mid and late career

I divide my thirty-year career into three periods (early/mid/late) associated with undergraduate (1982–), graduate (1996–), and postgraduate (2008–) teaching, supervision and examination. In the early and mid-career (1982-2008), I was based at the School of Economics and Management and worked with academics across the faculty borders of Social Sciences, Environmental Engineering, Humanities, and Natural Sciences. In 2008, I moved to LUCSUS as a core scientist and PhD supervisor in the LUCID research school and continued as a supervisor, teacher and examiner in several graduate programmes.

Three *career features* stand out [5]:

- * cross-faculty collaboration in interdisciplinary teams
- * pioneering and experimenting in new graduate and post-graduate education (Ness and Jerneck 2015)
- * progression from undergraduate teaching and graduate programme design to postgraduate supervision and postdoc mentoring implying more advanced work, responsibility and leadership

In my **early** career I designed undergraduate courses in economic history and development studies, with Swedish as an instruction language. To keep ‘ahead of students’ posing challenging questions I gradually focused more on *substance* (Kugel 1993) and became more knowledgeable in the historical and contemporary field I was teaching. Inspired by feminist research and a course on Teaching Gender, I created gender modules and started asking feminist questions: *What about reproduction in economic history and development?* I also introduced feminist perspectives, initiatives and literature in methodology courses. In PhD supervision I encouraged gender-sensitive analysis and feminist institutional theory to study access to resources, decision-making power, and income opportunities.

In my **mid**-career, I designed and developed international interdisciplinary graduate programmes and took courses in Academic Leadership (1994, 2001, 2007) and in Teaching in English (1998). Assisted by colleagues in Economic History, I led the planning team and became the founding director of studies for one of the first international interdisciplinary graduate programmes at LU – Asian studies. In this government supported initiative, *Asiensatsningen*, our teaching team worked across six disciplinary boundaries (Economic history, Geography, History, Political science, Sociology, East- and Southeast Asian languages) in three faculties (Humanities, Social Science, School of Economics and Management). As most of us had recently received a PhD in Asia-oriented research we approached teaching and substance knowledge on scientific grounds. Although research-teaching links vary between disciplines we had inquiry-based learning in common and wished to train students in research methods and in initiating their own projects (see Healey 2005). To stimulate both students and teachers, we invited international scholars in Asian studies to our workshops. As a tight team in a new interdisciplinary programme we had to be bold in university politics and challenge conventional norms. I now started focusing less on *self*, more on *substance*, and on leadership in interaction with *interdisciplinary teachers*.

Besides teaching, I co-supervised seven PhD projects to completion, five in Economic History and one each in Geography and Environmental Engineering, mainly women [3]. Meanwhile, I took a course in Postgraduate Supervision. I co-authored a paper on feedback and interaction based on interviews with supervisors and postgraduates in History and Economic History exploring the use of and need for effective and supportive feedback (Andersson and Jerneck 2002). The main lesson was to prioritise close reading of thesis drafts and giving constructive feedback on written text, and that is what I did.

In my **late** career, I supervise and examine theses in graduate programmes. In LUMID we initiated *thesis supervision groups* to prepare students for the field, support them in writing, train them in peer-reviewing and promote throughput [6]. Inspired by our success (97% throughput) I exported the format to LUMES where I was a methodology teacher and thesis supervisor. Recently I became the coordinator of the thesis course and one of three thesis examiners. In LUMID I am one of four thesis examiners.

At LUCSUS, I supervise postgraduates, three in sustainability science and one in Human Ecology. Out of twelve completed theses, I supervised six (2011-2013) and co-supervised two (2014) [3]. I have been a final PhD seminar discussant – in Lund, Linköping and Gothenburg – and have served on examination committees at several departments, faculties, and universities, including Australia. In addition, I mentor postgraduates in *Global Health* in Stockholm and postdocs at LUCSUS – in writing proposals and articles.

In the following three chapters I discuss *learning*, *interacting*, and *evaluating*, as three key themes in my scholarship of teaching and learning.

2 Learning in iterative processes

In teaching and supervision I focus on 1) students: it must be *with* and *for* someone that I engage with in knowledge production; 2) substance: the content must be interesting and significant, and oftentimes

aim at *social change*; and 3) reflexive interaction: I must *respond to* all students and be attentive to what they read and write, how they discuss and interact, and must also ensure that they respect each other.

Courses I teach are scientifically grounded in academic literature, often supplemented by policy reports. In the interest of self-directed learning I encourage 'interpretive investigations' (Healey 2005) and allow certain freedom in the choice of topics in both initial and final exams [7]. To help students flourish in at least one type of performance, I offer varied activities and assignments. Using continuous examination with feedback from me and from peers, I seek to facilitate the full learning process of reading, writing, defending, and revising while assisting them in moving beyond limiting frames.

At the outset of a course I learn all names and try to instill confidence in students both as individuals and as a group that they *will* manage course assignments, *will* be assisted if needed, and *will* pull through in the end. I stress that teachers and students 'are in it together' and have shared responsibility and a capacity to influence. I seek (and seem 😊!) to convey that I appreciate diversity, trust their capacity and active participation, believe in peer-collaboration, and have an interest in the interdisciplinary substance I teach. The higher and more complex the class-room diversity – the more we must communicate [5].

Below, I structure the discussion in three sections inspired by three pedagogic seminars at LU on *deep learning* (Marton et al 1976), *cultural responsiveness* (Belenky 1997) and *identity and subject formation in professional careers* (Skeggs 1997):

* Learning how: depth or surface?

* Learning what: received, experience-based, or created knowledge?

* Learning why: becoming a professional, and an agent of social change?

Learning how: depth or surface?

Ference Marton convincingly argues for *deep* versus *surface* learning and our capacity to link facts and events (causality) into bigger pictures (overall grasp). For that students need to practise their ability to identify, analyse and compare cases and to relate particular events to wider patterns. Adapting this to teaching in Asian and Development Studies, I suggested we take a *synoptic* view (Rice 1992). In lectures we introduced broad historical trends and stressed the capacity to use varied sources and shift between perspectives. In preparation of seminars, students were asked to select and discuss related aspects and arguments – be it on: conflict and *power* in social relations and historical processes, emerging *social phenomena*, pendulum shifts in *polemic* ideological debates, or *tensions* between theory and reality.

Since the inception of the Asian and Development studies programmes, I have followed the practice to launch major themes and perspectives in lectures followed by seminars where students explore and discuss further details and dynamics of historical processes, social dilemmas or theoretical issues. Given that deep learning is associated with 'some independence in choosing what is to be learned' (Trigwell et al 1999:58) all students select a theme for their 'inquiry-based' final take-home exam (Healey 2005) and do research to enhance their conception and understanding of it [7]. Due to the need for 'clear

awareness of the goals and standards required' (Trigwell et al 1999:58) we spell out learning outcomes in syllabi, course activity plans [8], and exam instructions – and clarify our intentions in class.

The learning process: lectures, seminars, and feedback in support of deep learning

In every course I teach, learning outcomes and course literature echo how I/we position it in wider scholarly debates. As an entry point, I introduce and justify the literature and examination tasks in relation to learning outcomes and show how oral and written assignments and reflections (on books, articles, films) are core activities in learning and a basis for examination, feedback and grades.

As a teaching format I generally offer scheduled lectures, seminars, and feedback on every assignment. I suggest specific readings and assignments (reviewing, comparing and preparing arguments, formulating research questions) and explain how students will engage in Socratic dialogues where everyone is expected to contribute by raising relevant issues and identifying valid concerns. In doing so they acquire skills such as: relating details and new substance to core issues of the course (*what is development?*); shifting between critical and benevolent readings and understandings of text; testing their capacity to evaluate and construct knowledge; and communicating findings in intelligible ways. Before sessions end, students and I do a closing summary (Davis 1993:351) to confirm the insights gained, stress the importance of oral and written contributions, try to resolve misunderstandings and indicate remaining issues in need of further attention at coming seminars (*which institutions are necessary for a fairer distribution, or for environmental justice?*). With the passage of time, I keep a lower profile allowing students themselves to 'make meaning' of things (Kreber 2015) and sort out dilemmas. If tensions remain – be it on substance, readings, workload or collaboration – we return to that during the course, individually or in the entire group.

In my view, the lecture-seminar process is circular and progressive, promoting long-lasting learning. In lectures I introduce themes, raise issues, and highlight critical tensions (*big picture*). In reading and writing based on assigned literature and tasks, students evaluate substance, express or test arguments, and suggest new inquiries as input for informed seminar discussions. In ungraded collective oral feedback or graded individual written feedback on assignments, I indicate strengths and scope for improvement. I seek to avoid 'over/under-mark' (Davis 1993:225). And to motivate students further I offer extra-curriculum sessions to clarify feedback: *How can you make better use of the literature to support your knowledge and experience? How can you trust your capacity in academic work?*

Peer-reviewing

To facilitate student learning in graduate courses, I initiate peer-review sessions. Students may seem unprepared or reluctant to 'give or get feedback' but *do* have skills to assess their own work and that of others in credible and supportive ways. In triplets of critical friends, I ask them to be 'interested readers' (Davis 1993:225) assessing their own work and that of others according to the simple formula of '*plus, minus, constructive advice for improvement*'. The learning lies in scrutinising the analysis and use of sources and in challenging one's own perspective. On final exams we maximise benefits through a first

peer-review on drafts followed by a second round on final papers [7]. Students in SIMP 36 appreciate this major learning experience. Some even dress up for the final seminar and some seem ‘unstoppable’ at this collaborative event. Afterwards we ‘debrief’ them (Davis 1993), do a written course evaluation, hand out graded final papers, and share a *farewell fika* to celebrate their accomplishments.

Pioneers in peer teaching

In 2015 we introduced peer-teaching as an instructional novelty, in order to maintain impetus in the graduate course SIMP 36 *Historical Aspects of Development*. The intention was to promote deep learning – both for student teachers and student learners – while stimulating social interaction, collaboration and variation (Goldschmid and Goldschmid 1976) as well as renewal for teachers. We introduced the course in four overview lectures and announced themes and readings for eight peer-based lectures and seminars to follow. Students chose themes based on their particular area of expertise, interest, professional knowledge, or life experiences (Belenky 1997). In triplets (John MacBeath, personal communication), they prepared lectures, selected a seminar format (debate, dialogues, film discussion, panels), gave assignments to peers in preparation for the seminar, and chaired and summed up seminars [9]. Each lecture and seminar was followed by peer-evaluation and our collective and individual feedback on performance. In the interest of continuity and overview, each teacher also attended one of the other teachers’ sessions.

The course evaluation indicated that the course was successful in challenging students’ existing views while also meeting aspirations as regards depth of substance, literature, flexibility in format, deep learning, and we agree. Peer teaching with continuous feedback after every lecture and seminar, also from peers, reinforced learning (‘I must be well prepared to teach my peers’) and most importantly, students announced that they felt *empowered* from improving their capacity not only to digest, present and critically reflect on substance knowledge but also to defend and negotiate their own position while communicating with and learning from peers in a varied interdisciplinary setting [10]. In becoming teachers, I found that students were honest about what they enjoyed in the course and took responsibility for suggesting improvements. As a participant in the process I detected new aspects of the substance knowledge and its teachability: *what is difficult to comprehend, interpret, explain – and why?*

Learning what: received, experience-based, or created knowledge?

At her seminar, Mary F. Belenky reflected on diversity in learning. She pointed at her own empirically grounded and theoretically informed typology of five – fluid rather than fixed – types of knowing and knowledge: *Constructed, Procedural, Received, Subjective, Silence* (Belenky 1997). As a feminist, she discussed the importance of classed, raced, and gendered epistemologies and showed how it plays out both in learning processes and in identity construction and subject formation. In the late 1990s, with the advent of high-profile international graduate programmes at LU, we had to address rapidly increasing diversity in classrooms and embrace intersectionality in theory and practice as done in critical feminist studies and feminist political ecology (Elmhirst 2011). We reconsidered subject matters of our courses as well as teaching styles and formats at seminars and supervision sessions: How could we break

Silence? How should we promote *Constructed* versus *Received* knowledge? To avoid transmitting knowledge (Biggs and Tang 2011) we would build on the experience, expectations and expertise that students bring to academia while challenging or ‘undoing’ past practice, with a view to *going beyond fixed positions* or classed, gendered, and raced views of knowledge and professions. To assist each other we often co-chaired seminars and shared insights.

In Asian studies we took seriously the variation in *disciplinary learning style* that students brought to class: learning through analysis *or* by rote, learning reflexivity *or* mimicking the master? To avoid reproducing partial knowledge we indicated alternative ways of understanding the world and stimulated the ability simultaneously to embrace *contradictory* thoughts. Whereas *learning as accumulation* mainly satisfies external needs (= knowledge control) we targeted their internal needs by fostering learning as *conceptual change* brought about when new knowledge shines light on existing beliefs (Trigwell et al 1999). I remember staying after class for hours to talk about referencing with a student from Asia who used a creative style in take-home exams and consistently avoided instructions to draw on course literature. In his previous education, teachers had told him that too much dependence on and referencing to existing literature would block creativity. When I encouraged him to develop his ideas in *dialogue* with the literature, while also explaining our motives in numerous examples on the board, he respected our view. Years later, he combined his creative mind with academic skills learned at LU when successfully pursuing a PhD at a prestigious American university, and afterwards told me: “I made it!”

In Asian studies, we also paid particular attention to *learning thresholds*. As early career researchers, we were eager to align course work to the research front in Asian studies; however, given the huge variation in education and culture among students, the ambition to translate cutting edge research and research methods into accessible readings and assignments was indeed challenging: how were we to increase *teachability* of complex issues in such a diverse group (see Schulman 1986)? The main difficulty was to foster constructive critical thinking and to create a format for interdisciplinary communication and peer-reviewing in groups of students who were not used to systematically scrutinising course literature or back up arguments based on sound referencing. Nor were they trained to spell out their opinion or academically grounded position, or ask pertinent questions in class.

Drawing on their rich and varied experiences from Asia while seeking to encourage debate to bridge knowledge gaps and enhance academic skills, we took turns in our teaching team to organise weekly interdisciplinary *East-West Seminars* on topical issues in ancient or contemporary Asian societies – Asian Values, Political Culture, Yellow Peril, etc. This initiative went beyond scheduled lecturing and graded assignments, thus paving the way for open debates and *Procedural* knowledge. In retrospect, I value our concern for *how* to teach and *how* to deal with *pedagogical content knowledge* (Schulman 1986).

In course design we struggled to facilitate learning by securing both connectivity between courses and cohesion in the programme structure: *Should we mainstream gender into all courses or make a separate one?* We did both! *Should we, in the interest of variation, experiment with different types of instruction*

material or synchronise it to improve integration between courses? We chose variation. These were attempts to shift away from *self* and *substance* to *students* (Kugel 1993) and from *subject matter knowledge* to *curriculum knowledge* (Schulman 1986). Here our shared normative vision of teaching for social change was effective in overcoming disciplinary divides in our approach or between modules.

Although we cannot measure the full effect of our performance, showing an interest in and sensitivity to students' difficulties while giving appropriate and supportive advice is indeed motivational (Trigwell 1999). In hindsight, we formed a generation of critical Asian scholars and professionals several of whom went on to postgraduate and postdoctoral research – at LU and beyond.

Learning why: becoming a professional, and an agent of social change?

As a feminist sociologist, Beverly Skeggs focuses on identity construction in professional careers (Skeggs 1997). Vigorously, she shows how to engage with research subjects over extended periods and how to analyse qualitative empirical material skillfully. She illustrates how sociological theory (Bourdieu) can be critically scrutinised, modified and used in both feminist research and deeper learning processes relating to *subject formation* in professional life. I translated her research example of 'what it means to *become* a nurse' into 'career making' in my context: what does it mean to *become* a professional development practitioner or an agent of change in sustainability, and what are the classed, gendered and raced aspects? In log writing in my field-based methodology course students use their academic knowledge, professional expertise and diverse experiences to discuss their *positionality* in research and their subject formation in the process of 'becoming' a professional. To save time I give collective feedback here [11].

Student understanding of research ethics is imperative: *how* will I do research for my thesis, *how* do I imagine myself as a future professional? In LUMID methodology and field methods courses (MIDM 12,18, 60) I ask students to discuss ethics in research designs, in fieldwork essays and in their dual role as students and interns working for a development organisation [8]. In SIMP 35 *Theories and Issues in Development*, I invite LUCSUS colleagues to an ethics-seminar to show their documentary film on *Social entrepreneurship in Kenya* (Åkerman and Ness 2013, Ness and Åkerman 2013, 2015). Here we discuss ethical aspects of the substance, of the story-line and of how best to represent smallscale farmers in media such as film. Regarding thesis work, the LUMES THESIS GUIDE has a special section on ethics [12].

As an appreciated learning event outside class, I invited development students in 2014 to attend PhD defenses in sustainability science stressing the science-society interface and action-orientation research in the global south. Exposing students to third cycle learning was inspirational not only for those aspiring to apply to postgraduate studies but also for those seeking to bridge academic and societal work. Public doctoral defenses may thus serve as meta-feedback to students: how do I understand the research front presented and scrutinised? Would I like to pursue doctoral studies? How would I contribute to society?

3 Interacting with student triplets and in teaching teams

In the large and active community interested in designing, developing and teaching research based courses in graduate programmes, I am inspired by colleagues, director of studies, and students while also following scholarly debates on higher education, especially on ways of knowing, learning, and evaluating. Below I discuss three main types of interaction.

Interaction: teachers to students and early career researchers

Although teachers may not primarily or should not necessarily *transmit* substance knowledge (Biggs and Tang 2011) students learn from interaction in class and from our attitudes towards knowledge, the knower, the subject matter, and how we respect and support students as *knowledge constructors and brokers* in society at large. In return, my ambition is to learn something substantially new from *every* student and their work: how they approach substance, how they (mis)understand its conceptual foundation, how they communicate and collaborate with others, and how they engage in learning in the normative fields of development and sustainability. Hard working students who read, write, and discuss generate much work for us to grade and give feedback on. This intense interaction is inspirational for gradually improving or radically rethinking lectures, readings and seminar themes. Through student peer-reviewing and frequent commenting on their reading, writing and presentations, I seek to promote their learning process while bearing in mind that student-teacher relations are profoundly asymmetrical because teachers have the power, responsibility, and duty to assess, examine and grade.

Given that learning curves are high at examination times and that students spend significant time thinking about, preparing for and seeking to fulfill exam criteria, I do *continuous examination* with written individual feed-back and formative assessment on each assignment. It serves to extend the learning curve throughout the course, increase interaction between students and teachers, and identify 'learning difficulties' while offering space for progress and improvement. On demand, I offer individual sessions for further feedback, especially for students who are less familiar with academic standards or have writer's block. I assist students who call for either 'too many or detailed' instructions or who feel 'too restricted'. I ask them to prioritise and define their own room of manoeuvre and then navigate more freely within that space. I may also ask them to consult fellow students for support.

When I headed the selection committee for Minor Field Study stipends in Economic History, I assisted those undergraduate students who had been awarded a MFS-stipend for their thesis work, to turn theoretical ideas into feasible empirical projects, using a simple field-based research method that I have subsequently refined in interaction with graduate students preparing for the field [13]. Although most MFS-students successfully completed their thesis not everyone pulled through and as a coordinator I had to accept that constraints were often beyond my reach or control, such as illness in the family.

Turning to postgraduate supervision there are further interactional challenges. Supervision implies asymmetrical relations and requires that advisors 'stay professional' (Marton, personal communication)

irrespective of our theoretical, methodological or personal preferences, or our financial means. Supporting the candidate as a *person* in her/his pursuit is necessary for *becoming a researcher*, and by repeatedly discussing the *process* of pursuing research, acknowledging the *difficulties in writing* a thesis, and by *'asking a million questions'* on substance and perspectives, I try to keep clear of opinions, personalities, or department gossip or rumours.

Interaction: students to students

I encourage students' deep learning and collaborative skills using various formats: Socratic dialogues where everyone prepares and participates; seminars planned, organised, and chaired by students; and repeated peer-reviewing of assignments, final papers, and thesis drafts to exchange ideas, stimulate analysis, and refine academic teaching and writing. The recent experiment with peer teaching in SIMP 36 *Historical aspects of development* was a rewarding experience of student-to-student interaction. It allowed greater freedom of choice in lecturing format, seminar assignments and instruction materials and the repeated course evaluation on peer-teaching throughout the course was generally very positive [9, 10]. In the interest of avoiding too generous or too diplomatic student reviews on peer-teaching we will experiment with two assigned 'reviewer roles' at each event – the *devil's advocate* who points out what can be improved during the lecture/seminar to boost learning and the *protective angel* who supports what worked well (Mikael Sundström, personal communication).

I cultivate a deep interest in research methodology. Inter- and transdisciplinary programmes expose students (and teachers) to many different views about the world and ways to seek knowledge about it, not least through fieldwork in the global south. This stirs intellectual as well as emotional and existential thinking and reflections on equality, identity, solidarity and the power of knowledge thus invoking *logos*, *ethos* and *pathos* in course work and research [14]. Teaching methodology at graduate level is therefore truly stimulating. I have experimented with various types of methodology courses, where I encourage students (again) to collaborate in triplets to design tentative research projects and illustrate chosen research designs [15]. By presenting their *imagined research*, they translate abstract theoretical and methodological thinking and empirical observations into concrete aims, objectives and relevant research designs, using mainly qualitative strategies such as case study, discourse analysis, ethnography, grounded theory, and narratives. In preparation, students read individually, discuss in their triplets and present power-points to their seminar group while also peer-reviewing others' work and writing individual reflection papers rooted in methodology literature. Seminars often turn into highly creative sessions where students visualise methodological choices, discuss the implications of these and assess their role as researchers. The full process – to read, discuss, plan, present and reflect – serves to raise methodological awareness. Besides such *on-campus courses*, I teach online-methodology-courses for field-based students, comprising discussions boards, power-point presentations, and video-lectures [16].

Interaction: teachers to teachers

In dialogue with colleagues and student evaluations, I refine or revise courses – in incremental steps or in leaps such as shifting to day-courses or peer-teaching. Below, I describe some collaborative initiatives.

In the early 1990s, a colleague and I made the strategic move to redesign part-time evening classes for a few development practitioners into fulltime day courses (ULA 101-103). This markedly increased competition, the number of applicants, enrolled students, and the overall status of the courses. Undergraduate development courses in Swedish are closing down, but international development programmes are among the most attractive – and expanding – at LU (ex: SIMP 35 is up from 20 to 40).

Since 2002, I participate in the Annual Development Research Day organised by development teachers as a mandatory event in SIMP 35 serving to enhance students' interest in and knowledge of contemporary development issues while also offering networking opportunities [17].

In 2005, together with teachers of Geography, Political Science, and Sociology, I was a member of the founding team of the Master's in Development Studies designing its two mandatory profile courses (SIMP *Issues and Theories in Development*, SIMP *Historical Aspects of Development*). I have contributed to updating them, and I am now the only bridging teacher. Recently, and based on evaluations, I assisted a SIMP coordinator in shifting the course focus (and name) from 'Issues' to an equal stress on 'Theories'. I also assist early career researchers in preparing teaching and conducting group supervision.

In 2010, I initiated the co-authoring of a LUCID-article on how to structure research in the emerging field of sustainability science (Jerneck et al 2011). It has become a foundational text in sustainability science (Spangenberg 2011), in LUMES and in the LUCID PhD-School, and now we need a follow-up-article.

In 2013, in the capacity of course coordinator of the LUMES thesis course, and building on my interest in continuous assessment and peer-reviewing for improved learning, I initiated a collective writing process with a dozen thesis advisors resulting in the LUMES THESIS GUIDE on quality criteria and procedures in thesis writing [12]. It is used as individual reading and in support of group supervision sessions.

To disseminate knowledge, I co-authored a text-book with two colleagues on *Politics of development* (Jönsson, Jerneck; Arvidson 2011, 2012) now used in SIMP 35, a chapter on *Poverty* for an e-Handbook on Environmental Governance, a chapter on *Resilience* for a Handbook, a chapter on the LUCID research school for an eBook on diversity in international interdisciplinary education at LU, a chapter on integrated research for UNESCO, and a chapter for the Association of Anthropology and Geography.

Interaction: beyond academia

In the normative fields of development and sustainability science there is an explicit ambition to integrate research and outreach. To acknowledge students' work, extend their learning, and boost their career opportunities, I assist them in presenting their thesis in ways accessible to wider audiences (municipalities, NGOs, schools) – and in publishing. I assist PhDs in arranging stakeholder dialogues and workshops to 'give back' their work to informants – in Bolivia, Kenya, Uganda – and in writing articles on

it. For the Swedish Parliament, we have co-authored reports and organised annual seminars with Right Livelihood Award laureates in 2012, 2013, 2015. I have written chapters for popular science books.

4 Examining and evaluating

In this short chapter I discuss examination as a student oriented opportunity for continuous learning. I also address the need for varied examination criteria, and the use of course evaluations. As regards major academic assessments, I have participated in the writing of evaluations, exemplified by: the LUCID research school (2010), LUMES (2012), LUCID Linnaeus programme (2013- 2014), and LUCSUS RQ 2014.

Learning from examination

For various reasons, be it bad time-management, high expectations, insecure private conditions, motivation loss or low ambition, some students find it hard to mobilise creativity, self-discipline and self-confidence to write final course papers (not to mention their thesis). To activate and motivate students and to interact more with them via instant feedback that allows scope for improvement, I break exam tasks down into specified assignments using a varied examination format: oral, written, individual, or collective. Realising that students spend the bulk of their time and work load engaging with oftentimes difficult literature, I ensure that most assigned *readings* are preceded by a lecture on the theme followed up by written reflections or reviews accompanied by a seminar. I follow up in further debates – often arranged by students – topics and themes in need of further exploration. Although some see such continual ‘reporting’ and ‘production’ as fragmented or disruptive to internal learning, I notice in course evaluations that (most) students benefit in workload and learning from regular, constructive and supportive feedback. However, students *disagreeing* with given feedback may report that they *did not get any* feedback, whereas those getting *positive* feedback may find it *unhelpful* in making progress!

Selecting examination and evaluation criteria

In interdisciplinary graduate and postgraduate programmes, we continually discuss and elaborate on quality criteria and examination criteria (Brinkmann 2014, Tracy 2010). Recently this resulted in THE LUMES THESIS GUIDE [12] and a document on quality criteria for a PhD in sustainability science [18].

Assessment – formative and summative, convergent and divergent, analytic and hermeneutic

In campus and online courses, I practise continuous assessment using both individual and collective feedback. At core, *formative feedback* is useful for communication between students and teachers on results (and grades) on oral and written assignments while also offering valuable information to students on their learning process – and to teachers on the teaching process (Biggs and Tang 2011:195). As a *formative assessment tool*, I give individual feedback in SIMP courses in short templates based on certain criteria such as: clarity, cohesion, and use of course literature [7]. In the *formative assessment* of graduate theses, we do *analytic marking* by giving feedback on separate components such as: 1/ substance, structure and style in a cohesive story; 2/ empirical and theoretical clarity of the argument and depth of understanding, and 3/ significance of focus and contributions [19].

At the end of most courses, our students select a topic, framed by the course themes and literature, for the final inquiry-based course paper [7]. This is the core element in the *summative grading* of students (Biggs and Tang 2011:196). Although we request certain 'declarative knowledge' (showing familiarity with course content, concepts, and literature) we mainly seek here to test their 'performance of understanding' meaning the ability to use and express knowledge for the sake of further knowledge construction as well as the ability to evaluate knowledge through peer-reviewing (Biggs and Tang 2011:212). To provide conditions for deep (internal) learning I give a minimum of instructions (short title, referencing style, word limit) and then do open-ended assessments guided by examination criteria and learning outcomes. This opens up for desirable, divergent and 'unintended outcomes' – *emergent* rather than predetermined or convergent (Biggs and Tang 2011:215) – while also stimulating values like aesthetics, creativity and originality. This is evident in final SIMP-papers and in LUMES/LUMID theses.

Finally, in holistic (Davis 1993) or *hermeneutic judgement*, I evaluate the *intrinsic merits* of a paper or thesis (Biggs and Tang 2011:213-214): is it comprehensive, creative and cohesive *as a whole* – not only in its separate parts? To use a metaphor: all your notes are correct, but can you really 'sing the song'?

To coordinate, we do analytic marking according to predetermined criteria in the LUMID and LUMES thesis templates [19]. However, such detailed – or *split* (Davis 1993) – assessments may result in too much regulation, conformity in research designs, and false insurance: "if only I meet all criteria, then". Therefore, we also use *normative assessment criteria* to compare *overall achievements* in one thesis with that of others (Clifford et al 2010) – such as ambition, novelty, problem-solving skills. In the interest of consistency and fairness and to balance single achievements against collective standards, examiners in LUMID and LUMES meet after final seminars to compare grades and grading principles.

Evaluating peer-teaching – and a new direction in course evaluations

The grading of students' individual and collective performance in peer-teaching *sessions* is delicate – it means assessing their performance in *becoming teachers* (and professionals). In preparing the 2016-course, we will (re)consider its weight (30/40/50 percent) of total performance. We will interview former students to further evaluate their learning process and what they gained from peer-teaching: being peer-teachers in charge of lectures/seminars *and* learners-in-class at peer-led lectures/seminars (Goldschmid and Goldschimid 1976). For that, we will consider *learners* contextually, intellectually and personally (Schulman and Schulman 2004).

In SIMP 35/36 course evaluations, I will shift from perceptions and ratings of lectures, literature, and exams towards *narratives and reflections* on 'how do you think that self-directed learning and inquire-based collaboration stimulated your relational capacity and prepared you for your professional life'?

5 Epilogue – and way forward

It has been extremely stimulating to engage with thousands of students and dozens of teachers in the many development and sustainability courses at all levels at LU that I have contributed to design, teach and evaluate. I have had the privilege to teach international students with diverse skills in timely issues relating to the global south, and often featuring social change. In the 1980s when international aid and collaboration expanded, I started teaching development. At the time of the *Asian Miracle*, and when China, Vietnam and other socialist countries shifted dramatically from plan to market, while later surviving the Asian financial crisis in 1998, the Swedish government commissioned a special report on Asia and asked LU to set up a Centre for East and Southeast Asian Studies with graduate education. In parallel to being the first director of studies of that programme, I was teaching popular courses on gender and the environment. With the emergence of sustainability science as a new research field, LUCSUS pioneered a PhD school where I became a postgraduate supervisor, and a postdoc mentor.

While students were often excited to be frontrunners in new programmes, I was excited to be an early adopter of novel ideas and directions. Shifting between different substance knowledge kept me busy reading and on the outlook for good instruction material. Learning from Asian studies, I adopted the Japanese business idea of *kaizen* (改善) meaning *continual refinement of best practices* from the floor. I did so in interaction with students who were encouraged to suggest gradual (or radical) improvements in course structures, exam topics, instruction format, and readings. For that I/we created an atmosphere of social trust where students felt 'safe' to openly share constructive critique. Slowly but surely, I developed considerable flexibility and a repertoire of practical thought – *phronesis* – of making quick but hopefully sensible judgments under new circumstances and in unpredicted situations (Kreber 2015).

Whereas the format of abundant feedback on assignments, frequent collaboration and peer-reviewing in triplets, and role based debates are becoming mainstream, it was perhaps more groundbreaking in 1990/2000. And vice versa – engagement that may now be more unusual was common then, such as opening the programme with a 'surströmmings-dinner', going out for beer after examination, or inviting teachers and students to parties in our homes. Thinking ahead, I will practise 'teach on demand' if students and postgraduates invite me, as a LUMES thesis course coordinator and LUCID supervisor, to workshops on methodology or the development-sustainability nexus. Here I will draw on experience while tailoring it to the interest and research profile of participants. I may also contribute to *moocs*.

Considering that *lived* teaching exceeds – by far! – any *documented* teaching, I had to *reduce the complexity* of everyday teaching in writing the portfolio. However, such systematic thinking on recurring challenges, possible improvements and gradual refinements eventually *produced a new complexity* of the dynamics of teaching, learning and interaction (Qvortrup and Keiding 2015). It triggered further thoughts on how to juggle the multiple roles of being an educator, examiner, entertainer, 'ethical paragon' and emotional supporter; and on what it takes to become an inspirational teacher, supervisor, and mentor in research-based education and in the light of changing social conditions and demands.

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Appendix 1-19 Purposively selected illustrative items

- [1] Appendix 1 2015 Pedagogic Academy Course Certificate
2015 Certificate from LUCSUS Deputy Director: Sara Brogaard
2015 Letter from colleague: Barry Ness
2015 Letter from colleague: Karin Steen
- [2] Appendix 2 2015 Total Teaching Portfolio All Courses
- [3] Appendix 3 2015 Total PhD Supervision
- [4] Appendix 4 2015 Short documentary on the LUCID research school
<https://youtu.be/EFc2PBQI2Xw>
- [5] Appendix 5 2015 Map of Career Focus and Process Over Time
2000 Optimising Communication across Disciplinary Diversity
- [6] Appendix 6 2007 LUMID Thesis Course Group Supervision: First Meeting
2009 LUMID Feedback from supervisor on doing a literature review
- [7] Appendix 7 2015 SIMP 35 Poverty Seminar Instructions & Triplets
2015 SIMP 35 Short Feedback Template for Poverty Assignment
2015 SIMP 36 Instructions and Themes for Final paper
- [8] Appendix 8 2014 LUMID MIDM 18 Field Methods: Course Activities Plan
- [9] Appendix 9 2015 SIMP 36 Instructions to students on peer teaching
2015 SIMP 36 Group contract for peer teaching
2015 SIMP 36 Feedback to Peer-teachers
- [10] Appendix 10 2015 SIMP 36 Summary of course evaluation on peer teaching
- [11] Appendix 11 2007 LUMID MIDM 60 Collective Feedback Log 5
2008 LUMID MIDM 60 Collective Feedback Final Log Book
- [12] Appendix 12 2014 LUMES Thesis Guide
- [13] Appendix 13 1996-2014 Template Tutoring Session: Preparing for field work
- [14] Appendix 14 LUMID MIDM 18: Returning from field work in the global south
- [15] Appendix 15 2013 ACER 22 Methodology in Theory and Practice: Seminar instructions
- [16] Appendix 16 LUMID MIDM 18: Film as instruction material – Case Study, Field work
https://liveatlund.lu.se/departments/lumid/MIDM18/MIDM18_2013HT_100_1_NML_1281/Pages/videos.aspx
- [17] Appendix 17 2002 First Development Research Day Programme
- [18] Appendix 18 2014 LUCSUS Specification of Postgraduate Syllabus Sustainability science
- [19] Appendix 19 LUMES Thesis Examination Template
LUMID Thesis Assessment Form