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The construction of teaching roles at Aalborg university centre, 1970–1980

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ABSTRACT

This paper proposes a historical analysis of the development of teaching roles at Aalborg University Centre in its first 10 years. The research highlights three processes through which the interpretation of the new ‘supervisor’ roles was constructed within the problem-oriented, project-based educational model of AUC. First, the authors show that the institutional framework for teaching roles was deliberately left open to significant interpretation from the various faculties of the university; second, the critical theoretical model that had served as a guideline for the inception of project work in Roskilde failed to make an impact in Aalborg, whereas teachers from AUC were more receptive to constructivist psychology as a theoretical framework for practice; third, through community-building and negotiation within the faculties, different interpretations of teaching roles emerged in the different disciplines. The paper closes with a reflection on the implications of these findings for the more general context of higher education.

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Introduction

The paradigm shift in the tertiary educational landscape from top-down didactics to student-centred pedagogy that began in the wake of the student protest movements of the 1960s has taken on global proportions in the early twenty-first century. All over the world, higher education institutions old and new are converting traditionally taught curricula into a plethora of so-called progressive education methods such as problem-based learning, project work, community-oriented education and so forth.¹ This shift, which began in North America and Europe, requires teachers to adapt to changing and often unclear expectations of what was traditionally a well-defined and

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¹Jos Moust, Peter Bouhuijs and Henk Schmidt, *Introduction to Problem-Based Learning* (Groningen: Noordhoff Uitgevers, 2007), 11. Over 500 higher education institutions worldwide are using some form of problem-based learning, one of the most popular student-centred pedagogies in use today.

authoritative professional role.² The struggle that teachers experience today with these shifting expectations is not so different from that which they experienced in the 1960s. As the famous British historian E.H. Carr eloquently suggested: ‘past, present and future are linked together in the endless chain of History’.³ To understand how the development of narratives around progressive teaching roles emerged from the student revolts of 1968, we propose to uncover the historical construction of those roles in one of the first universities to undergo such transformations at an institutional level. In order to understand how the transition of teacher roles from the authoritative professor figure to the educational guide was made, we must look to an institution that already had traditional educational practices and changed them, as opposed to starting with a blank slate, but also survived the conservative political backlash against progressive education of the late 1970s.

Thus, this paper focuses on the historical construction of progressive teacher roles at Aalborg University Centre (AUC), born in 1974 in the eponymous city of Northern Jutland in Denmark under the flag of the reformed universities movement. Proposing a problem-oriented, project-organised approach (PPL) to learning in which teachers were ascribed a new role as ‘supervisors’, or *vejledere* in Danish, the case of AUC is peculiar for two reasons: first, because unlike new tertiary institutions that successfully challenged traditional models such as Roskilde University Centre (RUC), McMaster University School of Medicine or Maastricht University, it was the hybrid child of pre-existing technical and college institutions and a new educational project mandated by Copenhagen. Indeed, Aalborg already hosted a number of scattered tertiary-level educational institutions – including a School of Economics and Business, a School of Social Work and some engineering institutions – but the city had been lobbying for its own university since the 1950s.⁴ Second, unlike other reformed universities born in the same epoch, such as Brasilia University or Bremen University, its model survived relatively unchanged for several decades and still exists today, albeit with some modifications.⁵

In proposing a historical analysis of the experience of change for teachers at Aalborg University Centre in the first decade of its existence, this paper will centre on the following research questions: how did the concept of ‘*vejledere*’ emerge within the reformed pedagogical model of Aalborg University Centre, and how did AUC’s teachers construct their roles given this framework? The answers uncovered by this research are divided into two key aspects: the institutional and education-theory framework for the concept of ‘*vejledere*’, which will be contrasted with emerging pedagogical practice; and the conceptualisation of the *vejleder* role by teachers themselves. The historical approach provides a temporal depth

²Alexandra K. Johnston and Robina S. Tinning, ‘Meeting the Challenge of Problem-Based Learning: Developing the Facilitators’, *Nurse Education Today* 21, no. 3 (2001): 161–9; R. M. Harden and Joy Crosby, ‘The Good Teacher is More Than a Lecturer: The Twelve Roles of the Teacher’, *Medical Teacher* 22, no. 4 (2000): 334–47; Virginie F. C. Servant and Eleanor F. Dewar, ‘Investigating Problem-Based Learning Tutorship in Medical and Engineering Programs in Malaysia’, *Interdisciplinary Journal of Problem-Based Learning* 9, no. 2 (2015), doi: <https://doi.org/10.7771/1541-5015>, <https://docs.lib.purdue.edu/ijpbl/vol9/iss2/6/> (accessed September 10, 2016).

³Edward H. Carr, *What is History?* (London: Penguin Books, 1990), 134.

⁴John S. Whitehead, ‘Denmark’s Two University Centres: The Quest for Stability, Autonomy and Distinctiveness’, *Higher Education* 10, no. 1 (2007): 89–101; *Aalborg Universitetscenter Aarsberetning* [Aalborg University Centre annual report] (Aalborg: Aalborg Universitetscenter, 1976).

⁵Anette Kolmos, Jette E. Holgaard and Bettina Dahl, ‘Reconstructing the Aalborg Model for PBL: A Case From the Faculty of Engineering and Science, Aalborg University’, in *PBL Across Cultures*, ed. Khairiyah Mohd-Yusof, Mahyuddin Bin Arsat, Mohamad Termizi Bin Borhan, Erik de Graaff, Anette Kolmos and Fatin Aliah Phang (Aalborg: Aalborg University Press, 2013), 289–96.

and context to the global debate on changing teacher roles beyond what empirical studies presently offer. By drawing from the lessons of history, this paper hopes to contribute to a more general debate on teacher experiences in times of pedagogical change.

In this research, the authors used a process of historical triangulation, meaning the combination of data 'drawn from different sources and at different times, in different places or from different people'.⁶ These sources were of four kinds: oral history accounts drawn from people who were either teachers or students involved with AUC between 1972 and 1982; archive materials, such as printed copies of student newspapers and contemporary reports; contemporary publications about AUC either internally or externally published collected from Aalborg University Library and the personal collections of our interviewees; publications from the 1980s reflecting on the events of the 1970s, collected from Aalborg University Library. The oral history interviews were conducted in English. The interviews were mostly done in person and recorded at Aalborg University, but some had to be done by telephone, then transcribed. The archive sources, publications and some personal correspondence with respondents were translated from Danish to English by the second author.

This paper begins by defining and critically reviewing the *vejleder* role within the institutional context of Aalborg, set against the background of two influential educational theories: the critical education theory of Oskar Negt as interpreted by Eva Hultengren; and the psychological education theory of Piaget as translated by Knud Illeris. Then, we propose an analysis of the emerging practice, shared experience and community-building components involved in the constitution of *vejleder* roles. Finally, we reflect on the impact of these processes on the teaching profession at AUC, and our historical understanding of pedagogical innovation on teachers more generally.

1970–1974: a new institution in an extant educational context

Building the Aalborg educational model was a lengthy process: even though preparations had begun in the early 1960s, the green light for AUC came from Copenhagen with the appointment of a Planning Group for the university in 1970. Indeed, the urgency of disgoring the halls of Copenhagen University was such that the adjacent city of Roskilde was authorised to set up the first University Centre two years prior to Aalborg.⁷ This historical happening is not anodyne – RUC pioneered the PPL approach that defined the concept of *vejleder* in higher education in Denmark, and this directly impacted on what would be the interpretation of the teaching profession at AUC.⁸ In this model the *vejleder* concept (translating literally into way-leader) redefined the teacher's role in the learning process as a person guiding the students' acquisition of content through project-organised problems rather than the direct transmission of knowledge. The *vejleder*, which has been translated as 'supervisor' in English publications, was considered a partner in the project work rather

⁶Julie Cox, 'Triangulation: SAGE Research Methods', in *SAGE Research Methods*, <https://srmo.sagepub.com> (accessed September 15, 2015).

⁷Allan Clausen, *Kampen for et Nordjysk Universitet* [The battle for a North Jutland university] (Aalborg: Aalborg Universitetsforlag, 1984).

⁸Else Hansen, *En Koral i Tidens Strøm* [A coral in the flow of time] (Frederiksberg: Roskilde Universitetsforlag, 1997). It should be clarified at this point that this paper will only refer to the 'Roskilde Model' in so far as it influenced the development of AUC's pedagogical practice. For a thorough historical analysis of the Roskilde model, Else Hansen compiled a comprehensive history of Roskilde University to which the reader is invited to refer.

than a hierarchical superior to the students.⁹ This is different from the role of ‘tutor’ endorsed by other progressive educational models like medical problem-based learning (PBL) in that the supervisor is in theory an integral participant in the project development whereas the PBL tutor is in theory not involved in deciding the content to be covered by students in their groups. In this paper, we shall use *vejleder* and ‘supervisor’ interchangeably to refer to the pedagogical role of teachers within projects. We shall refer to ‘teachers’ when we are talking about the physical persons working in teaching roles at AUC.

The Danish Ministry of Education dropped the blueprint for the RUC model on the table of the Aalborg Planning Group as a *fait accompli* that should be adapted but not discarded by the planners. Unlike Roskilde, Aalborg faced the challenge that instead of starting *tabula rasa* it was compelled to take into account the interests of pre-existing educational outfits and various industry lobby groups from the city of Aalborg and surroundings. This difference caused a triple clash in the first few years of AUC’s existence. First, it fostered a conflict between the revolutionary ambitions of radical elements of the Student Union *Danske Studerendes Fællesråd* (DSF) and pragmatic planners who had to integrate a large body of experienced teachers in their institutional structure. Second, it brought about a confrontation of different perspectives on educational theory, between the Frankfurt School and constructivist psychology. Third, while this provided AUC with a foundation for its learning principles grounded in education theory, it clashed with the atheoretical experience of teaching in Aalborg’s pre-existing institutions, particularly in the field of engineering. Within this context, a broad and sketchy interpretation of the *vejleder* role was drafted as a compromise, deliberately left open and thereby unintendedly more anxiety-inducing for teachers propelled into this new educational model.

The planning committee’s loose institutional foundations for teacher roles

At the start of the planning of AUC, the Danish Minister of Education requested that the *basisuddannelse* (basic education) programme – the interdisciplinary entry-level education programme at the start of any Bachelor programme at AUC – be different from the (two-year) *basisuddannelse* at Roskilde University Centre.¹⁰ The latter was largely seen by the press and the public as the nest from which communism, Marxism and other radical political activism was bred, and the minister was keen to avoid a repeat of these controversies in Aalborg.¹¹ Quite how was not explicitly determined by the minister, but the implications of this request overshadowed much of the initial discussions concerning AUC.¹² The ministerial decree specified that project-organised group work would comprise at least half of study time, which in practice translated to a 50–50 division between project work and traditional courses that could be either connected with or independent of project work. Teachers earned a mention in the ministerial decree with regard to their role in the project work: themes and projects would be drafted by *vejleders*, and students’ project selection

⁹Jens Berthelsen, Knud Illeris and Sten Clod Poulsen, *Projektarbejde* [Project work] (Copenhagen: Borgen, 1977); Knud Illeris, *Problemløserorientering og Deltagerstyring* [Problem orientation and participant direction] (Copenhagen: Munksgaard, 1974).

¹⁰Clausen, *Kampen for et Nordjysk Universitet*.

¹¹A. Andersen, ‘Roskilde Universitets Center – Marxistisk Sandkasse eller en Gavnlig Nyskabelse – 16 March 1974’ [Roskilde University Centre – Marxist sandbox or favourable invention – 16 March 1974], MagRHSa000006 (RUC-Historisk Samling Archives, Roskilde University, Roskilde, Denmark, January 5, 2012).

¹²Jes Adolphsen, *I Satte os i Jeres Baner: Interviews med 19 Vigtige Personer i AUC’s Historie* [You put us in your tracks: interviews with 19 important persons in AUC history] (Aalborg: Universitetsforlag, 1984).

should be approved by teachers in accordance with supervision resources. Assessment would be ongoing during the study, and a final assessment of the final project report should involve an external examiner or ‘censor’. The ministry gave no further indications regarding its vision for the redefinition of teaching roles.

The outcome of the lobbying process surrounding this ministerial mandate within the Planning Group was the production of a 60-page ‘Majority’ and a 201-page ‘Minority’ report on the structure of the proposed university, its curriculum and, to some extent, its pedagogical practices.¹³ Primarily concerned with economic viability and pragmatic management considerations, the ‘Majority’ report determined that *basisuddannelse* would be reduced from two years in the Roskilde model to one in the new Aalborg model. In addition, AUC would benefit from a technical-natural sciences orientation that was deliberately excluded from Roskilde – thus enveloping the existing engineering institutions in Aalborg into the university’s mantle. The ‘Minority’ report, by contrast, advocated a two-year *basisuddannelse* programme, arguing that this would enable students to manage their studies democratically, and that a one-year basic education would not be feasible as students would be unprepared for further studies.¹⁴

The debate had an important impact on teachers: within the *basisuddannelse* programme, they would be expected to spend most of their time as supervisors (*vejledere*) in interdisciplinary projects. As soon as basic education was over and disciplinary specialisation began, teachers could revert to their area of specialisation and act as content experts, even within a project framework. Therefore, the shorter the *basisuddannelse* period, the less exacting the (perceived) pedagogical demands on teachers. As with most situations of discord, the actual implementation of these reports was in fact a compromise between the two positions and to a large extent an adoption of the pedagogical approaches elaborated in the ‘Minority’ report with the pragmatic suggestions of the ‘Majority’ report. The final ministerial decree on the establishment of AUC, dated September 1974, stated that AUC would basically adopt the pedagogical principle of PPL, but with a one-year *basisuddannelse* programme.¹⁵ This was divided into four sub-categories that would operate quasi-independently: social sciences, linguistic-pedagogical, musical-aesthetic and technical-natural-sciences (Teknat). This represents an important choice, as the interpretation of the *vejleder* role was left open to teachers within separate disciplinary spheres rather shaped top-down within a monolithic institutional culture.

Beyond the establishment of a framework of basic education, the Planning Group’s recommendations concerning teaching staff were rather sparse in the proposal for the university centre. Some requirements for the *vejleder* role though were seen as essential: academic insight, interdisciplinary orientation, pedagogical skills, research experience, practical experience and collaboration skills.¹⁶ As potential applicants might have difficulties fulfilling all

¹³Interimstyret for Aalborg Universitetscenter, *Principskitse til Opbygningen af Aalborg Universitetscenter* [Principal design for structuring Aalborg University Centre] (Aalborg Universitetscenter, 1974). This work consists of the following sections: *Bind 1: Indledning og Sammenfatning* [Introduction and summary], *Bind 2: Flertalsindstilling* [Majority recommendation.], *Bind 3: Mindretalsindstilling* [Minority recommendation].

¹⁴Adolphsen, *I Satte os i Jeres Baner*; Clausen, *Kampen for et Nordjysk Universitet*.

¹⁵Henrik Nielsen, Jørgen Poulsen and Per Salomonsen, *SAMF BASIS – en Vurdering af den Samfundsvidenskabelige Basisuddannelse ved AUC 1974/75 og 75/76* [Social science basis-year – an assessment of the social science basic education at AUC 1974/75 and 75/76], Det Samfundsvidenskabelige Fakultetsnævns, 2 udgave, December 1976 (Aalborg: Aalborg Universitetscenter, 1976).

¹⁶Planlægningsgruppen for Aalborg Universitetscenter, *Opbygningen af Aalborg Universitetscenter* [Structuring of Aalborg University Centre] (Aalborg: Aalborg Universitetscenter, September 1972), 95–6.

of the above requirements, teachers were to be given the opportunity for further education and training, pedagogical courses, training on collaboration skills and the possibility of temporary leave in order to gain experience elsewhere.

With the general framework for educational practice set by the Planning Group, the following central issues and debates on the early curriculum design and teacher roles at AUC were left unresolved:

- (1) Project definition and model: an implicit (and probably overly optimistic) understanding that all staff were familiar with the structure and the process;
- (2) Project themes and proposals: the extent to which framing and direction was to be done by *vejleders* as opposed to students;
- (3) Courses and projects: unresolved debate on the degree of disciplinary orientation in the curriculum, and the degree of problem orientation;
- (4) Student achievement: unresolved debate on the degree of teacher-centred versus learner-centred activities in assessment;
- (5) Subsequent study: the degree to which AUC should focus on building subsequent studies on achievements intended during *basisuddannelse*;
- (6) Employment of teaching staff: This could be done by transfer from pre-existing but integrated institutions, versus by application based on specified academic requirements, it could be based on documented prior pedagogical qualifications versus in-service training, it could be based on documented experience with interdisciplinarity (rather limited in 1970s Denmark!). It was not determined whether staff should be appointed in clearly discipline-defined departments, or in interdisciplinary departments.

What we can conclude from this analysis is that, as AUC opened its doors, teachers beginning in the autumn of 1974 had very little to go by in terms of an institutional framework for their new role as *vejleders* within the reformed pedagogy model. The loose political compromise solution that had been offered by the Planning Group to the problem of teaching and learning at AUC offered little tangible support for teachers trying to figure out expectations of their new roles. What is more, the local context of the teaching profession in Aalborg meant that it was impossible to expect a unified way of adopting PPL within AUC.

Local circumstances impacting on teacher recruitment and willingness to work with PPL

Aalborg was a small provincial town with very practical concerns and particular skillset requirements from the local industry. Indeed, the fact that, in addition to academic representatives, the original planning committee was composed of people like Vagn Null, a sales manager and former mayor of Løgstør; Alfred Bøgh, a farmer and former member of parliament from Arden; Eigil Hastrup, a bank manager from Aalborg; Holger P. Nielsen, a councilman from Aalborg; and Niels Østeraas, a manager from Aalborg, shows that regional industry and local interests were of primordial importance in the planning process for the university.¹⁷ As Whitehead pointed out, the main concern of these people

¹⁷Planlægningsgruppen for Aalborg Universitetscenter, 'Opbygningen af Aalborg Universitetscenter', 17–18.

was to ensure that Aalborg had a university at all; they were not particularly attached to any pedagogical principles and in fact would have preferred a traditional university with traditional professors.¹⁸ But since the PPL model was mandated by the Ministry the planners were prepared to make it work, in whichever way seemed most pragmatically convenient. However, once they put together the loose framework for recruiting teachers outlined above, they were still faced with three factors that influenced the recruitment of teachers in the early days of the University Centre: Aalborg had an extant teacher population, but only in technical and vocational subjects, and only with a traditional pedagogical background. Sweden had a supply of willing professors in social sciences and humanities, but they were largely of the left-wing persuasion. Aarhus had young graduates to offer as teachers, but they would have to be persuaded to move to Aalborg and offered little in terms of professional experience.

It was decided, to resolve this conundrum, that all faculty from an extant institution would be offered an unconditional transfer to AUC and pedagogical courses to catch up with the PPL model.¹⁹ In 1974, 275 teachers took up the offer and were transferred into AUC from the five pre-existing institutions in Aalborg.²⁰ These traditional teachers were generally not affiliated with left-wing student groups and had little inclination to absorb any theoretical literature. By contrast, most teachers for the social sciences and humanities were freshly hired, some indeed willing to come over from Sweden upon finding Denmark to be more welcoming of left-wing ideology than Gothenburg or Stockholm.²¹ These were supplemented with teaching assistants hired among older students from Aarhus University. What these recruiting policies meant was that AUC was endowed with a rich variety of faculty members, with marked differences between the different institutes. These differences had a strong impact on the institutes' respective propensity to take on the PPL model. Whilst the social sciences were naturally inclined to follow the RUC model, engineering was a different story. According to Caspersen: 'some teachers were prepared, some were expectant, some were reluctant, and some were unwilling'.²² For the 200 teachers coming in from the two traditional engineering institutions the forced transition to PPL was rather traumatic:

So in the faculty of engineering and science, I would say the first seven or eight years or so were pretty traumatic actually. I normally say to people a little bit jokingly but with an element of truth in it that the curb in numbers of university teachers admitted to the psychiatric hospital in Aalborg rose quite quickly. And there was even a case of suicide, which presumably was caused by the work situation. That's at least the explanation that we got afterwards. So it was not an easy transformation.²³

The loose institutional framework of the Planning Committee that we have described so far set the scene for the influence of education theories as support for teaching practices at AUC. First, a fall in influence for Frankfurt School critical pedagogy, which was the defining feature of RUC but failed to take hold at AUC; second, the rise in the influence of constructivist psychology as the basis for understanding *vejleder* roles at AUC.

¹⁸Whitehead, 'Denmark's Two University Centres', 97.

¹⁹Adolphsen, *I Satte os i Jeres Baner*.

²⁰Sven Caspersen, 'Inaugural Lecture by Appointment to Honorary Professor at Aalborg University, November 23, 2012', Edu Media, https://edumedia.dk/media/Sven+Caspersen/0_ka2x2zqj (accessed September 13, 2016).

²¹John Houman Sørensen (former head of the Student Union DSF at AUC), in discussion with the author, January 2013.

²²*Ibid.*

²³Mona-Lisa Dahms (Associate Professor at Aalborg University), in discussion with the author, January 2013.

Tentative steps towards an AUC theory of education

The educational offspring of the Frankfurt School, known as *Kritische Erziehungswissenschaft* (Critical Pedagogy) in its country of origin, had been popularised at Roskilde University by people like Mihail Larsen and Henning Salling Olesen.²⁴ Although this intellectual movement was strongest in Roskilde between 1970 and 1977, it found some ardent defenders in Northern Jutland too. The most prominent ideologue of this movement in the early years of AUC was Eva Hultengren, who headed the study board for the humanities in the mid-1970s.²⁵ But the critical-pedagogic theoretical framework was not the only model that set the context for the teachers at AUC: pedagogical ideas from cognitive psychology were imported from Copenhagen, expounded in the work of Knud Illeris.²⁶ In order to understand the shaping of the role of teachers at AUC, it is important to consider how the influence of these ideas played out in terms of ideas about teaching and learning.

Psycho-societal education theory (Frankfurt school)

The so-called ‘psycho-societal’ framework is the 1960s and ’70s re-interpretation of classical Freudian and Marxist thought. The term ‘psycho-societal’ features prominently in the work of the German philosopher Oskar Negt, particularly in his 1972 collaboration with Alexander Kluge, *Public Sphere and Experience*.²⁷ Their work centres on ‘sociological imagination’ in the sense proposed by C. Wright Mills as the basis for the emancipation of the working class through education. The theory posits that through the means of *exemplarisches lernen* (exemplary learning methods) that relate directly to the workers’ lived experience and world-model, education can overcome *sprachbarrieren* (the barriers of the bourgeois spoken language) that incapacitate the working class in traditional bourgeois educational contexts, of which the traditional university is one example.²⁸

Negt, a student of Adorno, was based in Frankfurt-am-Main, but his work was highly influential in Roskilde. Within the DSF, it inspired the so-called *Fagkritik* movement, an intellectual development described by Mihail Larsen as follows:

The *Fagkritikkens* aim is precisely the preparation of the emancipatory possibilities of scientific and technological work, whether this preparation takes place as an internal theoretical research and logical analysis (internal *Fagkritik*) or as the empirically concrete, practical research (external *Fagkritik*); in other words: whether it takes place as for example in the critique of positivism, within a single scientific theory, or as preparation of a *fagkritisk* report on a labour market issue.²⁹

²⁴Bernhard Koring, ‘Konzepte der Erziehungswissenschaft’ [The concept of critical pedagogy], *TU Chemnitz-Zwickau*, <https://neibecker.wiwi.uni-karlsruhe.de/breiter/fertig/chemnitz/homesem.htm> (accessed May 20, 2016); Mihail Larsen, *Kritik af den Kulturradikale Pædagogik* [Criticism of cultural-radical pedagogy] (Copenhagen: Modtryk, 1974).

²⁵Eva Hultengren (former head of the study board for Humanities at AUC), in correspondence with the author, July 2016. It should be noted that Hultengren would refer to herself more as a practical person than a theorist, although she admits that she may have been considered as an ‘ideologue’ by others, including her students.

²⁶Illeris, *Problemorientering og Deltagerstyring*.

²⁷Oskar Negt and Alexander Kluge, *Öffentlichkeit und Erfahrung* [Public sphere and experience] (Frankfurt am Main: Suhrkamp, 1972).

²⁸Oskar Negt, *Soziologische Phantasie und Exemplarisches Lernen* [Sociological imagination and exemplary learning] (Frankfurt am Main: Europ. Verl.-Anst, 1968).

²⁹Larsen, *Kritik af den Kulturradikale Pædagogik*, 75.

Fagkritik went beyond education theory and contained broader implications regarding the societal role of knowledge. Its importance in the academic context was explained by Klemmensen:

Fagkritik was the buzz-word of the 1968 insurgency and had both an internal and external component. The external *fagkritik* was about science and the societal role of studies. Here, the political confrontation against prevailing conditions was formulated. The catchphrase from the occupation of Copenhagen University in March 1970 distinctively and succinctly expresses the core of this criticism: ‘research for the people, not for profits’... The *fagkritik*’s internal aspect was directed at the discipline’s theoretical and methodological foundations and beliefs. It was in this context that the academic showdown ensued.³⁰

Hultengren encountered Negt’s educational work prior to her joining AUC, while she taught in a ‘shop steward’ education programme in which problem-oriented project work was being used by ‘far sighted trade unionists’ to help unskilled workers learn.³¹ Her acquaintance with Negt’s education theories was fostered by her colleagues from Roskilde University, particularly Henning Salling Olesen, with whom she authored several texts in Danish and German on the subject of workers’ education.³² Hultengren met Negt in 1976, paying a special visit to his ‘shop steward school’ in Falkenstein, which served as a living laboratory for his ideas on working-class education.³³ Additionally, Negt visited Aalborg several times as guest lecturer between 1974 and 1976. The history of the Frankfurt School influence in Denmark as a whole is somewhat obscure, but since the subject of this research is AUC, and its links to the Frankfurt School are clearly linked to Hultengren, we shall take her work as representative of this educational theory current at AUC.

Hultengren put many of her ideas on project-organised and problem-oriented education to paper throughout the 1970s, and it is clear from her writing that the project-organised educational model had to be understood in line with both *Fagkritik* and Frankfurt School Marxism – namely, the pedagogical theory of exemplary learning should be inextricably linked with a Marxist theoretical approach to project content. Thus, speaking about the nature of problems and projects at *basic education* level at AUC, she wrote:

You could say that you work from the integration of subjects within a social science theory. Marxism is no super-theory but an integrating and structuring Social Sciences theory. If we return to the university centres you could say that Marxist theory and methods are very useful in *basic education* due to the broad problem-topic you work with there.³⁴

We find in this passage the recurrence of the theme of interdisciplinarity, which lies at the heart of *Fagkritik*. For Hultengren, the problem-oriented project-organised pedagogical model should be used as a means to generate consciousness in a materialist sense. The following statement is quite telling in this regard: ‘I think it must be a criterion for problems that one could gain insight into consciousness and consciousness-production in relation

³⁰Børge Klemmensen, ‘Sølvbryllup i Oprøret, – og Ligusterhæk Ensretning og Ukritisk Tilpassethed hos Afkommet’ [The silver anniversary of rebellion – and privet hedges, regimentation and uncritical conformity in the offspring], in *RUC i 25 År* [RUC is 25 years old], ed. Henrik Toft Jensen (Frederiksberg: Roskilde Universitetsforlag, 1997), 42–4.

³¹Hultengren, in correspondence with the author, July 2016.

³²Eva Hultengren and Henning Salling Olesen, *Eksemplarisk Indlæring og Arbejderuddannelse* [Exemplary learning and workers’ education] (Aalborg & Roskilde: Institut for Uddannelse og Socialisering, 1977).

³³*Ibid.*

³⁴Eva Hultengren, *Problemorientering, Projektarbejde og Rapportskrivning* [Problem orientation, project work and report writing] (Aalborg: Aalborg Universitetsforlag, 1979).

to the historical and material situations through said problem.³⁵ Thus, Hultengren believed that PPL could build on social and societal problems to bridge the gap between university education and the real-world concerns of the working class through Negt's principle of exemplarity. To achieve this, problems had to break through the constraints of disciplinary boundaries and heighten the students' consciousness with regard to the historical and material processes at play in the world. However, within a few years, Hultengren recognised that the material situation of unskilled workers was very different from that of the majority of AUC students, whose limited experience simply could not lead them to uncover the hidden power structures of society. Rather discomfited, she states: 'I came to the realisation that the societal aspect often was a glued-on final chapter and a kind of subservience to the new way of thinking at the university-mountain. Highly unsatisfactory for me.'³⁶

Hultengren did not say much of the teacher's role, save as a guide and ally in this process of consciousness-formation. She allocated five pages of recommendations for the *vejleder* role in her otherwise elaborate 'Handbook with Explanations' for teachers.³⁷ She stressed that teachers must be in close contact with the group, act with 'gentleness', rather be reactive than proactive and thus support the group's process through collaborative formative assessment of product and process. Hultengren advocated scrutinising the group's methodology and text as a way of facilitating the desired academic quality. The traditional lecturer-professor of old was anathema to her model, and the entire point of the psycho-societal framework of education was to centre around the students' experiences in learning, rather than teaching. This in itself would have constituted a considerable psychological shock to teachers already established in Aalborg's pre-existing higher education institutions.

Although Hultengren's writings were quite popular with some of the left-wing elements at AUC, particularly within the humanities and social sciences, they failed to sway some of the more technical fields of study. To find a grounding for their educational model less based on obscure critical school educational principles, many turned instead to the work on cognitive psychology of Danish education theorist Knud Illeris.

Constructivist psychology: the Copenhagen interpretation

Another important intellectual influence in the development of Roskilde University was the Danish Institute for Educational Research (DIER), founded in the 1960s in Copenhagen, with a mission to 'carry out research and pursue studies relating to education' and 'to assist in the planning and coordination of educational experiments outside the Institute and the analysis of findings derived from them.'³⁸ Because it was so close to Copenhagen and so intriguing a project, Roskilde University offered a perfect opportunity for education research under the auspices of the DIER. As part of this research effort, *magister* candidate Knud Illeris came to develop the theoretical component of his dissertation on the Roskilde model under the supervision of prominent DIER researcher Jens Bjerg in the early 1970s. Both Bjerg and Illeris were hired as pedagogical consultants prior to RUC's opening, and Bjerg was given a professorial position once the university opened. Despite this, he left soon after the set-up phase while Illeris stayed and published his thesis under the title

³⁵Hultengren, *Problemorientering, Projektarbejde og Rappportskrivning*, 16.

³⁶Hultengren, in correspondence with the author, July 2016.

³⁷Hultengren, *Problemorientering, Projektarbejde og Rappportskrivning*, 123–8.

³⁸Erik Thomsen, 'The Danish Institute for Educational Research', *Applied Psychology: An International Review* 10 (1961): 23–9.

Problemorientering og Deltagerstyring (Problem orientation and participant direction). The book, published the year of Aalborg's opening, became a best-selling work of pedagogical theory in Denmark and remains a key reference for the Danish project-work model today as evidenced by recent references to it from both Aalborg and Roskilde.³⁹

Illeris's own cognitive theory of learning sat at the crossroads between three intellectual currents: *Fagkritik*, the education philosophy of John Dewey and the constructivist psychology of Jean Piaget.⁴⁰

It was Jens Bjerg who brought Dewey's ideas on progressive education to the table at RUC. Bjerg also had an affiliation at Copenhagen's Teacher Training College where, according to Illeris, Dewey was a well-known source of pedagogical inspiration, particularly because of his ideas on problem-oriented project work.⁴¹ At the Teacher Training College, Bjerg implemented Dewey's 'learning by doing' in an interdisciplinary, group-work based programme called 'Development Work and Projects'; these ideas were then brought to RUC when Bjerg became involved in the development of its pedagogy. Although Illeris cited Dewey in *Problemorientering og Deltagerstyring* the influence of the latter on the former's work was diffuse, rather than specific. Illeris limited his analysis to stating:

The American J. Dewey is the first to work seriously with the principle of problem-orientation for teaching. His viewpoint has had a central place in the pedagogical debate throughout the 20th century. For Dewey, the criterion for the selection of problems was first and foremost in the child's experience-world.⁴²

However, Illeris borrowed a third line of education theory from the DIER, namely constructivist psychology, and made this very much an integral and substantial part of his writing:

Piaget was a third development.... He was unknown in Denmark until the middle of the 1960s. Then a group, at what was called the 'Danish Pedagogical Institute' (DIER) ... there were some researchers there who took up Piaget. And one of them was Thomas Nissen (he was a very, very close friend of Jens Bjerg) [who] was a great inspiration to me! And that was because I took the concepts of Piaget as are elaborated in this book: accommodation, assimilation, I used very much in this book to ... well, to merge these things together.⁴³

In particular, Illeris elaborated extensively on the differences between the Piagetian concepts of accumulative and assimilative processes of learning, leading to the idea that successful educational models are those that can foster accommodation – that is, the remodelling of existing conceptions of a subject-matter, also known as 'schemata'.⁴⁴ For Illeris, this meant allowing the students to control the process of problem formulation, since only a task which truly appealed to the student would push him or her to reconsider his or her pre-existing cognitive schemata (accommodation). Although Piaget did not grant any attention to the role of teachers in the learning process, this was a central theme of other constructivist psychologists such as Vygotsky and Bruner, both of whom also feature in Illeris's work. Unlike

³⁹Anette Kolmos, Flemming Fink and Lone Krogh, *The Aalborg PBL Model: Progress, Diversity and Challenges* (Aalborg: Aalborg University Press, 2004); Anders Siig Andersen and Tinne Hoff Kjeldsen, 'Theoretical Foundations of PPL at Roskilde University', in *The Roskilde Model: Problem-Oriented Learning and Project Work*, ed. Anders Siig Andersen and Simon B. Heilesen (Cham: Springer, 2015).

⁴⁰Knud Illeris, *The Three Dimensions of Learning* (Roskilde: Roskilde University Press, 2002), 27.

⁴¹Knud Illeris (education theorist at RUC, author of *Problemorientering og Deltagerstyring*) in discussion with the author at Danmarks Pædagogiske Universitetet Copenhagen, August 2013.

⁴²Illeris, *Problemorientering og Deltagerstyring*, 171–2.

⁴³Illeris, in discussion with the author, August 2013.

⁴⁴Illeris, *Problemorientering og Deltagerstyring*, 82–4.

Fagkritik, which did not offer clear guidance for teachers, the implications for teachers were clear and straightforward in constructivist psychology: teachers should serve only as guides, or 'scaffolds' for student learning, rather than knowledge-transmitters. So, although Illeris used both theories in his work, concepts like accommodation and assimilation were far easier to grasp for trainee teachers than obscure concepts like the epistemological critique of disciplines.

What may we conclude from this? The publication of Illeris's first major work can be considered as the most important effort in weaving together the various ideas from different intellectual interest groups such as the Student Union, the DIER and the Teacher Training College. Indeed, *Problemorientering og Deltagerstyring* attempted the seemingly impossible synthesis of Critical School ideas, Deweyan pedagogy, Piagetian cognitive psychology and a few other sources of education inspiration, prominent among which were Carl Rogers and Jerome Bruner.

Asking which of the book or the RUC curriculum came first is something of a chicken-and-egg question. Illeris was friends and colleagues with the people working to assemble the RUC curriculum from all sides of the intellectual argument, and a first-hand witness to the events unfolding there. He was not a passive observer describing a settled situation; he was enmeshed in the formation of the educational model as it happened. The most likely explanation is that he fed the concrete practices of the model into his theoretical work, which in turn fed into the model with novel ways of interpreting said practices in a feedback loop that was stronger in some faculties than others and in some areas compared with others. For instance, Jens Højgaard Jensen, one of the pioneers of the natural sciences programme at RUC, claimed that when it came to the natural sciences Illeris's work was of little relevance as the inspiration came mostly from his previous experiments with projects at Copenhagen University.⁴⁵ Perhaps Olesen summarised the mutual relationship between Illeris and RUC in the most appropriate way: 'I think it makes sense to say that it's not ideas that have been developed, it's practices that have been developed and adopted ideas.'⁴⁶

It seems that those aligned with the Critical School paradigm considered Illeris to be more aligned with the psychological position than the Frankfurt School interpretation of education,⁴⁷ even though Illeris dedicated almost 30 pages of his book to expounding the relevance of Negt and the Critical School to PPL as opposed to 20 pages on Piaget and constructivist psychology. Whilst this perceived bias in favour of constructivist psychological interpretations may have been frowned upon by radical elements of the DSF, it could be seen as the crutch that Roskilde leaned on when the political storm began to cripple its model in the late 1970s. Meanwhile, at Aalborg, the practical strength of Illeris's synthetic work gave it a definite edge over the difficult works of *Fagkritik* authors such as Larsen, Salling Olesen and Hultengren, especially among a population of young teachers who were not so interested in a worker's educational revolution and more interested in finding better ways to do their job. This certainly appealed to the more pragmatically minded majority of teachers in the Teknat Faculty of Aalborg. The influence of Illeris on the development

⁴⁵Jens Højgaard Jensen (Assistant Professor of Physics at RUC in 1972), in discussion with the author at Roskilde University, January 2013.

⁴⁶Henning Salling Olesen (Former DSF representative at RUC in the 1970s and adult education theorist), in discussion with the author at Roskilde University, January 2013.

⁴⁷A statement made by Jørgen Rafn (Project Group Vocational Education at RUC in 1975) and Olesen in discussion with the author at Roskilde University, January 2013.

of the AUC's educational model is today an officially acknowledged historical 'fact' among those writing about AUC.⁴⁸

Although Hultengren read and had great respect for the theoretical work of Illeris, some of the latter's ideas on self-direction and problem formulation were met with reticence on the part of the former, who was quick to point to their limitations:

This psychological ideal-claim can be difficult to realise in practice. If you have to wait to serve food until the appetite is there, it may well be that at that time AUC's meagre one-year *basisuddannelse* and the specialised education are over before they get the appetite.⁴⁹

The disagreements between Illeris and Hultengren were broader than his interpretation of Piaget, however, and the biggest point of contention seemed to be the practical implications of Illeris's reporting of the Frankfurt School educational philosophy. Hultengren believed Illeris to be naive and accused him of inappropriately understanding the context of Danish higher education: first, because students were not comparable to the German working class of Negt, or the oppressed South Americans of Freire, and second, because the ideal of social partnership which infused Illeris's model of project work could not be compared to the objectives of class conflict.⁵⁰ So while Hultengren and Illeris had a common understanding of the theoretical components (both pedagogical and content-bound) of *Fagkritik*, Hultengren tried to deal more directly with the problems of translating this into practice for teachers and students alike. In her own words:

I read with great interest and reverence Illeris's writings. His are much more theoretical writings than mine. On a general [theoretical] level I did not perceive myself as being inconsistent with Illeris. But neither as a teacher in the trade union movement nor as an educational developer at the university was I operating at this general [theoretical] level. Therefore, I pointed out several difficulties (allowed myself to call them mistakes) when Illeris transferred his concepts to Danish universities and the Danish students.

The conclusion of this theoretical debate is that the concept of project work as articulated by the *Fagkritik* movement, brought to AUC principally by Hultengren, but also supported in the first part of Illeris's seminal book, was close to the intentions of the founders of the Danish project-work model at RUC. However, it was actually the more pragmatic components work of Illeris, especially his reworking of Piagetian constructivism, which held sway with most teachers at AUC, even though they were perceived as a later addition by many RUC founders.

1974–1980: constituting teaching practices at AUC

We have analysed in some depth the institutional, contextual and theoretical backgrounds that set the scene for the development of teaching practices at AUC. We concluded from there that a loose institutional framework set by the Planning Committee, and a patchwork of teaching backgrounds among recruits to AUC, left *vejleder* roles open to definition and re-definition in the practice of project work. We have also identified the predominance of constructivist psychology over *Fagkritik* as a supporting theoretical framework for teaching practices. The unanswered historical question remains: given the institutional and theoretical context described above, how did teacher roles actually evolve in the first 10 years of

⁴⁸Kolmos, Fink and Krogh, *The Aalborg PBL Model*, 10.

⁴⁹Hultengren, *Problemløsering, Projektarbejde og Rapportkrivning*.

⁵⁰*Ibid.*, 76.

practice at AUC? And what does this say about the development of teaching practices in novel pedagogical environments? The constitution of the latter in a PPL environment can only be understood by looking at the lived experience of those teachers, from which they constructed a mosaic of understandings of their function.

The weak impact of the institutional-theoretical framework on practice

Although the institutional plan was built for AUC as a whole, decentralised management in each institute and the great differences in new recruits meant that there was quickly a divide in the way the ‘model’ was being applied across departments, resulting in large differences of application of the PPL model. This phenomenon was highlighted by one of the interviewees, who was a student in the first decade of AUC:

The development history in Aalborg differs a little bit from that in Roskilde in the respect that we here in Aalborg have a much more decentralised development where there has been a lot more power to the various studies on how they want to outline the general ideas and principles according to the content of the studies.⁵¹

Unsurprisingly, the split between technical subjects and social sciences that was embedded in the recruitment practices was mirrored in split support for the PPL model.⁵² In November 1975 a group of 10 engineering teachers wrote a letter to the ministry complaining that:

A substantial part of students is at proficiency levels in mathematics and physics lower than [entry level] high-school exam, and their study-skills are not any better than previously seen after one year of studies at [the engineering academy].⁵³

This letter was supported by the majority of the engineering teachers at Teknat – seeking a return to the discipline-oriented and teacher-directed education. They proposed two semesters of traditional courses in basic sciences before the students could be allowed to do project work. The consequences of the complaint were a rapid evaluation followed by intensive work in relevant management committees and study boards, resulting in a new study plan for all Teknat students – the plan included more traditional and theoretical courses to answer the concern about building a stronger foundation in basic sciences, as well as intensive remedial training of the under-qualified students.⁵⁴ Meanwhile, social sciences teachers interpreted the phrase ‘gradual specialisation of studies’ so that in reality studies within social sciences turned into a two-year *basisuddannelse* programme similar to the one at RUC.⁵⁵ The battle between the disciplinary, traditional viewpoint against the interdisciplinary problem-oriented viewpoint, loyal to the intentions of the Planning Committee, cut through teacher as well as student ranks and lasted into the 1980s, by which point each faculty had its own interpretation of the model, none of which followed precisely the original plan.

Although psycho-societal education theory was somewhat present at the origins of AUC in the social sciences and humanities, after a few years the influence of *Fagkritik* at AUC was spent – save perhaps in some bastions of politically radical faculty members. It

⁵¹Anette Kolmos (Professor and former student at Aalborg University), in discussion with the author at Aalborg University, January 2013.

⁵²Adolphsen, *I Satte os i Jeres Baner*.

⁵³*SR Nytt*, årg. 3 nos 17 and 18, 1977 (Aalborg: Aalborg Universitetscenter, 1975–1982), 25.

⁵⁴*SR Nytt*, årg. 3 nos 14, 17 and 18, 1977 (Aalborg: Aalborg Universitetscenter, 1975–1982).

⁵⁵Adolphsen, *I Satte os i Jeres Baner*.

is fair to say that there was never much support for Marxist ideology among the engineering staff. Even the idea of exemplarity borrowed from Negt, which was supposed to be the basis of the project model, was not very well known or understood. The most radical elements of AUC, like John Houman Sørensen, erstwhile leader of the DSF at Aalborg, did not seem too upset that the local interpretation of PPL was more practical and less theoretical.⁵⁶ Ultimately, everybody at AUC, including the first two Rectors Weibull and Caspersen, understood that the interest of Aalborg University at the institutional level was to work with regional organisations and industry and promote regional interests, not to stir political controversy.

It seems that the ideas of constructivist pedagogy, as interpreted by Illeris, were more widely understood and accepted than those of the critical school. Although the former were circulating around the university, our interviewees expressed doubts as to how much influence this actually had on teaching practices. Our interviews indicate that students seemed to know about Illeris and would bring it up with teachers during project supervision meetings. One statement from a former Aalborg student describing the learning experience displays far more resemblance to Bruner's theories on learning by discovery than anything proposed by the Frankfurt School:

Because it's all about asking questions about things. We want the students to ask questions.... And try to make this thesis and hypothesis and then end up having a branch of maybe one big question and then lots of smaller sub-questions. During that approach, trying to find answers by reading the theories, by going out in the field and making experiments – asking questions. So it's very much about asking questions – putting up hypotheses and getting answers to these.⁵⁷

Ultimately, teachers also drew their own inspirations from their personal experiences. For example, Finn Kjærdsdam, former Dean of the Faculty of Engineering, stated:

The Planning Students that I taught were always working in groups, both at the Agricultural University and subsequently at AUC. So [PPL] was also well known. In contrast, Fagkritik and Marxism was a city on the moon, which only a few found interesting. Seen from Teknat, social science students should deal with social problems/issues, be it Marxism or another, while students in techniques should deal with technical problems/issues.⁵⁸

The point Kjærdsdam makes here is that there was no need for him or other teachers from the Planning Department to read either Hultengren or Illeris because they had a wealth of practical experiences to draw from in their own specialties revolving around group work and projects in their own technical field.

The building and transmission of teaching practices

Fortunately for the teachers of the early days, as student intake was low in the first few years compared with the number of hires, teachers had plenty of time to get to grips with their role and reflect on their experience. Given the enthusiasm that comes with beginning a new educational project, many were also highly motivated to make the best of their experience at AUC, as recounted by early days DSF member Palle Rasmussen:

⁵⁶Sørensen, in discussion with the author, January 2013.

⁵⁷Lone Krogh (Associate Professor, Department of Social Sciences, and former student at Aalborg University), in discussion with the author at Aalborg University, January 2013.

⁵⁸Finn Kjærdsdam (former Rector of Aalborg University), in correspondence with the authors, February 2016.

Many of the teachers also had high expectations. They regarded this as a new and liberating way of organising university studies and they hoped for their students to become wise persons who would change the world.⁵⁹

This enthusiasm was not met in equal measure with managerial support – the inadequate training of teachers in pedagogy and group dynamics was stressed several times in two evaluation reports from the Faculty of Social Sciences.⁶⁰ As a consequence, there was much trial and error with teaching methods in the first few years. In fact, what it meant to be a *vejleder* was left pretty much up to the individual. For instance, when asked how much supervision was necessary, one *vejleder* answered: ‘They should be involved as much as was necessary to make the best learning outcomes for the students,’⁶¹ in other words, ‘how long is a piece of string?’. It seems that given the institutional vacuum and lack of appeal of educational theory, getting to grips with the role in a trial-and-error manner was the way forward for most. Teachers dealt with this unstructured environment in different ways: some took notes, a sort of ‘reflection diary’ to help them improve their practices, but how much they invested in self-improvement was really up to them.

Negotiated community-building became one effective mechanism for developing a common set of practices. Supervision became a negotiation process between members of the institutes who would pass projects around according to their competencies and areas of expertise with the expectation that supervision work would be shared. By its nature, the PPL model helped interdisciplinary cross-fertilisation to a certain extent – people had to learn to work with others from different disciplines; they could not function in isolation in this new institution. The creation of interdisciplinary departments was meant to deal with the interdisciplinary nature of the real-life problems required in the problem-oriented model.⁶²

In the humanities and social sciences, teachers met weekly to share, discuss and evaluate experiences and challenges, before a weekly meeting with all students to discuss educational matters. These meetings provided faculty and students ample opportunities for reflecting on the evolving practice within a spirit of democratic governance that was close to the heart of AUC’s founding values: ‘We used a pedagogical debate as integrative mechanism. And this debate was not of abstract character, but almost always concrete in terms of supervision problems, lecture proposals, course organising etc.’⁶³

The efforts at community-building were offset by a major barrier to the crystallisation of teaching practices: the initial lack of tenured teachers encouraged the extensive use of part-time and temporary teachers, often hired among older students at Aarhus University.⁶⁴ In Teknat, very few teachers were assigned for longer than two years at the *basisuddannelse* level, while in the social sciences teachers were involved in the ongoing planning of the education programmes and often had engagements in other departments as a result of the interdisciplinary teaching and research approach, so could not invest much time and effort in improving teaching methods. As a result, teaching experience and practices were

⁵⁹Palle Rasmussen (former representative of the DSF at Roskilde and Aalborg Universities), in discussion with the author at Aalborg University, January 2013.

⁶⁰Nielsen et al., *SAMF BASIS*; J. Hjerrild-Jensen, F. Kramer, E. Laursen, J. C. R. Nielsen, A. B. Ravn and A. J. Wiis, ‘Rapport om Pilotprojektperioden, Erfaringer fra Storgruppe 7723’ [Report on the pilot-project period, experiences from large group 7723] (Aalborg: Aalborg Universitetscenter, 1978).

⁶¹Finn Kjærdsdam, in discussion with the author at Aalborg University, July 2014.

⁶²Dahms, in discussion with the author, 2013.

⁶³Hjerrild-Jensen et al., *Rapport om Pilotprojektperioden*.

⁶⁴*Ibid.*

continuously lost as part-time and temporary hires ceased their affiliation, and teachers invested time in organisational tasks rather than teaching practices.

After a few years, certain guiding threads of practice crystallised, eventually forming a 'didactic' that became re-theorised by certain pedagogy aficionados at AUC in terms of constructivist psychology and other fashionable ideas.⁶⁵ We can surmise that this crystallisation was made possible when senior teachers who did not leave the institution became more experienced, and were able to coach new teachers who came in as deputy *vejleders* on projects. As hires stabilised, practices trickled through from one generation of teachers to the next. Bolstered by this new stability, teaching communities of practice could consolidate, such that by the early 1980s pedagogy was no longer a serious topic of discussion: 'Everybody was engaged and happy with this approach and took pride in making it work and this kind of thing. It wasn't discussed that much, no.'⁶⁶

Two common debates surrounding project supervision

Despite the different practices emerging across the institutes, there were two core common areas of concern for all teachers who were involved in project supervision at AUC: their role as knowledgeable persons and content experts, and their roles as facilitators of the learning process.

There was some hesitation as to whether the *vejleder* should be an expert in the area of the project he was supervising. In reality it would not have been possible to allocate projects only to experts in the field, so supervisors had to focus more on using their given expertise to create learning opportunities for students; for example, by facilitating their handling of methodology, the building of argumentation and working with content-relevant theory – meaning that they would focus on students' ability to select and process the knowledge, as recounted by a former student:

What is very important is that as a supervisor you have some very personal commitment to be able to balance between this supporting the students and being able to ... 'now, now I have to tell you'. This balance between these things. But also support the students' collaboration process, which may be very difficult for many students.⁶⁷

However, supervisors adapted to the needs of the projects they were supervising, and acquired knowledge in related fields through practice with students' diverse projects. In the beginning supervisors were strongly involved in the project-work process, having plenty of time allocated and often acting as student mentors and resource persons. This also meant being involved in groups' internal social and emotional evolution. Since two supervisors were often allocated to each group, they could share responsibility and therefore the workload with colleagues – which freed more time for social support of students. This also left some time for another external-facing aspect of the *vejleder* role: they were expected to work in close liaison with their project groups in supporting their collaboration with external organisations, industry and other external partners and across the different departments and institutes of AUC.

⁶⁵Kolmos, in discussion with the author, January 2013.

⁶⁶Stig Enemark (Professor, Department of Development and Planning, Aalborg University), in discussion with the author on Skype, July 2014.

⁶⁷Kolmos, in discussion with the author, January 2013.

In terms of the facilitation of the learning process, supporting or guiding appropriate choices and relevant approaches, the interpretation of *vejleder* roles differed among faculty members. With regard to facilitation, technical teachers were more inclined to try to help students by telling them what they needed to know and do rather than discussing options and potentials.⁶⁸ In an evaluation report from 1977 that comprised both student and teacher perspectives, students' evaluation of the teachers' efforts mainly commented on inconsistent, ambiguous, too directive, absent or helpful guidance, while the teachers' analysis sought to comprehend the complexity of the supervisor role. Among students' recommendations were a course on supervision for teachers; a written contract between the group and their supervisor for the initial formalising of the collaboration process and supporting students in developing good group-work practices; and a course for students on group collaboration. Naturally, they concluded, the balancing of teaching with supervision demanded attention, but especially the balancing of supervising the subject matter versus the learning process placed a heavy burden of responsibility on the teachers, which not all were sufficiently prepared to meet.

We can conclude from this that, once again, lack of a top-down directive led to something of a trial-and-error development of practices that reflected fairly accurately the splits that had emerged within the teaching staff from the day of their hiring at AUC.

Concluding reflections on the construction of teaching roles at AUC

The purpose of this paper was to bring to light the challenges faced by AUC, a novel and innovative university integrating existing higher education institutions, in developing teaching practices in the first 10 years of its existence. Having done this, we shall reflect on these challenges while placing them in the context of the changing expectations weighing on teachers in current shifting pedagogical landscapes.

The first lesson to draw from this historical study is that the weak institutional framework drawn up by the Planning Committee was both a blessing and a curse for teachers coming into AUC in 1974. It was a blessing in that teachers uncomfortable with the PPL method had some room to adjust at their own pace and in their own way; a curse in the sense that lack of strict guidelines made it nearly impossible to monitor quality, as reflected by the anxieties expressed in the student evaluation report of 1977. The choice to provide such a loose framework is understandable given that the Planning Committee was handed the PPL model by Copenhagen with little idea of how to implement it in practice, let alone in the specific regional context of Aalborg. The decision to bring in teachers from pre-existing institutions whilst also hiring from Aarhus, Copenhagen and Sweden was also mandated by the circumstances, namely the existence of higher education institutions that had to be integrated, combined with the difficulty of attracting faculty in a remote northern province of Denmark. It is therefore not surprising that one of the first phenomena to appear in the development of teaching practices was the retrenchment from the interdisciplinary ideal to a very much disciplinary interpretation of teaching roles, a phenomenon not so prominent in contemporary innovative universities that started with a blank slate, such as RUC or Maastricht University in the Netherlands. One of the consequences of this process at AUC

⁶⁸SR Myt, årg. 2 no. 8, 1975 (Aalborg: Aalborg Universitetscenter, 1975–1982).

was the fragmentation of the interpretation of teaching roles. The idea of a unitary model was doomed from the start – its fragmentation was written in the Planning Group's plan as soon as they allowed different *basisuddannelse* models for the three faculties. For instance, within the Humanities Faculty itself, the first-semester projects were marked by differences in approach, contents, focus, methodology – and quality.⁶⁹ The fragmentation of practices left teachers unable to form a unitary front, and thus opened up their practices to critique. This critique came following a public debate on the Aalborg education model, initiated in November 1978 by Mihail Larsen and AUC teacher Søren Keldorff, who questioned the quality of students' and teachers' efforts based on 'socialist science'.⁷⁰ A few years later, Keldorff and Salomonsen published a scathing critique of the outcomes of the new pedagogical approach,⁷¹ claiming that students merely fulfilled requirements in a 'rite-de-passage' of the system without having gained much knowledge about the 'strange phenomenon' in focus for their project.⁷² They coined the term '*ca.-knowledge*' as a rebuttal of what they perceived to be a pseudo-academic effort at AUC.⁷³ In essence, they questioned the ability of teachers to provide their students with the qualifications required for formalised studies leading to professional competence.⁷⁴ In this sense, while there was little that AUC could do about its starting point and hiring policies, one must wonder why they did not invest massively in teacher training. All evidence indicates that this was completely overlooked in the 1970s and 1980s, a mistake only fixed in the 1990s with encouraging results. It seems that, in the early years of AUC, inadequacies regarding project supervision were compensated for with an increase of disciplinary course-load among which few were actually relevant to the students.⁷⁵ Anxious teachers who did not believe that projects alone could feed students the required knowledge for their future professions would often reintroduce courses and lectures into their curricula. In the first 10 years (within social sciences), groups began with a problem as trigger for learning and relevant lectures were requested by students. But as time went by the process began to reverse, and lectures served as the trigger for problems, while supervisors began guiding the direction of the study literature and other sources as starting point for content-theoretical considerations, setting preconditions for making an acceptable project report:

It was necessary ... it was reasonable to do it. It was not pressure from the outside. It was because many of the students' project reports were of a too low quality. They were too ... at least the first years, and at least in social sciences. It was too much ... the theoretical foundations were more or less the first volume of *Das Kapital*.⁷⁶

Had AUC not been dependent on the PPL model to affirm its unique identity, this move might have threatened the model altogether. The problem was fixed in the 1990s; in 1993 the 'Pedagogical Development Centre' was established soon followed by the research centres

⁶⁹AUC Nytt, årg. 1. no. 10, 1975 (Aalborg: Aalborg Universitetscenter, 1974–1975).

⁷⁰SR Nytt, årg. 5 no. 7, 1978 (Aalborg: Aalborg Universitetscenter, 1975–1982).

⁷¹Søren Keldorff and Per Salomonsen, *Viden Forandrer Verden* [Knowledge transforms the world] (Aalborg: Institut for Sociale Forhold, Administration og Politiske Institutioner, 1981).

⁷²Søren Keldorff, 'Virkeligheden som Erkendelse [Reality as cognition]', in *Viden Forandrer Verden*, ed. Søren Keldorff and Per Salomonsen, 29–38.

⁷³Søren Keldorff, 'Lighed, Virkelighed og Cirkaviden. Retrospektive Teser om P-Pædagogikken [Similarity, reality and ca.-knowledge. retrospective theses on P-pedagogy]', in *Viden Forandrer Verden*, ed. Søren Keldorff and Per Salomonsen, 56.

⁷⁴Ibid., 68.

⁷⁵AUC Nytt, årg. 1 no. 10, 1975 (Aalborg: Aalborg Universitetscenter, 1974–1975).

⁷⁶Sørensen, in discussion with the author, 2013.

'Knowledge Centre for Learning-processes' and 'Danish Centre for Science Didactics'. By 2003 these became the foundation for the interdisciplinary 'Department of Learning' (now Department of Education, Learning and Philosophy) focusing on learning methods and research on learning. This brought full circle the institutionalisation process that began with the work of the Planning Group in 1970, and contributed to making teaching in the PPL system (renamed Problem Based Learning in the 1990s) a more standardised profession with specific practices and rules, whether soft or hard, that have reached an advanced stage of codification and diffusion.⁷⁷ If there is a historical lesson to be learned, it should be that if an innovative institution fails to compensate for weaknesses in starting conditions (such having to integrate teachers with set pedagogical ways) with adequate follow-up training, it risks defeating the pedagogical innovation that it was trying to implement in the first place.

A second important lesson to be drawn is that educational theory only has merit in supporting educational innovation if it is intelligible to the teachers who will be working with the new pedagogical model, especially in institutions that already have pre-existing educational practices. In that sense, the *Fagkritik* ideal that was so important in Roskilde missed the mark in Aalborg and played almost no part in the definition of teaching practices because it was neither intelligible nor relevant to people outside of social sciences. In terms of the practice of project work, the primary consideration was the learning process within the organisational frame of the project and only second the practical problem rooted in the context (or social reality). In the humanities and social sciences, where Marxism held the greatest sway, *Fagkritik* was still built on traditional structures and disciplines – a contradiction in terms which seems hard to reconcile with the writings of Negt. In the engineering departments, although *Das Kapital* featured as an add-on to many engineering project reports in the first few years of AUC, study groups were required to analyse the problems thoroughly at the concrete level before attempting to resolve them with some kind of theoretical (or ideological) superimposition. Hultengren aside, the relative disinterest of AUC Faculty in Marxism forms a sharp contrast with the situation at Roskilde University Centre. This difference is not surprising given the very distinct situations of both University Centres.⁷⁸ Sheltered away from the political storms of Copenhagen, bolstered by a strong engineering contingent and committed regional support, AUC preferred to focus fully on developing its educational identity and cast aside complex Frankfurt School theories. By contrast, the 1980s witnessed a revival of the education psychology – people became interested in theories of learning, rather than just 'teaching' or 'education', and discovered authors like Kolb. Kolb's theory dates from 1984, and while it was not originally included in Illeris's work, it was included in his later books.⁷⁹ Marx, however, was never really brought back and is today practically absent from the curriculum. As people started to write books about the sorts of practices that they had developed, both for other teachers and for students, the set of constructed teaching practices that had been building up across the different faculties began to consolidate into a 'model', albeit a fragmented one, supported in places by constructivist psychology. The lessons learned from this experience

⁷⁷Welcome to the MPBL, *Aalborg University*, 2016. <https://www.mpbl.aau.dk/> (accessed October 2, 2016).

⁷⁸Whitehead, 'Denmark's Two University Centres'.

⁷⁹Illeris, *The Three Dimensions of Learning*.

are all too relevant in a global educational environment where casually throwing in references to Vygotsky or Dewey serves as a justification to each and every sort of educational reform. Unless the theory is rendered intelligible and relevant to the direct experience of the teachers, it serves no purpose. Ironically, both Dewey and Vygotsky would have agreed with this statement.

The final historical lesson to gather from this paper is that the strength of an innovative educational institution is in its capacity to stir enthusiasm amongst its teaching staff, which can be harnessed into constructive community-building. Despite its rocky institutional foundations and the ineffectiveness of its educational-theory framework as a supportive tool for teaching staff, AUC drew strength from its teachers' willingness to experiment and ability to share practices both within and across institutes. It is through these mechanisms of exchange that teaching practices eventually crystallised, even if they did so in different manners across the different disciplines. It could be argued that it was precisely the lack of structure that allowed such community-building to take place, and strengthening the institutional framework from the beginning would have weakened the need for social negotiation of practices. There is therefore a fine line between providing enough institutional support to allow some form of unified practice to develop along the lines imagined by the instigators of the educational reform, and too many rules that would smother bottom-up practice development among the teaching community.

This paper has focused particularly on following the historical journey of an innovative educational institution from the beginnings of its institutional and educational theory framework to the actual practice of teaching in the everyday context of higher education. Although we have touched upon the codification of practices in the 1980s and 1990s, this phenomenon was largely outside the scope of this paper, and could be the subject of future research. Additionally, this paper took a purely historical stance with an inductive approach. Perhaps deeper insights might be gained into the development of the Aalborg educational model if this history were analysed from an organisational theory standpoint. In essence, hardly anything has been written about the historical development of problem-oriented approaches and their impact on student learning and the teaching professions. In such an open field of study, possibilities are too large to list fully. Renewed interest in the history of the educational experiments of the 1970s, whether in Denmark or elsewhere, comes at a time when the cracks in the 'New Public Management' credo are turning into gaping educational holes. As such, we foresee no shortage of relevance for this sort of research in the near future.

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