

Teacher professionalization in relation to retention strategies

Do teacher training activities have any impact on drop-out rates in adult education?

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Abstract

This paper reports some preliminary findings of a research project titled *New roles for the teacher - Increased completion through social responsibility*. This research, designed as an intervention project, has an overall aim of reducing absence and drop-out rates in the Danish vocational and general adult educational system by developing and improving the teachers' competences. This has been pursued in the research project through engaging teachers in training aimed at improving their socio-pedagogical competences. The effect of this training has been measured by two electronic questionnaires filled in by the teachers, interviews with the teachers, and by the teachers' written logbooks. At this stage of the research it is not possible to document comprehensive and specific changes in the teachers' attitudes and specific behaviour. However the project's focus on the socio-pedagogical competence has had an impact on the drop-out rate. The preliminary conclusion is that it is the general attitude in the teacher groups towards the importance of improving retention that is of significance for the documented effects on the drop-out rates.

Introduction

Why students drop out of the school system and what can be done about it are vital and relevant questions. A Danish research project focuses on this problem in the vocational and general adult educational system. The project started in 2011 and continues until December 2014. It is located at five adult education centers.

Under the assumption that the teachers' behavior plays an important role in the drop-out process, the projects' aim is to supply the teachers with the necessary competences to tackle the problem. In the project the teachers are trained to cope with the students' social situation and learn to pay attention to the drop-out process.

What are the necessary competences for an educator in the adult educational system? A Delphi-study on *Core Competences of Adult Learning Facilitators in Europe* gave some answers. The study showed that the "ability to create a safe learning atmosphere (not intimidating)" and more general "group management and communication" were among the most important competences (Bernhardsson & Lattke, 2011; Nuissl & Lattke, 2008).

A Nordic study based on interviews with different adult educational stakeholders found that "the ability to implement methods involving the students" and "knowledge of psychology of the adults" are highly valued competences for the adult teachers (Marquard & Sørensen, 2011).

Based on these results it may be assumed that the ability to focus on the social climate in the learning environment is a vital part of the adult educators' competence-profile.

The effect of teacher training programmes on the development of teachers' competence and for the teachers' practices has been shown in some studies (Wahlgren, 2011; Larsen & Wahlgren, 2010; Goldschmidt & Phelps, 2010; Smith et.al., 2003; Beltzer, 2003).

There is research on the effect of the development of teachers' competence for the students' academic performance and outcomes (Antoniou & Kyriakides, 2013; Duffield, Wageman & Hodge, 2013; Dekker-Groen, van der Schaaf & Stokking, 2012; Lancaster & Milia, 2012; Rotgans, & Schmidt, 2011; Bruce et.al., 2010; Harris & Sass 2010; Kerka, 2003). However, most of this research is directed at primary, secondary and high school teaching. Few studies are directed at teachers and teacher training in adult education.

Existing research has identified a number of factors that are of significance for absence and drop-out rates (Jeffrey et.al., 2011; Lamb et. al., 2011; Rumberger & Lim, 2008, Rumberger, 2011, Rumberger & Rotermund, 2012), though some studies call for more systematic research (Valentine et.al., 2011). The factors can be divided in three categories: the students' background and engagement (Bragt et.al., 2011; Lamote et.al., 2013), study environment (Fincher, 2010), and teachers' competences (Lippke, 2012).

Based on this research it may be assumed that the development of teachers' capability to generate positive social relation with a focus on each student's performance will have a positive effect on the student's engagement and reduce drop-out.

As a consequence it may be assumed that if teachers' competences, particularly the socio-pedagogical competence, increase it will reduce absence and drop-out rates. It may also be assumed that this competence could be achieved through training programmes for teachers.

Thus the project investigates to what degree training of adult education teachers leads to a decline in the adult student's absence and drop-out rate.

Research design

The project was designed as an intervention project. The intervention consisted of development of the socio-pedagogical competencies of the teaching staff at five adult education centres. In the project we define socio-pedagogical competence as the ability to use and integrate knowledge of the students' precondition in the interplay with the students. Thus it concerns the teachers' ability to obtain knowledge of the students' proficiency and social and psychological preconditions and act according to that inside the classroom and outside, e.g. commending the students behaviour in the class or texting students in the morning to make sure that they turn up for school. The concept encompasses a classroom management perspective and the ability to obtain a positive and stimulating learning environment.

To obtain these competences the teachers participated in a training program. The teachers' competence development program includes three courses:

1. Knowledge of students: the teachers are trained to analyse the students' preconditions for participating in the study program and to plan and accomplish their teaching in accordance with that.
2. Conflict management: the teachers are trained to handle conflicts in the classroom more efficiently and to develop and maintain a positive learning environment.
3. Cooperative learning: the teachers are trained to use cooperative learning method as part of their teaching and to activate the students and make them feel comfortable cooperating in fixed social structures.

Each course took two days. The total training program was accomplished over a period of 10 months. Approximately twenty teachers from each centre were directly involved and participated in the program. The remaining part of the teachers, which means about eighty teachers at each centre, were involved in the competence development process in different ways based on the principle of knowledge sharing in companies. The project was presented for the total group of teachers at two staff meetings where the focus on retention was highlighted. At the second meeting the trained teachers shared the knowledge and skills they have achieved in the training program with the rest of the teacher group. At the centres working groups were established to discuss how to implement the new competences and the focus and aim of the project. The teachers' involvement in these working groups differs from centre to centre. The research group have no exact information on how much each teacher attended these working groups.

The training program and the knowledge sharing activities were planned to provide the total group of teachers with enhanced socio-pedagogical competences. It was assumed that enhanced socio-pedagogical competences would lead to more comprehensive socio-pedagogical activities in the teachers' teaching activities. It is assumed that teachers' competence development would lead to a changed attitude towards the socio-pedagogical competence; e.g. to a change in behaviour towards the individual student, and to a changed pedagogical behaviour in the classroom. These socio-pedagogical activities were in the end expected to reduce absence and drop-out.

On basis of these assumptions the following research questions were examined:

1. Which competence do teachers develop through participation in the training program and the knowledge sharing activities?
2. Is the competence converted into (new) socio-pedagogical activities?
3. Does the teachers' competence development contribute to reduce the absence and drop-out rate?

Data collection

The data collection for this study included data sets containing descriptions of the training program, an electronic questionnaire aimed at teachers, knowledge of the scope, the content of the teachers' new and more comprehensive socio-pedagogical activities (interviews and logs), and systematic registrations of the students absence and drop-out rates.

The electronic questionnaire for teachers. The development of the teachers' socio-pedagogical competence and the extent of their socio-pedagogical activities were measured through two questionnaires. The first questionnaire was administered at the very beginning of the project, and the second questionnaire the following year.

All teachers employed at the centres (a total of 494 teachers) constituted the total research population and received the questionnaire. For practical reasons it was not possible to separate teachers who took part in the training program from teachers who did not. The response rate was 75% the first year. The following year the response rate was 72%.

Both times the teachers were asked to consider the extent to which they felt they had sufficient competences in relation to nine types of actions, e.g. 'giving students a word of approval in relation to the actual school performance', or 'giving personal feedback to an active student', or 'providing a student with personal advice in relation to the study progress', or 'talking to a student about his or her private social situation outside the school'. They could answer in five categories from 'excellent' to 'need to be better'.

They were also asked to consider to which extend they actually performed these activities. They were asked to enumerate how often they, e.g. 'gave personal feedback to an active student', or 'provided a student with personal advice in relation to the study progress'. They were asked to indicate if it was within the last week, within the last month, or if it was even less frequent.

Finally they had to state the relative composition of their own competences as regards to academic competence, didactical competence, and socio-pedagogical competence. Similarly, they were asked to assess how they regarded the ideal proportional distribution of these competencies. The teachers were asked to distribute a total amount of 100 points between the three categories according to how important they felt that the three competences were.

Interviews and logs. Knowledge of the scope and the content of the teachers' new and more comprehensive socio-pedagogical activities were collected through two data sources, interviews, and logs.

Interviews with 16 teachers were completed. The respondents were appointed by the management on basis of the level of involvement in the development process. All of the interviewed teachers had attended the training program. The interviews were conducted as semi-structured interviews with open end response possibilities. There were three main themes in the interview: 1) a description of completed educational initiatives seen from the teacher's perspective, 2) perceptions of what the teachers

learned in the program, and 3) what new socio-pedagogical initiatives the teachers took after they had completed the program. The interview lasted for about one hour.

Ten teachers produced written logs over a period of eight weeks. One log entry was to be completed each week. The teachers participating in this part of the survey had also been appointed by the management based on their activity in the project. All ten participants had completed the program. The logbook had to describe three items: 1) the socio-pedagogical activities which the participants carried out during their teaching, 2) the effects which the teachers assessed that the activities had on the participants and their absence and drop-out rates and 3) to what extent these socio-pedagogical activities were new in relation to what they used to do, and to what extent the activities related to the competence development which the teachers had completed.

Systematic registration of absence and drop-out. The data also included a systematic registration of absence and drop-out rates in a cohort on more than 10.000 students. The actual number of students changes from year to year. In each of the five centres, the absence rate was systematically registered during the course of the year. At the end of the school year the drop-out rates were registered. Absence as well as drop-out rate was calculated after a common standard for the five centres. Because information about absence and drop-out rates for the preceding two years is available it is possible to compare years and to compare between the five centres.

Findings

At present the overall result of the project – a year and a half after the beginning – is that there is much less impact than assumed if you look at the teachers' perceptions of their own socio-pedagogical competences and at the teachers' actual performance. However we find a significant decline in the drop-out rates.

The impact on the teacher's performances. The teachers' perceptions of their own socio-pedagogical competence, which was registered via the questionnaires, indicated that the teachers all in all felt rather competent from the beginning of the project. Only among 20% to 50% felt that they could improve their competences 'a little' or 'some' – depending on the actual activity. The activity that teachers felt they least had to improve was the competence to 'give guidance to a student you don't like'. Only 15% of the teachers felt that they had to improve this competence. Conversely 30% of the teachers felt that they needed to be better at 'talking to a student about his or her private social situation outside the school' and 56% of the teachers indicated that they had to be better at 'creating social networks between the students'.

It was expected that after having participated in the competence development activities the teachers would feel more able to cope with the socio-pedagogical activities and they would regard themselves more competent. However the data show that the teachers' perception of their own competence-level was almost unchanged. The perception of their competencies had not changed in the course of the year in which the competence development process had run. Only in one (of the nine measured items) we found a significant change, namely at the ability to 'talking to a student about his or her private social situation outside the school'. The perception of need for

development of that competence has declined from 30% to 20% of the teachers (Table 1).

Table 1: Development of teachers' perception of their socio-pedagogical competences

(N = 479)	"I am very good" and "I have more than sufficient competences"	"I have sufficient competences"	"I could become a little better" and "I could become somewhat better"
Ability to talk to a student about his/her private social situation outside the school			
Spring 2012	42 %	28 %	30 %
Spring 2013	46 %	34 %	20 %

$$\chi^2(2) = 5,849, p < 0,05$$

With regard to the teachers' socio-pedagogical activities, there are only two of eight possible activities which have increased significantly. These are: 'giving a student a word of approval in relation to the actual school performance' and 'giving personal feedback to an active student' (see table 2). These two activities – both related to school performance - were more frequent after the teachers' competence training. However, we could not find any changes in the more personal or social oriented activities.

Table 2: Development of frequency in teachers' socio-pedagogical activities

(N = 477)	During the last week	During the last month	infrequent / do not remember
Frequency of giving students a word of approval in relation to the actual school performance			
Spring 2012	79 %	20 %	0 %
Spring 2013	87 %	10 %	3 %
Frequency of giving personal feedback to an active			
Spring 2012	59 %	33 %	8 %
Spring 2013	73 %	20 %	7 %

$$\chi^2(2) = 13,261, p < 0,005, \chi^2(2) = 11,138, p < 0,005$$

There were differences between young teachers (younger than 50 years) and older teachers, and between less experienced teachers (less than five years of employment) compared to experienced teachers. Older teachers and experienced teachers generally were not so willing to give a higher priority to socio-pedagogical competence as the young and un-experienced teachers.

However these differences became rather constant over the project-year and did not change (significantly) after the teachers' competence development program.

The teachers were asked to state their perception of the relative composition of their own competences as regards to academic competence, didactical competence, and socio-pedagogical competence. Similarly, they were asked to state how they viewed the ideal or wanted relative distribution of these competencies. The teachers were asked to distribute a total amount of 100 points between the three categories.

There was a systematic and significant difference between the actual and the ideal distribution. The average of the relative share of the perception of the actual socio-pedagogical competence is 22.9 points. The average of the relative share of the perception of the ideal socio-pedagogical competence is 26.9 points. Obviously the teachers found that there was a lack of socio-pedagogical competence in the total competence. At the beginning of the project the teachers as a group wanted to give a higher priority to the socio-pedagogical competence.

Opposite to what was expected, we found that the teachers' perception of the relative importance of the socio-pedagogical competence compared to the importance of the subject-competence and subject-didactic-competence was only slightly (and not significantly) changed after the training program.

The insight obtained from the questionnaire survey can be extended with the results from interviews and data from the written logs from the teachers participating in the training program.

From the interviews it appears that the primary focus in the training program was on more general pedagogical issues rather than on specific socio-pedagogical activities that could be brought into the classroom. Thus, the teachers had difficulties providing examples of the effects which the various initiatives may have had on the project's strategic objectives. To the question: 'What new socio-pedagogical initiatives have you taken after you have completed the programme?' the general answer was: 'Many activities, but not many new'. However, there was a general agreement that a greater focus on course participants was important.

In the logs the teachers described a number of activities which they conducted for the purpose of reducing absence and drop-out rates. It was very specific activities e.g. performing personal interviews with students or arranging social activities e.g. class get-togethers. The teachers generally agreed that their initiatives had a positive impact on the students. However, there are only a few examples that directly point to reducing absence and drop-out rates.

In relation to 'what extend these socio-pedagogical activities were new in relation to what they use to do', the teachers told us that 'most of them are activities that they previously had carried out'. However, almost half of the teachers replied that they were doing something different in their practice.

The most significant effect of the teachers' competence development is that they 'have been given a new view of the importance of drop-out' or they have 'given more thought to the importance, it has'. Some refer directly to the competence development program and to what they had learned, for example attention to classroom management and to the importance of the various course participant types' significance to the teaching.

While the figures from the questionnaire survey leave us with the picture of ‘nothing much has happened’ the information form, the interview, and logs paint a slightly different picture: ‘nothing much new has happened, but the teachers have become much more alert to the problems related to drop-out’.

The impact on retention. If we look at the absence and drop-out rate, which is the main focus of the project, the figures actually show an improvement compared to previous years. The figures are shown in Table 3.

Table 3: Drop-out and absence rates in different years in per cent

(N> 10.000)	Baseline 2008/2011	1 st year 2012	2 nd year 2013
Drop-out from education	30,1 %	26,1 %	22,1 %
Absence from lessons	24,9 %	24,0 %	24,6 %

What is interesting is that while absence rates have been fairly constant over the years and during the intervention period, the drop-out rates have clearly been reduced. The reduction is evident both when comparing the baseline figures (the average of three years) with the first year figures and when comparing the first and the second year figures. The decline in drop-out rates is notable compared to the figures nationwide. On national basis the drop-out rate has been stable and still above 30% in the years 2008-2013.

Although the students do not attend class on a more frequent basis there still seems to be an impact from the different activities regarding students’ willingness to complete their studies. The drop-out rates declines systematically during the intervention period.

We do not find any significant differences between the five adult education centres. With data from the first part of the study we are not able to point out a more specific or differentiated relation between the content on the training programme and the effect on drop-out rates. Until now we can only conclude that if you train the teacher in using the students’ preconditions and to be better at handling conflicts in the classroom it seems to have a positive effect on the drop-out rate.

Conclusion

Although it is not possible to document a more comprehensive and specific change in the teachers’ attitudes and specific behaviour, the focus on the socio-pedagogical competence has had an impact on the desired parameter: retention.

The preliminary conclusion is that it is the general attitude in the teacher groups towards the importance of reducing drop-out rates which is of significance for the effects. One effect is that the teachers ‘think with a new perspective on dropping out’. This new ‘thinking’ is transformed into actions, which the teachers find difficult to describe, and which it so far has been difficult to document through the applied data collection methods.

At present the project supports the original assumption that a competence development program and knowledge sharing activities among the teachers can lead to a decline in the students' drop-out.

In the remaining part of the research project until the end of 2014 the training program and knowledge sharing activities continues. Our goal is to give a more precise and differentiated description of what kind of teacher training will have the most comprehensive effect on student drop-out rates. We too want to investigate whether a more specific effect of the training program on the teachers' attitudes and socio-pedagogical activities can be documented.

References

- Antoniou, P., & Kyriakides, L. (2013). A Dynamic Integrated Approach to Teacher Professional Development: Impact and Sustainability of the Effects on Improving Teacher Behaviour and Student Outcomes. In: *Teaching and Teacher Education*, 29(1), 1-12.
- Belzer, A. (2003), Toward Broadening the Definition of Impact in Professional Development for ABE Practitioners. In: *Adult Basic Education* 13 (1), 44-59.
- Bernhardsson, N. & Lattke, S. (eds.) (2011). *Core Competencies of Adult Learning Facilitators in Europe. Findings from a Transnational Delphi Survey Conducted by the Project "Qualified to Teach"*. QF2TEACH, The German Institute for Adult Education (DIE). www.qf2teach.eu.
- Bragt, C.A.C., Bakx, A.W.E.A., Bergen, T.C.M. & Croon, M.A. (2011). Why students withdraw or continue their educational careers: a closer look at the differences in study approaches and personal reasons. In: *Journal of Vocational Education & Training*, 63 (2), 217-233.
- Bruce, C. D., Esmonde, I., Ross, J., Dookie, L. & Beatty, R. (2010). The effects of sustained classroom-embedded teacher professional learning on teacher efficacy and related student achievement. In *Teaching and Teacher Education*, vol. 26 (8), 1598-1608.
- Dekker-Groen A.M., M.F. van der Schaaf & K.M. Stokking (2013). A teacher competence development programme for supporting students' reflection skills. In: *Teachers and Teaching: Theory and Practice*, 19 (2), 150-171.
- Duffield, S., Wagemana, J. & Hodge, A. (2013) Examining how professional development impacted teachers and students of U.S. history courses. In: *Journal of Social Studies Research*, 37 (2), 85-96.
- Fincher, M. (2010). Adult student retention: A practical approach to retention improvement through learning enhancement. In: *Journal of Continuing Higher Education*, 58(1), 12-18.

Goldschmidt, P. & Phelps, G. (2010). Does teacher professional development affect content and pedagogical knowledge: How much and for how long? In: *Economics of Education Review*. 29 (3), 432-439.

Harris, D.N. & T.R. Sass (2011). Teacher training, teacher quality and student achievement. In: *Journal of Public Economics*. 95: (7-8), 798-812.

Jeffrey, C.V., Hirschy, A.S., Bremer, C.D., Novillo, W., Castellano, M. Banister, A. (2011). Keeping At-Risk Students in School: A Systematic Review of College Retention Programs. In: *Educational Evaluation and Policy Analysis*, 33, no. 2, 214-234.

Kerka, S. (2003). Does Adult Educator Professional Development make a difference? *ERIC Clearinghouse on Adult, Career and Vocational Education* (ACVE), Myths and Realities, 28. The Ohio State University College of Education.

Lamb, S., Markussen, E., Teese, R., Sandberg, N. & Polesel, J. (2011). *School Dropout and Completion. International Comparative Studies in Theory and Policy*. Springer.

Lamote, C., Spreybroeck, S., Noortgate, W.V.D. & Damme, J.V. (2013). Different pathways towards dropout: the role of engagement in early school leaving. In *Oxford Review of Education*, 2013, vol. 39, no. 6, 739-760.

Lancaster, S., Milia, L. D. & Cameron, R. (2012). Supervisor behaviours that facilitate training transfer. In *Journal of Workplace Learning*, vol. 25 (1), 6-22.

Larsen, L.L. & Wahlgren, B. (2010). Effects of teacher training. In Egetenmeyer, R. & Nuissl, E. (2010). *Teachers and Trainers in Adult and Lifelong Learning – Asian and European Perspectives*. Frankfurt am Main: Peter Lang.

Lippke, L. (2012) Who am I supposed to let down? The caring work and emotional practices of vocational education training teachers working with potential drop-out students. *Journal of Workplace Learning*, 24 (7), 461-472.

Marquard, M., & Sørensen, S. H. (2011). *Den Nordiske Voksenlærer - en kortlægning af kompetencekrav til voksenlærere og uddannelsesmuligheder inden for det voksenpædagogiske område i de nordiske lande*. København: Nationalt Center for Kompetenceudvikling (english summary). www.nck.au.dk.

Nuissl, E., Lattke, S. (eds.). (2008). *Qualifying adult learning professionals in Europe*. Bielefeld: W. Bertelsmann Verlag.

Rotgans, J. I. & Schmidt, H. G. (2011). The role of teachers in facilitating situational interest in an active-learning classroom. In *Teacher and Teacher Education*, 27 (1), 37-42.

Rumberger, R. & Lim, S.A. (2008). *Why Students Drop Out of School: A Review of 25 Years of Research*. California Dropout Project. Policy Brief 15. Santa Barbara: University of California.

- Rumberger, R.W. (2011). *Dropping Out*. Cambridge: Harvard University Press.
- Rumberger, R.W. & Rotermund, S. (2012). The Relationship Between Engagement and High School Dropout. In Christenson S.L. et.al. (eds.) (2012). *Handbook of Research on Student Engagement*. Boston: Springer.
- Smith, C., J. Hofer, M. Gillespie, M. Solomon & K. Rowe (2003). *How teachers change: A study of Professional Development in Adult Education*. Boston: National Center for the Study of Adult Learning and Literacy.
- Valentine, J.C. et.al. (2011). Keeping At-Risk Students in School: A Systematic Review of College Retention Programs. In *Educational Evaluation and Policy Analysis*, 2011, vol. 33 (2), 214-234.
- Wahlgren, B. (2011). Training of Adult Education Teachers – Experiences from a teacher training programme in cooperative learning. In *Cursiv*, 2011 (6), 65-82.