Teacher professionalisation in relation to retention strategies

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Introduction

Drop-out rates and absence is a significant pedagogical problem in the educational system.[1] It has a negative impact on the individual, on the study environments and on the education system. It is not least on this basis that the actual research project is trying to identify factors that can reduce absence and drop-out rates.

New roles for the AEC[2] teacher - Increased completion through social responsibility (January 2012 – December 2014) is an on-going research project initiated by a concern for the growing number of dropouts from adult educations in Denmark. The purpose is thus to reduce absence and drop-out rates at the AECs, and this purpose is pursued through specific activities such as improved learning environment and development of teacher competences.

It is the basic assumption for the study that drop-out is caused by a combination of external and internal factors, i.e. an interaction between the students' social and personal background, the teachers' competences, and the learning environment, and the educational culture at the specific institution. Based on this assumption, drop-out rates can be reduced with an enhanced and focused effort from the schools. The general tool used by the schools to secure a positive development in this study is to improve the teachers' socio-pedagogical[3] competences through their participation in different training programs. It is the central assumption that the competency development of the teachers will contribute to reduce the absence and drop-out rates.

Background

The existing research has identified a number of factors that is of significance for absence and drop-out rates (Lamb et. al., 2011; Rumberger & Lim, 2008), though some studies calls for more systematic research (Valentine et.al., 2011). The factors can be divided in three categories: The students' background (Bragt et.al., 2011), study environment (Fincher, 2010; Kefallinou, 2009) and teachers' competence (Lippke, 2012). It may be assumed that if teachers' competence, particularly the socio-pedagogical competence increases it

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[1] Danish figures show that within the past ten years the drop-out rate in general adult education has constantly been almost 50 %.

[2] AEC is an abbreviation for *Adult Education Center*, in Danish: *Voksen Uddannelses Center* (VUC). AECs offer general adult education programs at lower and upper secondary level. The course provides students with competences that correspond to level one, two, three and four of the European Qualifications Framework (EQF).

[3] The term socio-pedagogical competencies encompass both socio-psychological and socio-educational competencies. Thus it concerns the teachers' interest in a group of students in a class room management perspective, and in the individual student outside the class room, i.e. texting students in the morning to make sure that they turn up for school.

will reduce absence and drop-out rates. It may also be assumed that this competence could be achieved through training programmes for teachers.

There is research on the effect of the development of teachers' competence for the teachers' practices (Goldschmidt & Phelps, 2010; Bernhardsson & Lattke, 2009; Smith, Hofer, Gillespie, Solomon & Rowe 2003; Beltzer, 2003). There is also research on the effect of the development of teachers' competence for students, in particular focusing on the connection between teacher competence and the students' academic performance and outcome (Antoniou & Kyriakides, 2013; Duffield, Wagemana & Hodge, 2013; Dekker-Groen, van der Schaaf & Stokking, 2012; Lancaster & Milia, 2012; Rotgans, & Schmidt, 2011; Bruce, Esmonde, Ross, Dookie &Beatty, 2010; Harris & Sass 2010; Kerka, 2003). However, most of this research is directed at primary, secondary and high school teaching. Very few studies are directed at teachers and teacher training in adult education.

This project aims at investigating to what degree training of adult education teachers leads to a drop in the adult student's absence and drop-out rate (and to an increase in the students' academic outcome). Thus the research project will be carried out on what Kirkpatric describes as the fourth level, which means that we are interested in measuring the final result of the teacher training program: the effect on the students' performance (Kirkpatrick, 1994).

Research design

The project is designed as an intervention project. The intervention consists of competency development of the teaching staff at five adult education centres. It is assumed that teachers' competency development leads to a changed attitude towards the socio-pedagogical competence; to a change in behaviour towards the individual student, and to a changed pedagogical behaviour in the classroom. It is assumed that both of these changed behaviours will lead to an increased retention of the students.

As mentioned, the project involves a competency development of teachers working at five different adult education centres, and the teachers' competency development programs includes three interventions:

1. Knowledge of students: the teachers are trained to analyse the students' preconditions for joining 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.

3. Cooperative learning: the teachers are trained to use cooperative learning method as a vital part of their teaching.

The competency development is carried out through training programmes which differs for each of the five Centres. From each Centre, twenty teachers are directly involved and participate in programmes. The rest

of the teachers are involved in different ways. The table 1 below shows the programmes completed at each Adult Education Centre.

Table 1. Training programmes at the five Adult Educational Centres

	AEC 1	AEC 2	AEC 3	AEC 4	AEC 5
Knowledge of students	X	X	X		X
Conflict management		X		X	
Cooperative Learning		X		X	X

These programmes provide the teachers with enhanced socio-pedagogical competence. It is assumed that the enhanced socio-pedagogical competence will lead to more comprehensive socio-pedagogical activities in the teaching group. These socio-pedagogical activities are expected to reduce absence and drop-out rates. It is expected that the different training programmes will have different effects on absence and drop-out rates.

On the basis of these assumptions the following research questions will be examined:

1. Which socio-pedagogical competence do teachers develop through participation in training program?
2. Is the competence converted into (new) socio- pedagogical activities?
3. Does the teachers' competency development contribute to reduce the absence and drop-out rate?
4. Which socio-pedagogical initiatives have the greatest effect on the reduction of absence and drop-out rates?

Method and data

The data collection for this study is comprehensive and includes data sets consisting of a description of the training programs, an electronic questionnaire aimed at teachers (almost 500 informants), systematic registrations of absence and drop-out rates (for more than 10.000 students) and knowledge of the scope and the content of the teachers' new and more comprehensive socio-pedagogical activities (interviews and logs).

The electronic questionnaire for teachers

The development of the teachers' socio-pedagogical competence and the extent of their socio-pedagogical activities are measured through two questionnaire replies. The first questionnaire is given at the very beginning of the project, and the second questionnaire the following year.

494 teachers received the questionnaire at the beginning of the project. The response rate was 75%. At the second round the response rate was 72%.

Both times, the teachers had to consider the extent to which they felt they had sufficient competences in relation to eight types of actions, e.g. 'giving a student 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 the study progress' or 'talking to a student about his or hers private social situation outside the school'.

They also had to consider to which extend they regarded themselves to have the sufficient competencies to run these activities.

Finally, they had to assess the relative composition of their own competences with a view to academic competence, didactical competence and socio-pedagogical competence. Similarly, they are to assess how they view the ideal relative distribution of these competencies.

Systematic registration of absence and drop-out

The data also included a systematic registration of absence and drop-out rates for more than 10.000 students.

In each of the five Centres, the absence rate was systematically registered in 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 there is available information about absence and drop-out rates for the preceding four years it is possible to compare to different years and to compare between the five Centres.

Interviews and logs

Knowledge of the scope and the content of the teachers' new and more comprehensive socio-pedagogical activities is collected through two data sources, interviews and logs. Thus, the design further includes periodic a) interviews with teachers and students as well as b) electronic logs written by teachers.

Interviews with teachers

Interviews with 16 teachers have been completed. The respondents are appointed by the management on the basis of the level of involvement in the development process of the process. The interviews were conducted as open structured interviews. There were three main themes: 1) a description of completed educational initiatives, 2) perception of effects of the project, 3) documentation of the effects.

Interviews with students/course participants

The interviews with course participants provides information about how participants experience the teaching, including teaching activities and the effects hereof, experience of teachers' ability to consider the individual student, as well as teachers' efforts in relation to social environment, teaching environment etc. ,

participants' experience of whether the teachers do something new and/or different in relation to the teaching, the students have previously received and, finally, the course participants' perception of whether the teachers can do something else or more in relation to reducing absence and, in the long term drop-out rates.

Electronic logs written by teachers

Ten teachers have written logs over a period of eight weeks. One logbook was to be completed pr. week. The participating teachers for this part of the survey had also been appointed by the management based on their activity in the project. The logbook had to describe three items: 1) the socio-pedagogical activities which the participants carried out, 2) the effects which the teachers assessed 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 competency development, the teachers had completed.

Findings

The overall result of the project at the present time is that there is much less impact than assumed.

The teachers' perceptions of their own socio-pedagogical competence which were registered via the questionnaires have virtually not changed in the course of the year in which the competency development courses have been completed.

Out of nine possible changes, there is only one change which is significant, and it is the ability to 'talk with a student about his or hers personal social situation outside the school'.

With regard to the teachers' socio-pedagogical activities, there are only two of eight possible activities, which have increased. These are: 'giving a student a word of approval in relation to the actual school performance' and 'giving personal feedback to an active student'. These two activities – both related to the 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.

We found that their perception of the relative importance of the socio-pedagogical competence compared with the importance of the subject-competence and subject-didactic-competence was changing. The teachers as a group wanted to give a higher priority to the socio-pedagogical competence. But we found differences between young teachers and older teachers and between not so experienced teachers compared with 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.

The results from the questionnaire survey can be compared with the results from teacher interviews and data from the teachers written logs.

From the first interviews with teachers it appears that the primary focus was on the competency development itself rather than on the main focus of the project which is to reduce absence and drop-out rates. Thus, the teachers had difficulties providing examples of the effects the various initiatives may have on the projects' strategic objectives. However, there was a general agreement that a greater focus on course participants, i.e. keeping them 'on a tighter lead', seems to have a positive effect on the absence. Generally, the teachers showed a positive support of the project and the embedded competency development, and thus the project seems to have a mobilising effect on the teaching staff.

In the logs the teachers describe a number of activities which they conduct for the purpose of reducing absence and drop-out rates. It can be very specific activities as performing personal interviews with students or in a wider context, arranging social activities as class get-togethers. The teachers generally agree that their initiatives have 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 whether the socio-pedagogical activities are new, the teachers answer that 'most of them are activities that they have also carried out previously'. However, about half of the teachers reply that they are doing something differently in their practice.

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

If we look at the absence and drop-out rate, that is the main purpose of the project, the figures actually show an improvement compared with previous years. The figures are shown in Table 2, Drop-out and absence rates over years in %.

Table 2. Dropout and absence rates in different years in %.

	Baseline 2009/2011	1.year 2012	2. year 2013
Drop-out from education	30,1 %	26,1 %	22,1 %
Absence from lessons	24,9 %	24,0 %	24,6 %

N => 10.000

What is interesting is that while absence rates have been fairly constant over the years and under the invention period, the drop-out rates have clearly been reduced. The reduction is evident both when comparing the baseline figures (the average for three years) with the first year figures and when comparing the first and the second year figures.

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

Conclusion

Although it is not possible to document a more comprehensive and specific change in teachers' attitudes and specific behaviour the projects' 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 and in the individual Adult Education Centres to the importance of reducing drop-out rates that is of significance for the effects. One effect is that the teachers 'think differently'. This 'thinking differently' is transformed into actions, that the teachers find difficult to describe, and that it so far has been difficult to document through the applied data collection methods.

At the present time, the project supports the original assumption that a competency development of a teacher group can lead to a greater retention of the students.

References

Antoniou, P., & Kyriakides, L. (2013). A Dynamic Integrated Approach to Teacher Professional Development: Impact and Sustainability of the Effects on Improving Teacher Behavior 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. (2009). *Core Competencies of Adult Learning Facilitators in Europe.*QF2TEACH, The German Institute for Adult Education (DIE).

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)

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).

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, Stacy, Justin Wagemana & Angela Hodge (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 & Phelps (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,* 33:214.

Kefallinou, M. (2009) The Learner Persistence Programme at Quinsigamond Community College: Practitioner Report. *Adult Basic Education and Literacy Journal 3* (2), 105-109.

Kerka, Sandra (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 Educatio.

Kirkpatrick, D.L. (1994), *Evaluation Training Programs.* San Francisco: Berrett-Koehler Publischers.

Lancaster, S. & Milia, L. M. (2012). Supervisor behaviors that facilitate training transfer. In *Journal of Workplace Learning*, vol. 25 (1).

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)

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

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).

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

Smith, C., J. Hofer, M. Gillespie, M. Solomon & K. Rowe (2003). How teachers change: A study of Professional Development in Adult Education. NCSALL Report #25.