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Changing education – QA and the shift from teaching to learning

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Proposal

Title: Tutoring Support Office: Increasing Teacher . Student contact in Higher Education, Promoting a shift from Teaching to Learning?

Abstract (150 words max): After the Bologna Process (2006), tutoring activities have been introduced and disseminated among most IST Programmes as a way to support expected and needed changes on the teaching and learning practices in Higher Education. Before 2003, only peer mentoring existed to support the students' transition and there were no specific measures to either support students' academic strengths or difficulties, or training and support activities for teachers. In this article we characterize IST Tutoring Program, highlighting the aims, outcomes and outputs of several strategies taken to promote the communication between Teachers and Students. Strategies like training for Tutors and Tutees, Coaching or the combination of tutoring practices with soft skills training within first year introductory course are described. Low Academic Outcome Identification System (LAOS) is also referred to as a way to early identify students in stress and prevent the low academic cycle in which students tend to keep before they ask for external help.

Text of paper (3000 words max):

1. INTRODUCTION

The Tutoring Program (TP) aims at promoting IST students' academic success, and is especially directed at first and second year students, contributing to the overall efficiency of the school to graduate students within a reasonable time frame, based upon the establishment of an early bond between students and experienced professors from the students chosen Programme, as a way to bridge the existing gap between secondary and higher education.

Since the implementation of the Bologna Process (2006), tutoring activities have been introduced and disseminated among most IST Programmes as a way to support expected and needed changes on the teaching and learning practices in Higher Education. TP has been improved yearly since its beginning, 10 years ago, through assessment and review of practices, always keeping in mind the need to broaden the number of students who actually profit from it and to document improvements on academic results of participating students (Lima & Regateiro, 2011). Before 2003, only peer mentoring existed to support the students' transition and there were no specific measures to either support students' academic strengths or difficulties; also, training and support activities for teachers were infrequent and none aimed at helping the teachers becoming more able to deal with underachievers or to motivate newly arrived students to the Programme of their choice.

2. TUTORING PROGRAM

TP involves five main areas: training (self-regulated learning and soft skills for students and practical tutorial models for teachers), follow up (meetings and coaching for teachers and students alike, including student delegates), monitoring (performance frame, academic course critical points), dissemination (institutional presentation, homepage, Facebook, flyers) and assessment (internal and external). Within the scope of the TP assessment, annual and semi-annual reports on the students, teachers and school activities are produced since 2003, gathering quantitative and qualitative data, including surveys. Each academic year, the TP staff prepares (with Programme Coordinators) the tutoring activities for the ensuing year, taking into consideration assessment results from previous years, preferences and needs of the specific Course and Academic Area Management Board and especially the alignment with Pedagogical Council Guidelines for that Academic Year. For a general description of the TP, refer to Figure 1.

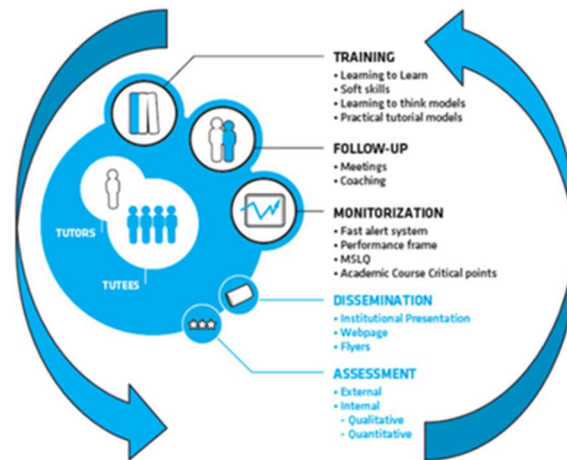


Figure 1: Areas within Tutoring Program

Following the Seven Golden Rules for Tutoring and Mentoring Schemes+ (Goodlad, 2001), Tutoring Program tried to: clearly define its aims, participant roles and evaluation criteria; at the same time, to train and support for both tutors and tutees, it structured contents for tutors, always keeping logistics as simple as possible. Let's check some aspects of the practical application of these rules.

2.1. Be clear about aims

The TP aims are:

- Accompany students during their stay at IST;
- Support the transition Secondary / Tertiary Education;
- Direct the academic potential of students;
- Identify situations early academic failure;
- Contribute to the improvement of teaching quality at IST;
- Support activities related to Programme Coordination.

2.2. Be clear about tasks and produce data

The ratio tutor/tutee is one to 15, and tutors are volunteer teachers occupying a privileged position to counsel and support newcomers to the university, mainly regarding the improvement of academic outcomes and helping in the process of decision making concerning academic life and future career choices, as explained in Figure 2.

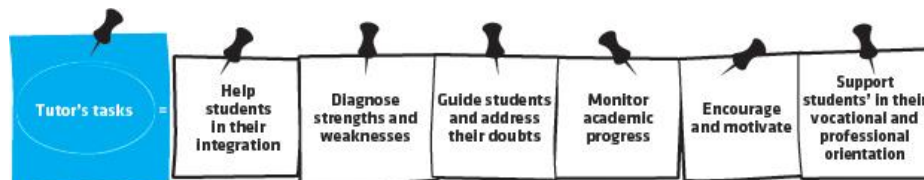


Figure 2 – Tutor Tasks

A training program for teachers has been developed in order to support teaching and tutoring activities at IST. The Tutor is available on demand for the student (in person, during classes, through the

telephone and/or e-mail), and in the beginning of the first year by actively reaching the student, either during scheduled meetings or through e-mail contacts. In order to monitor students results, the Tutor has access to his Tutees academic results during their first two years at the university (through performance frame . see Figure 3).

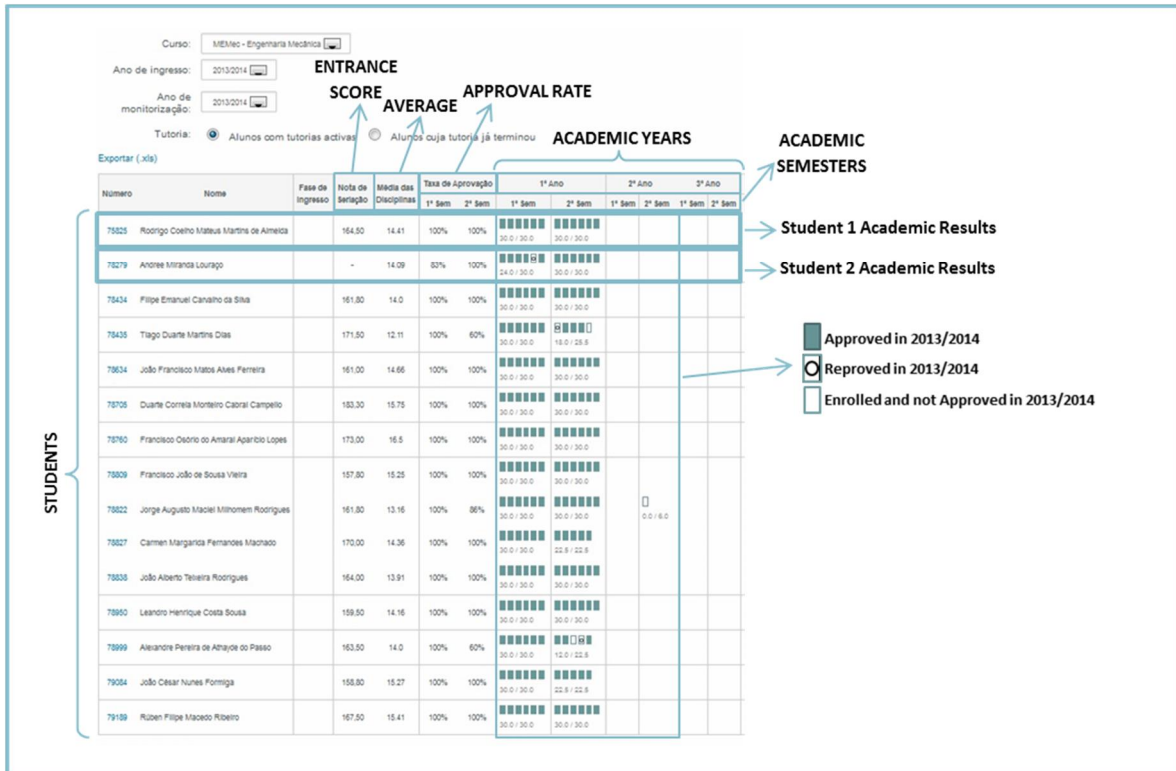


Figure 3 – Performance Frame for Tutors

2.3. Keep it simple, make it attractive for tutors

Tutors are chosen by Programme Coordinators, very often among Best Teachers and/or First Year Teachers, to facilitate contact with Tutees. Tutors logistic activities are kept to a minimum, as Figure 4 illustrates:

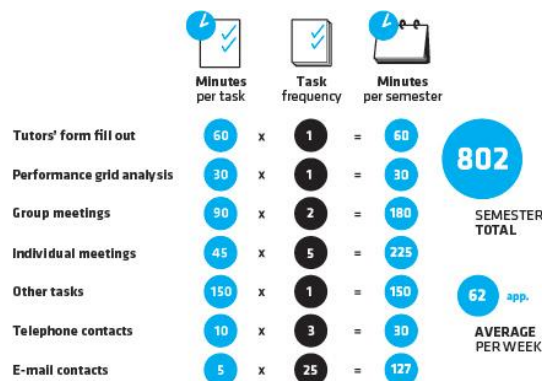


Figure 4 – Estimated time spent by tutors each semester

IST symbolically rewards participating Teachers by counting the time spent as Management Support Activities, but over time, the biggest reward reported by Teachers (e. g. during Excellent Teacher interviews conducted by staff of the Tutoring Support Office) is the visible improvement in their teaching skills during tutoring activities, and the possibility of learning new ways of reaching low achieving students, helping them improve their academic results and also of supporting high achieving students, sometimes by facilitating an early involvement in research and other IST activities.

2.4. Start Small

Since the implementation of the TP, participation rates of students have increased and consequently the number of Tutors involved. Figure 5 shows the evolution of TP between 2003/06 and 2013/14 semesters, highlighting the increased rate of Tutors and Tutees committed to the Program, 60.7% and 280% respectively. More detailed information on TP evolution over time can be found.

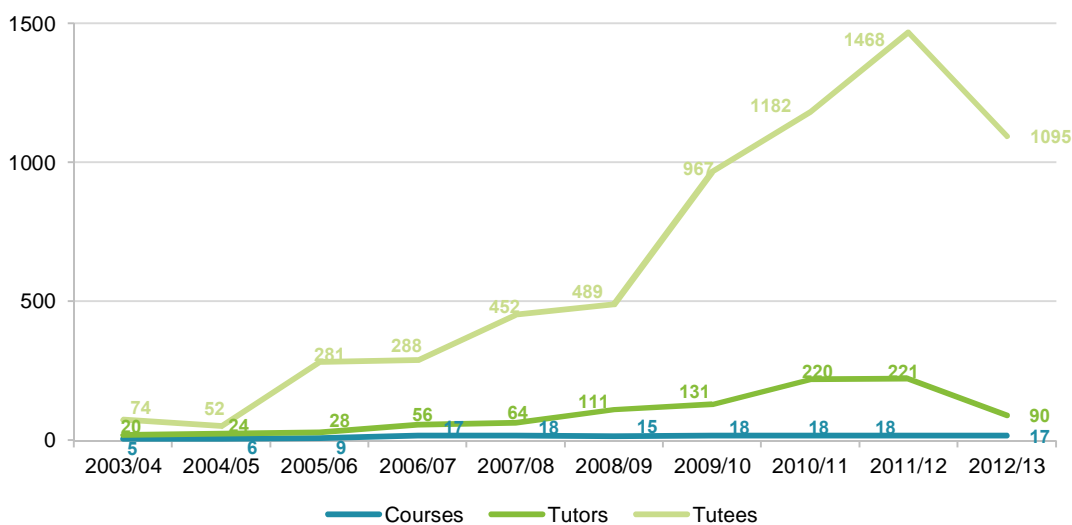


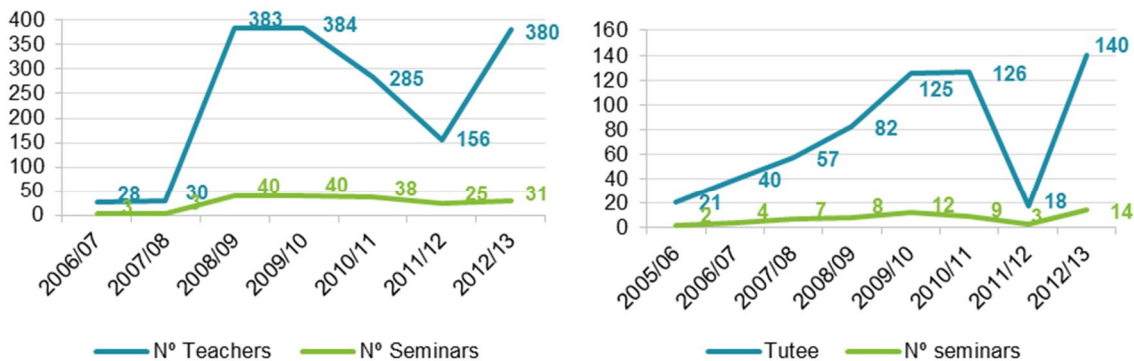
Figure 5 – Rates of rates of participation in TP: Evolution over time

The three areas of the TP students value the most are: support/information about IST, academic adaptation/integration and contact with somebody experienced (Universe: 1419 students, Sample: 616 students and response rate of 43,4%).

In general, planned objectives, mission and goals for the TP have been reached, although improvements are still needed in order to promote a more broad acceptance of the Program, expressed by even higher rates of students participating in the Program, as well as a higher rate of contact hours between students and their tutors, preferably leading to an early identification and intervention with the academic underachievers and to a measurable impact on their academic results.

2.5. Train and Support Tutors and Tutees

Throughout the school year the TP keeps active, intervening in the academic community by offering training to Tutors (and in fact all Teachers interested) and Tutees (and in fact all Students interested). Since 2012/13 academic year, a growth trend was registered in both sets of training offers, with recorded values among the highest ever recorded. see Figures 6 and 7.



Figures 6 & 7– Evolution over time of the rates of participating Teachers and number of Seminars (left) and of participating Tutees and Tutees Seminars (right)

Personalized Coaching by trained staff at the Tutoring Support Office is also offered for Tutors when needed and twice each year as a follow through rule to monitor the functioning of the TP each semester. Social networks and special advertising activities (e.g. a Flash Mob) are sometimes also organized to market TP, especially among first year students.

As we will later show, this marketing activities are useful to a certain extent, but different Programmes seem to have different rates of participating students (depending on how motivated Tutors are in that particular Programme) and many students identified by Tutors (using the Performance Frame) as having poor academic outcomes very often feel shameful and don't make an appointment with the Tutor when in need.

2.6. Reach all students and motivate participation

Since in southern European countries (as opposed to northern European countries) there is not an active culture of Tutoring practices in Higher Education, Tutoring Support Office team tried some strategies to improve contact hours between tutors and tutees along the first year of the students stay in IST. In the Mechanical Engineering Programme this contact hours have been made compulsory through the attribution of tutors to student tutees (ratio 1 Tutor/15 Students) at a Portfolio course (1st year, 2nd semester) since 2006/07 academic year. The contact hours of the students with the tutors improved in the 2nd semester due to the need of the students to be helped by their tutor in the preparation of the final presentation of Portfolio course.

Therefore, in the 2010/11 academic year a new Course was included (in the 1st year, 1st semester) . Introduction to Mechanical Engineering - following approximately the Portfolio format, aiming at increasing students' soft skills (time management, team work and communication skills) and motivation for the Programme through lab visits and seminars run by professionals in the industry and other areas relevant for the profession. Tutors have a great amount of contact hours with their students in this format, starting from the first week after classes start.

The combination of tutoring practices with soft skills training within a first year introductory course is, as far as we know, unique either for the university system and for IST (no other courses at this institution combine these two elements, although a general form of tutoring is present in most IST Programmes). Qualitative data collected through the years show that hours of contact and quality of contact between tutor and tutees in the beginning of 1st year improves if tutors are teachers from the students Programme and if they meet regularly with them during academic activities (e.g. project teachers at Architecture Programme, or Lab teachers at Chemistry Programme), as is also the case with Portfolio and Introduction to Mechanical Engineering. These two courses are mandatory, 2 classes/week, 1h30 each with a weight of 1,5ECTS assessed by a group project composed by a written paper and an oral presentation, and 3 types of classes compose it . working, seminar and

tutorial plus research labs visits at IST. Tutorial classes are taught both by tutors and Tutoring Support Office team members (mainly psychologists). Results are encouraging, showing the students are satisfied with the tutorial classes, particularly with the writing and presentation skills classes considering them useful for their future academic and professional life.

A good, strong and respectful collaboration among tutors (Engineers) and Tutoring Support Office team (Psychologists) is needed, with a great effort being made at the preparation of joint classes, taking advantage of different sources of knowledge. A Strong belief of Programme Coordinators and the School Pedagogical and Academic Boards in the advantages of the Program, is reinforced each year and replicability of this practice in other institutions is evident in various requests made by other Portuguese HEIs in order to better know IST's Tutoring model. TP was considered pioneer in the Portuguese Higher Education Landscape, and has been described in detail both at national (e.g. publication of a book briefly describing TP in its 8th year functioning) and international (e.g. participation in the ATTRACT project with the presentation of a workshop for underachievers and of the academic course critical points system) level.

3. ACADEMIC COURSE CRITICAL POINTS SYSTEM

The Low Academic Outcome Identification System (LAOS) was created in 2010, aiming to early identify students in stress and prevent the low academic cycle in which students tend to keep before they ask for external help. The Portuguese law uses a metric that defines that after 3 enrollments a student must succeed in a minimum of 60 ECTS, after 4 enrollments in a minimum of 120 ECTS, and after 5 enrollments in a minimum of 180 ECTS. All the students under these limits are required to not enrol in any HEI for a whole academic year.

LAOS was designed to identify students with persistently low academic outcomes before their 3rd enrollment, and is complemented by an intervention plan that aims to reverse the low academic outcomes, and to prevent students to get to their 3rd enrollment at risk of being excluded from IST.

LAOS is based on an informatics tool, integrated in the school intranet system (Fénix). The System allows for the identification of students at risk following a set of sequential Moments, each Moment being defined by specific rules to be described (see Table 1 for a description of these Moments).

Although the system is sub sequential, the 5 moments occur in only two periods of time. Three of them occur simultaneously in March, and the remaining 2 occur simultaneously in July.

Table 1 – Moments defined within LAOS

Moment	Semester	Enrollment Year	Students ECTS	Action in the e-mail
1	1st	1st	< 15 ECTS	The e-mail alerts the students to the fact they should have had got 30 ECTS. Students are advised to enroll in the Workshops Time Management and Team Work, consult the support reading on the programme webpage and contact the Tutor.
2	2nd	1st	< 30 ECTS	The e-mail alerts the students to the fact they should have had got 60 ECTS. Students are advised to enroll in the Tutoring Programme Workshops and are advised to contact their Tutor in order to assess their 1st year and prepare the next year enrolments.
3	3rd	2nd	< 40 ECTS	The e-mail alerts the students to the fact they should have had got 90 ECTS. Students are advised to enroll in a 4 weeks session Workshop for students with low academic outcomes.
4	4th	2nd	< 45 ECTS	The e-mail alerts the students to the fact they should have had got 120 ECTS and informs them about the possibility of being excluded for 1 year if their academic outcome does not improve, and that they should consider a part time enrolment in the next school year.

Moment	Semester	Enrollment Year	Students ECTS	Action in the e-mail
5	5th	3rd	< 55 ECTS	The e-mail alerts the students to the fact that in the end of that year they should have a minimum of 60 ECTS (in order to not be excluded for 1 year). Their participation in the Workshop (students who cannot attend have to justify their absence), and a scheduling of a meeting with the Tutoring office is mandatory.

Between 2011/012 and the 1st semester of 2013/14 LAOS has been in function. In this period 13 lists have been produced, a total of 1423 students have been identified. 704 students were identified more than once, 46 participated in the Workshops and 66 contacted the Tutoring Support Office.

The lists reflected an interesting trend: the 1st, 3rd and 5th Moments (winter semester) seem to have more students with low academic outcomes, than the 2nd and 4th Moments (summer semester) and the number of students with low academic outcomes seems to decrease from one enrollment year to another. This may be explained by one or more of the following situations:

- students respond positively and actively to the warning; acknowledging the risks and being confronted with the goal they were supposed to achieve (and didn't) acts as a trigger to improve their attitude towards study (even if they don't follow any of the suggestions included in LAOS);
- the impact of the transition between secondary and higher education decreases from year to year and slowly students start to adapt to the new demands and improve their grades;
- some students drop out between semesters, and this accounts for a decrease in the number of students identified (although this being true only for a small number of students).
- the decrease in the number of students identified reflects those students that drop out in the first two years.

From the start, LAOS advising e-mails seem to work better in the 4th and 5th Moments, when students are closer to the possibility of being excluded for 1 year - students in that situation tend to enroll and participate more in the Workshop. The response to the e-mail is also higher among the 3rd year students, not only to schedule a meeting with one member of the staff and apply for help, but mainly to clarify questions regarding retention rules and part-time enrollment.

In the previous applications of the System, we've noticed mainly an alert and informative effect, however, in the first two semesters the student response is very low. 1st year students tend to consider their low academic outcomes as part of a rite of passage into higher education, and therefore tend to minimize the effects of the first years on their academic path. Students in this situation seem to consider that they are able to reverse their poor outcome by themselves, considering external help as a demerit to their abilities.

It is also important to acknowledge that the 5 different moments refer to different publics (e.g. students that are in different stages of their academic life), so the message has to be specially directed to each one of them, in order to maximize their response. The student response is one of the major setbacks of the System, although part of the 5th Moment is mandatory, truth is - there's no way to control or to require a student to participate or to meet with his Tutor/Member of the Tutoring Program.

A final note is needed in order to explain the nature of the % Exclude Exclusion Workshop, detailed (as well as LAOS) in the final report of the ATTRACT project . it is a 4 session weekly workshop especially oriented for students with low academic outcomes. The workshop is for no more than 10 students, either identified through LAOS, sent to it by Tutors or Colleagues. Session 1 covers topics such as motivation, time management and study organization skills, session 2 promotes the relationship between students and tutors and between participants through group work, session 3 helps students define SMART aims and to draw upon some rules of thumb to help them study more efficiently and session 4, the last one, closes the workshop with assessment of outcomes and need for further individual support. 79,6% of the participating students are not first year students, 66,9% consider the workshop increases their motivation for the Programme they've enrolled and, last but not the least, 46,7% of the participating students are never excluded and finish their instruction at IST.



4. FINAL NOTES

Getting back to where we started . does the increase in Teacher . Student contact in Higher Education, especially in the first years, e.g. within the scope of Tutoring Programmes, also promotes a shift from Teaching to Learning? There's no easy answer to that question, but Lourtie (2009) presented the Tutoring Program, as well as the Internal Evaluation Process of Course Units (QUC) at IST as examples of possible ways to involve students in institutional life. The Tutoring Support Office experience is that it's hard to involve students in academic life when they've persistent low academic outcomes . usually these students don't attend classes, or the schedule for questions defined by their course teachers and, as we've seen through LAOS, many times they even have difficulty to apply for on time help with tutors or even with their peers in classes or at the students' Union. For these students, to identify them early through the performance frame (by their tutors) or later on by the LAOS seems to make a difference both in the improvement of their academic outcomes (see Lima & Regateiro, 2011) and in their participation in academic life (e.g. by sharing strategies with peers found at the Exclude Exclusion Workshop).

Also, as we've seen, Tutors seem to improve the quality of their teaching over time by being Tutors and the introduction of soft skills training activities in first year courses, with shared responsibilities between Teachers and the Tutoring Support Office, seems to have a strong preventive effect by enabling students, from the start, to manage their time, teamwork and assignment performance in a more self-regulated and effective way (e.g. feedback received from Introduction to Mechanical Engineering teaching staff. The adoption of this 'Soft Skills' training approach by over 8 different IST courses seems to reinforce the idea that frequent contact during classes of teachers and tutees and soft skills training early at students entrance in HE seem to be promising venues for the future.

Questions for Discussion:

- 1) If Tutoring helps bridging the gap between students and teachers, how can we increase the participation rates of both, especially when students find it hard to apply for help due to a feeling that in HE autonomy is expected from them? And are tutorial programs doomed to be seen as a way of prolonging students' dependency? And what to do if some students really lack the skills to strive in HE without help? Are there advantages to have teachers rather than staff helping the students?
- 2) Most members of the Higher Education teaching staff in Europe do not have specific training in pedagogical or teaching competencies . do tutoring activities and the challenge to help students with low academic outcomes motivate them to find and participate in training activities? Can Tutoring participation be seen as a hands-on training, especially if accompanied by coaching and/or mentoring activities with specialized staff (e.g. educational psychologists)

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