

THE TUTOR'S PERCEPTION ON THE ACTIVITY OF A STUDENT IN GROUP ACTIVITY IN REMOTE MODE

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ABSTRACT

This paper seeks to respond to one of the difficulties founded by a tutor in a situation of monitoring a group activity at a distance activity (remote mode), namely the perception of the individual activity of the students in the group activity. Based on a literature study on remote collective activity scenarios and group dynamics, the authors propose ways to facilitate the tutor's perception of individual activity. These means are based on a perception of the individual and group productions of the students, collective discussions, social behaviors as well as the sociometric analysis of the group. The authors confront these proposals for the real needs of the tutors of the group activities through interviews conducted with eight experts.

KEYWORDS

Open and Distance Learning, Group Learning, Tutoring, Student Monitoring

1. INTRODUCTION

When monitoring a collective activity online, the tutor is faced with difficulties related to the distance situation. In particular, the tutor needs to find the individual progress of the students involved in a distributed project in such a way as to support everyone in the collective task (Berger and Rieben, 2000). This work focuses on a twofold dimension of monitoring collective activity:

- 1) monitoring of the collective activity itself, that is, in order to achieve the objectives envisaged;
- 2) individual monitoring of each student involved in the collective activity.

Following each student individually assume everything, perceiving each student's activity beyond the group's activity. The task of perception is central because it is from the perception of the activities that the tutor can help the group and guide the students individually. The work is related to the issue of instrumentation of the tutor's activities to perceive the individual activity of the students, that is, to conceive and develop tools to understand the individual activity. For this, responses were developed to improve the perception of individual activity by the tutor from a study of the literature. The authors also provide information about what the tutor can rely on to understand the students' activity. These proposals were then confronted with the needs of the tutors by conducting interviews.

2. PROPOSALS FOR RAISING AWARENESS OF A STUDENT'S ACTIVITY IN A GROUP

In this section, we present the study of the literature that led to make proposals to facilitate the perception of a student in group activity. That proposals focused on ways to highlight:

- 1) the contribution of the student in the group activity through the study of various scenarios of the collective activity;
- 2) the involvement of a student in the functioning of a group, studying the work related to the analysis of social networks and group dynamics.

2.1 The Student's Contribution to the Group Activity

The study highlights that collective activity scenarios are often based on an organization in individual and collective contexts (Gaudioso *et al.* 2003). The individual phase allows the student to reflect on the problem and form an opinion that he can defend in the collective phase (Stahl, 2000), a reflection that enriches discussions and collective productions. The collective step consists of reinvesting what was produced by each student during the individual step. The discussion has a central focus since it allows the group to agree on the content of the production or on the solutions to its problem (Baker and Lund, 1997).

Through the previous study (Gaudioso *et al.* 2003), we see that a student is led to produce individually, that the group is brought in to discuss before producing collectively, and that these discussions can focus on the initial individual productions. Therefore, to perceive the activity of a student in the context of collective activity, we propose to focus on individual productions, discussions, and collective productions. The tutor can perceive the collective work through the consulting of the collective productions and the discussions. He can perceive a student's individual work by consulting their individual productions, their contributions to collective productions, and their participation in discussions. We believe that it is possible to offer the tutor ways to bring these different productions closer together, in order to take into account and see the strong dialectic that exists between individual and group monitoring.

2.2 Involvement of a Student in a Collective Activity

More and more works are focused on the analysis of social networks to better understand the process of collaboration (Reffay and Chanier, 2003). The analysis of social networks is a way to identify the roles played by members of the group (Beck *et al.*, 2003). It seems to us, therefore, that one of the means of praising the activity of a student in a group is to perceive his place in this group in the social network. Currently, the analysis of group dynamics is often quantitative: information about the density of interactions and the centralization of interactions. This quantitative information is usually represented under graphs to provide a synthetic view to the tutor. The authors understand that while this type of quantitative information is a good point for the tutor, to understand the collaborative process is not enough. Other works concern the qualitative study of group dynamics. The first trend that seems interesting, concerns the study of social behaviors, and in particular, work in ethnology. After a series of studies in the field, with students, (Plety, 1996) four profiles of social behaviors were highlighted according to the volume of intervention, the type of intervention, communicative gestures, and reactions of other students.

The four social behaviors proposed are the Facilitator, the Auditor, the Collector and the Independent. Based on the work of George and Leroux (2002) a tool was developed to perceive the social behavior of students in distance situations in the context of group discussions. The particularity of the discussion tool is that it is based on a structuring of parallel discussion and the importance of linguistics. This structure makes it possible to determine the automatic pattern of the profiles of the linguistic acts used by the students during their interventions in a discussion. These calculations result in the generation of graphs that present the profiles of the students in this same discussion. A second current that draws attention is the sociometric analysis of a group. This analysis consists of highlighting the interpersonal relationships between the members of the group (Parbelas, 1992). To this purpose, each member must complete a questionnaire. The answers to the questionnaire provide information about how each one perceives the group (who he or she would like to work with, who he or she thinks is the leader of the group, etc.) and how he or she thinks he is perceived by the group. The sociometric analysis highlights the "latent structure" of the group at different times of collective activity: the status of the different members (Favorite, Isolated, Rejected, Solitary, etc.), the structure of the group into micro groups. Sociometric analysis can be represented in the form of graphs (centered on a particular student or not).

The authors could work on qualitative analyses because it is an aspect of group dynamics that may be of interest to the tutor. These analyses propose and offer the tutor points of view which provide him with qualitative information on the group dynamics, and the place of a student in the group, in order to reinforce his perception of the situation of the learner. The sociometric analysis is complementary to that of social behaviours since it offers a picture of students' interpersonal relationships from the perspective of those same students.

2.3 Summary of Proposals to Facilitate the Perception of the Activity

Table 1 represents the synthesis of the proposals to perceive individual activity in the group. This table highlights the need to perceive group activity in order to perceive a student's activity (and vice versa). The two types of perception are complementary to ensure the individual follow-up of the students involved in a collective activity.

Table 1. Proposals to facilitate the perception of a student's activity

Perception of the student in a group	Perception of its activity in an individual spot	Through his individual productions
	Perception of his activity in a collective task	Through his contributions in the collective contributions
		Through his contributions in the discussions
	Perception of his place in the group dynamics	Through his social behavior
		Through his sociometric status

3. COMPARISON OF PROPOSALS WITH THE NEEDS OF TUTORS

The authors brought together eight people with different experiences of collective distance learning mentoring (apprentice acts mixed or distance, apprentice fields act and different group sizes). It now presents the synthesis of interviews according to four types of needs pointed out by the tutors.

- **Need to follow the student individually in the group activity.**

The tutors said that they need individual information about students when they are in a situation of monitoring the collective activity, and this from the beginning of the collective activity: this allows them to identify the least active students, with more difficulties and the least motivated, to be able to intervene enough from the beginning of the activity with them. Tutors need tools to compare the information provided with their own perception of students. Currently, there is not a wide variety of tools to understand the behavior of an individual in a group, being the information of the quantitative type (tools for the consultation of links that indicate the dates and durations of interaction of a student). Tutors reported that this first level of perception of a student is essential, but not sufficient; A second level of perception of the individual in the group is required, through qualitative information (type of intervention in the exchanges, identification of the role of a student in the group).

- **Need to understand group dynamics.**

The tutors expressed that the functioning of the group depends on the individual motivation of the students: it is therefore important for the tutor to be able to locate exactly one student in the group dynamics, to approximate their behavior in the group and foster their involvement in productions and discussions. Tutors said they get an idea of the group dynamics from student exchanges but need formalized tools to identify the purpose of their perception, stating that currently distance learning platforms do not provide such tools. In addition, tutors need to notice the evolution of group dynamics during the collective activity.

- **Need to understand sociometric analysis.**

All tutors interviewed believe that using sociometric information about the group involves risks: disruption of the course of the collective activity, entropy introduced if the students do not know each other well enough to answer such questions, risk for the student to consider his position in the group as an objective.

However, most believe that such information can be useful for the tutor and students, as long as all the risks involved are taken into account. For the tutor, it would be a way of confronting his representation of the group to that of the students, as well as a way of acting with the students who are perceived as dysfunctional

in the group. For a student, knowing the sociometric representations of the group would allow him to adopt a reflective attitude about the place he occupies in this group.

- **Need to understand social behaviors.**

On the question of social behaviour profiles, tutors explain that it is difficult to make a clear idea of students' social behaviours and that it may be interesting to provide tutors a rating, even if it is reductive. There, however, the tutors appreciate the idea of having more objective information than is deduced and confront the students with their own perception.

4. EVALUATION

Feedback from tutors reinforced the authors' goal of providing them with tools to perceive a student's activity in a group activity, and thus confront the students' own point of view. In particular, they confirmed the hypothesis of their need to perceive the dynamics of the group and be able to identify the student role in the group, which is in line with the authors' choices regarding the design of tools for visualizing group dynamics from the point of view of their originality and their usefulness to the tutor. Regarding sociometrics, the authors are aware of the risks that the use of remote entails, but it is believed that it is interesting to test this type of tool with experienced tutors. More generally, the interviews reinforced the authors' approach, which is to provide the tutor with information about the contribution and involvement of a student in a group, information that cannot be obtained directly by consulting the students' activity, but which can be useful to better understand the functioning of the student and the group.

5. CONCLUSION AND FUTURE WORK

These proposals to facilitate the perception of the activity will allow the authors to develop a model of perception of the individual activity, which they integrate into a broader model of individual monitoring of the students involved in a collective distance activity. This model serves as the foundation for the development of an IT environment for individual monitoring of students involved in a collective distance activity. The development of these tools is currently a work in progress (now in the development phase of the tools) hoping to move to the testing phase from the beginning of the next academic year with the students of the 2nd year of graduation (Academic Year 2023/2024, L2).

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