

Affective-Motivational Responses Identified by Means of the Pedagogical Diary in the Initial Training of Teachers

Venera - Mihaela Cojocariu; Prof. Ph. D.,
“Vasile Alecsandri” University of Bacau, Romania
Calea Mărășești, nr. 157, Bacău, 600115
Phone: 0234 542 411
venera@ub.ro

Gabriel Mareș
“Vasile Alecsandri” University of Bacau, Romania
“Al. I. Cuza” University of Iași
Calea Mărășești, nr. 157, Bacău, 600115
Phone: 0234 542 411
mares.gabriel@ub.ro

Abstract

The pedagogical diary may show a versatile utility in the initial teacher training process. Our study aims to highlight the results obtained by capitalizing the pedagogical diary during a semester's activity, the discipline of History of Pedagogy, academic year 2016-2017. The sample consisted of 70 1st-year students from the Pedagogy of Primary and Preschool Education. Our effort was to identify motivational-affective responses generated using the pedagogical diary and semi-structured entries at the end of each seminar. The suggested structure comprised the requirement to write down the experiences generated by successively covering the curriculum topics. Their qualitative analysis focused on identifying the types of affective states, their correlation with types of motivation, as well as identifying specific types of motivation.

Keywords: pedagogical diary, motivation, affectivity, initial teacher training

1. Introduction

The pedagogical diary – a tool for knowing and stimulating student motivation

Concerned with the increase of students' academic performance as well as their personal and professional development, teachers seek, identify, experiment, adapt and capitalize on more flexible, polyvalent, creative teaching strategies. Their aim is to ensure an optimal combination of the content of learning with its form, the algorithmic aspect with the heuristic one, for a successful, balanced, exciting, attractive learning process that becomes the generator of the desire/action to learn (Crețu, 2015). In this context, the pedagogical journal is a critical, reflexive teaching strategy with a strong formative impact, "an effective means of monitoring and developing reflective practice in higher education" (Bruno, Dell'Aversana, 2017, p.1). Known and exploited in practice and in research, especially for its formative virtues related to the development of metacognition, critical and reflexive thinking, the pedagogical diary is increasingly used for other associated effects. One of them is about building learning motivation. From the many theories and explanatory models, we recall those systematized by Kourelis (2007): 1. Achievement motivation theory; 2. Self-determination theory; 3. Attention, Relevance, Confidence, Satisfaction (ARCS) motivation model; 4. Learner Orientation theory. Beyond the diversity of these theories used in pedagogical diary research conducted by the mentioned author, two important conclusions are required: the integration of the pedagogical diary in the didactic process can stimulate student motivation; its impact is positive but different depending on the age of students (idem). The authors interested in finding realistic solutions to the complexity of ways to stimulate motivation by reference to these models have raised the following question: What is the best way to motivate students? Williams & Williams have answered by drawing the analogy with a "group of blind men discovering for the first time what an elephant is like" (2011, p.18). Each of them will find a way, but none will be able to encompass the whole. In this respect, the authors give us a picture of ways to stimulate student

motivation, systematized into five key ingredients, each of them assuming and incorporating numerous opportunities for exploitation: student, teacher, content, method/process, environment (idem). Their analysis highlights the compatibility and convergence of many of them with the use of the pedagogical diary.

Along the axis of forward and reverse determinations that includes (type of) task – type of student engagement – result – motivation, we can identify serious theoretical, practical, experimental arguments that support the pedagogical diary as a powerful motivational source for students. Many of them are usually correlated with the models of motivation. For example, the model of Jones (2009), The MUSIC Model of Academic Motivation, highlights 5 components: empowerment, usefulness, success, interest and caring. A quick analysis shows how this model can relate to the effects of using the pedagogical diary for all these components. We systematize, from the literature, other arguments that directly or indirectly support the use of the pedagogical diary for training/developing motivational vectors: it generates positive effects “in enhancing motivation and self confidence” (Farrah, 2012, p. 1019; Walker, 2006; Park, 2003); it motivates students and makes them know what they want to achieve and by what means (Learning journal, 2016); “it increases active involvement in, and ownership of, learning” (Moon, 2003, p.6; Bruno, Dell’Aversana, 2017); it develops learning motivation, active engagement in one’s learning and training (Trif, Popescu (2013); it “encourages students to reflect on course materials” (Wynne, 2010, p.4); it raises awareness of thoughts, moods, opinions which are sources of further learning improvement (McClure, 2005); it develops the skills needed to encourage and support lifelong learning (Toros & Medar, 2015). Resuming one of our conclusions formulated in a recent study (Cojocariu, Mares, 2018), we reiterate the idea that the pedagogical diary should be used “as a starting point/catalyst to generate/maintain/ activate students' motivation for their own training”.

2. Research methodology

The research was conducted during the 2nd semester of the 2016-2017 academic year (February-May, 14 weeks) at "Vasile Alecsandri" University of Bacau, at the discipline of the History of Pedagogy. This is part of the curriculum for the Pedagogy of Primary and Pre-school Education study program, 1st year. We have explored how to use the pedagogical diary at a compulsory discipline as a first learning experience during the initial teacher training program to identify motivational-affective vectors that support the training process. Research methods: content analysis of pedagogical diaries, statistical and mathematical methods.

2.1. Study purpose, hypotheses and objectives

Purpose: the analysis of how the use of the pedagogical diary at the discipline of The History of Pedagogy can be capitalized as a strategy for identifying the motivational-affective vectors that supported the activity of the students.

Hypotheses (H) and objectives (O):

The overall hypothesis (H1): Can the integration of the pedagogical diary into the teaching activity allow for the identification of motivational vectors?

O1: identifying entries from the students’ diaries that illustrate the motivational vectors;

O2: quantifying the entries from the students’ diaries that illustrate the motivational vectors.

H2: the extrinsic motivational vectors highlighted by the pedagogical diary are more numerous than the intrinsic motivational ones:

O3: establishing the degree of representativeness of extrinsic motivational vectors revealed by the students' diaries

O4: establishing the degree of representativeness of intrinsic motivational vectors revealed by the students' diaries

H3: the positive motivational vectors highlighted by the pedagogical diary are more numerous than the negative motivational ones:

O5: establishing the degree of representativeness of positive motivational vectors revealed by the students' diaries

O6: establishing the degree of representativeness of negative motivational vectors revealed by the students' diaries

H4: the affective-motivational vectors highlighted by the pedagogical diary are more numerous than cognitive-motivational ones:

O7: establishing the degree of representativeness of affective-motivational vectors revealed by the students' diaries

O8: establishing the degree of representativeness of cognitive-motivational vectors revealed by the students' diaries

2.2. The design of the pedagogical diary

The pedagogical diary used in this research was designed for analysis from a dual perspective, as a product and process. In terms of product, we have analysed, in another context (Cojocariu & Mares, 2018), both the content and the form of the elaborated diaries. In terms of process, students were encouraged to reflect on the reasons that supported them in elaborating the diary, the interests they had during their work. They were asked to identify and name, step by step, (as freely and honestly as possible) the states they had experienced during the elaboration of the diary and express them in their own way. These are expressed (in terms of our research) in the following 6 indicators: 1. affective-motivational vectors; 2. cognitive-motivational vectors; 3. extrinsic motivational vectors; 4. intrinsic motivational vectors; 5. positive motivational vectors; 6. negative motivational vectors.

2.3. The research sample

The sample consisted of 70 1st-year students from the Pedagogy of Primary and Preschool Education, academic year 2016-2017. They submitted 67 diaries; we identified motivational-affective responses generated using the pedagogical diary at the end of each lecture/seminar.

2.4. Procedure

The group was asked to produce a pedagogical diary for the discipline of the History of Pedagogy. During the first meeting, students were instructed on how to fill in the diary, at the end of each seminar, and informed on the diary's purpose: 1. to improve learning; 2. to carry out a formative and complementary evaluation; 3. to contribute to a superior (personal and professional) development of reflexivity. There were constant reminders about filling in the diary, at the end of each seminar, regarding the affective-motivational component. The diary was handed over to the teacher after examination. The quantitative approach was used to establish and compare answer frequency; the qualitative approach was used to identify motivational vectors, classify and interpret it. All students agreed on using the diaries in this research.

2.5. Stages of the study

The study implied covering the following stages: 1. analysis of specialized literature and identification/selection of articles, references on the use of the pedagogical diary and reflective methods in education; 2. structuring the requirements for the development of the pedagogical diary and its realization guide in order to capture both the general reflective elements and the specific elements referring to the motivational vectors; 3. elaborating and revising the reflective guide for students; 4. presenting to students the reflexive diary working methodology; 5. practicing, with the students, during the initial seminars from the discipline History of pedagogy, of the reflexive/self-reflexive strategy; 6. covering the curriculum specific to the discipline The History of Pedagogy and

the systematic filling in of the diaries by the students; 7. collecting the diaries and analysing their contents; 8. identifying the types of motivational vectors and realization of the database; 9. interpreting the data and formulating conclusions and recommendations, identifying future research/improvement directions on how to integrate and exploit the pedagogical diary in the teacher training process.

3. Presentation and analysis of results

After the collection of the diaries from the students who participated in our study, there followed the stage of their analysis, aiming to identify the types of motivation that led the students to get involved in the process of adding entries to their pedagogical diaries. After quantification of the results and qualitative analysis of their contents, we found that 182 reasons were issued/reported, on average each student expressed 2.71 reasons ($M = 2.71$), the maximum number of reasons being 8/student, and the minimum number being 2/student. Following the analysis of the journals, we identified the categories of the invoked reasons and established their distribution (Table 1). From the perspective of reason polarization, their distribution is presented as follows:

Table 1. Polarization of reasons identified in the journals

<i>Types of reasons</i>	<i>Number of reasons identified in the diaries, in terms of reason polarization</i>
Intrinsic reasons	169
Extrinsic reasons	13
Positive reasons	167
Negative reasons	15
Cognitive reasons	96
Affective reasons	86
Total	182

These data enable us to state that *the overall hypothesis (H1): can integrating the pedagogical diary into the teaching activity allow for the identification of motivational vectors?* has been validated. The data from Table 1, analysed below, confirm this hypothesis, in agreement with the reference literature.

The data from Table 1 highlight the predominance of intrinsic reasons ($N = 169$) compared to the extrinsic ones ($N = 13$). This may be correlated with the predisposition towards a reflective attitude of the subjects of the research. For example, the author of Journal no. 66 (J66), referring to the usefulness of the seminar, asserts that it has helped her to understand “*what this discipline requires, to learn new things that support her evolution and achieve her goals*”; also, that: “*... Today's experience has helped me to become aware of the world in which I live, it has helped me realize, as Socrates said, that the most important thing is to know myself*”. The comparative analysis of data that reflects the intrinsic ($N = 169$) and extrinsic ($N = 13$) reasons reveals a wide difference in their weight, 13 times. These evidences confirm H2: *the extrinsic motivational vectors highlighted by the pedagogical diary are more numerous than the intrinsic motivational ones*. For the initial teacher training, these results are auspicious, meaning that the students who have opted for this profession start preparing with well-defined intrinsic reasons that will support them both in their academic training, especially in their future career.

The comparative data analysis highlights a wide difference between positive ($N = 167$) and negative ($N = 15$) reasons, above 11 times. These data confirm H3: *the positive motivational vectors highlighted by the pedagogical diary are more numerous than the negative ones*.

Regarding the comparative analysis of the cognitive ($N = 96$) and affective ($N = 86$) reasons, we may notice that unlike the other cognitive reasons analysed above, these reasons are

very close in number, although the cognitive reasons have a slight advance to the affective ones, of only 1.11 times; hence, it is difficult to draw a conclusion on the validity or invalidity of H4: *the motivational-affective vectors highlighted by the pedagogical diary are more numerous than cognitive-motivational ones*. If we strictly refer to the data, the hypothesis is invalidated. Given the very small difference in the results (96 cognitive, 86 affective, a difference of 10 entries) as well as the relatively small number of students who were the subject of our study, we do not have enough data to validate or invalidate this hypothesis. If the study continues on representative groups of students, sufficient data can be collected to indicate significant results.

The analysis of the combination of the reasons for the participants in the study shows that the greatest share of the combination of reasons is the combination of intrinsic - cognitive - positive reasons (45.5%) (Table 2). The arguments that support this combination of factors are: interest in the discipline and its content. For example, from J33 we find out that: *“Everything I learned has raised my interest and curiosity about the theme and I would like to study more thoroughly [...], I felt very good during this seminar, I came across new ideas and perspectives”*. Students believe that the use of the reflective diary triggers a process of self-analysis and self-reflection. For example, the same J33 writes that she has asked herself *“...why education leads directly to humanization but also to loss of personal identity ...”*.

The combination of intrinsic-affective-positive reasons (38.4%) is supported by arguments such as: the affective response caused by content study and analysis, the joy of discovering pedagogical models that place emphasis on the emotional life of children, generating positive emotional responses based on reporting the pedagogical models to their own learning experiences or to the model of the educator/education that the student would like to offer as a teacher/future teacher. From J14, we find that *“a course/seminar is more attractive when the opinions of colleagues differ, and each of them supports their views with different life experiences, with different world views”*. Appreciating the predominance of intrinsic - cognitive - positive reasons (45.5%) as an extremely important vector for learning, we highlight the relative balance between these and the intrinsic - affective - positive (38.4%) ones. The small difference between them (only 7.1%) as well as their total (83.9%) support and validate their complementarity and the possibility of using the pedagogical diary to highlight the motivational - affective vectors that supported the activity of the students.

Table 2. Combinations of reasons of the study participants

Combinations of reasons	N	Percentage
Intrinsic-affective-negative	8	4,4%
intrinsic-affective-positive	70	38,4%
extrinsic-affective-positive	2	1%
extrinsic-affective-negative	4	2,2%
intrinsic-cognitive-negative	3	1,5%
intrinsic-cognitive-positive	82	45,5%
extrinsic-cognitive- negative	0	0
extrinsic-cognitive- positive	13	7%
<i>Total of reason combinations</i>	182	100%

In the qualitative analysis of the pedagogical diaries we have found exciting motivational perspectives, which produce unusual combinations of reasons, cognitive-affective-positive: “New learning horizons have been opened, but at the same time I felt good, relaxed, focused ...” (J50). Sometimes, argumentation begins with affective-cognitive-positive reasons and then intertwines very closely with the cognitive-affective-positive ones: “*I felt good with my colleagues who make me feel full of energy; they motivate me to overcome myself [...] whereas during the past seminar I was faced with difficulties [...] when I had to gather my ideas and formulate an appropriate argument, this time the debated theme was easier for me*” (J14).

4. Conclusions... open issues

According to the data obtained and the observations made by us during the entire academic semester, we can say that the pedagogical diary proves to be both a current strategy of identifying the motivational - affective vectors that supported the activity of the students (according to the purpose set by us at the beginning of the study) as well as an incentive/support/development for them. The major goal with which it is integrated in the teaching process is “to facilitate reflection and allow students to express feelings regarding their educational experiences” (Walker, 2006, p. 216). The pedagogical diary is often selected by teachers and used in school practice for two distinct purposes: 1. assimilation of contents/building intellectual work skills and abilities - the students participating in the study have also identified the utility as a facilitator of learning, noting that it is: “... a useful resource in understanding, processing and assimilation of knowledge ... I have acquired a great amount of knowledge” (J50); 2. formative/summative assessment. However, its versatility makes it possible to extend the range of reflexive use, with a significant emphasis on the following dimensions: 1. formative, involving the identification of student/students' set of values (Cojocariu, Mares, 2018); 2. generator of self-analysis and projection in relation to the education of one's own children “*[...] I started thinking about my son; I was wondering if he could become an educated man, able to discern between good and evil, but ... who knows?*” (J27); 3. openness towards lifelong learning: “*I have realized that I should read more, that permanent education should become one of the most important issues ...*” (J27); 4. the correlation between professional and personal, family development: “*Everything that we have learned today is important for our didactic activity and not only. We have often learned things that I can also apply in my family ...*” (J27). The data obtained by us from this study reveals the fact that all the approaches presented by the students imply assuming a certain attitude and motivational-affective perspective, in most cases intrinsic and positive. We note the balance between the cognitive and emotional accents, that maintained and directed the students' learning effort, also generating an intellectual state of reflection and an affective state of well-being, freedom of expression, authentic expression and desire for knowledge - good milestones for future responsible professional engagement.

While maintaining our analysis in the area of initial teacher education, we highlight two issues relevant to the further development of our studies:

1. Enhancing practical and experimental approaches to capitalizing on the pedagogical diary to increase the motivation of learning in the academic environment, especially for students who are preparing for a teaching career. We base our present and future efforts on the conviction that the pedagogical diary *enables learners to understand their own learning process and to increase their active involvement in learning and personal ownership of their development*” (Bruno, Dell'Aversana, 2017, p.2). From this point of view, we anticipate positive results on motivation, on school performance and the reflexive ability of future teachers.

2. Expanding the study on the valences of the pedagogical diary in relation to the activity of the teacher. If the students who are now training for the teaching career are equipped with this strategy, then as teachers they will be able to use it in a double direction: for their students and for themselves. We base our expectations on the idea that “*the teaching diaries will continue to be a*

useful tool for developing not only methods to motivate students, but also to watch progress of both the teacher and the learner” (Kourelis, 2007, p. 19).

The exploitation of the pedagogical diary in these directions is not an easy one, but, reaping the benefits of the last years of studies on this topic as well as the creativity of the teachers, we appreciate that its role in the teaching activity can be extended, especially at the level of high school education and the education of adults.

References

- Bruno, A., Dell'Aversana, G. (2017). Reflective practice for psychology students: the use of reflective diary feedback in higher education. *Psychology Learning and Teaching*, 16, 248–260.
- Cojocariu, V.-M., Mares, G. (2018). Pedagogical diary - a way of identifying some of the values of future primary and preschool teachers, Paper presented at The Fifth International Conference on Adult Education Education for values – continuity and context, Iași, România, Chișinău, Moldova, 2018.
- Crețu, D. M. (2015). A model for promoting academic motivation. *Procedia - Social and Behavioral Sciences*, Vol.180, 751 – 758.
- Farrah, M. (2012). Reflective Journal Writing as an Effective Technique in the Writing Process. *An - Najah Univ. J. Res. (Humanities)*, Vol. 26, No. 4, 997-1025.
- Jones, B. D. (2009). Motivating students to engage in learning: The MUSIC Model of Academic Motivation. *International Journal of Teaching and Learning in Higher Education*, 21 (2), 272-285.
- Kourelis, E.P. (2007). *A teacher's diary as a valid tool for researching student motivation*, University of Birmingham, 1- 41.
- McClure, P. (2005). *Reflection on practice*, A 8resource commissioned by the Making Practice Based Learning Work project, an educational development project funded through FDTL Phase 4 Project Number 174/02 and produced by staff from the University of Ulster. http://cw.routledge.com/textbooks/9780415537902/data/learning/8_Reflection%20in%20Practice.pdf.
- Moon, J. (2003). *Learning journals and logs, Reflective Diaries*. Centre for Teaching and Learning, Good Practice in Teaching and Learning, University of Exeter.
- Park, C. (2003). Engaging Students in the Learning Process: the learning diary. *Diary of Geography in Higher Education*, Vol. 27, No.2, 183–199.
- Trif, L., Popescu, T. (2013). The reflective diary, an effective professional training instrument for future teachers. *Procedia - Social and Behavioral Sciences*, Vol. 93, 1070 – 1074.
- Toros, K., Medar, M. (2015). Social Work Students' Thoughts on Self-Reflection: A Qualitative Study Based on Reflective Diarying. *International Journal of Humanities and Social Science*, Vol. 5, No. 3, 89-96.
- Walker, S. E. (2006). Journal Writing as a Teaching Technique to Promote Reflection. *Journal of Athletic Training*, Vol.41, No. 2, 216–221.
- Williams, K.C., Williams, C.C. (2011). Five key ingredients for improving student motivation. *Research in Higher Education Journal*, 11. 104-122, <http://aabri.com/manuscripts/11834.pdf>
- Wynne, R. (2010). *Student Perceptions of Reflective Learning Activities*, Mid Atlantic ASEE Conference, October 15-16, 2010, Villanova University.
- XXX (2016). Learning journal. *Study skills advice sheet – University of Worcester*, 1-4 https://www.worcester.ac.uk/studyskills/documents/Learning_Journals_2016.pdf



Venera-Mihaela Cojocariu (b. August 9, 1962) received his Bachelor Degree in Philosophy (1985) from University of Bucureşti, Faculty of History - Philosophy his and PhD in Education Sciences (2000) from “Al. I. Cuza” University, Iaşi. Now she is professor of education sciences in The Pre- and In-service Teacher Training Department, Faculty of Sciences, "V. Alecsandri" University of Bacau, Romania. His current research interests include different aspects of educational strategies and the axiological universe of teachers. She has (co-) authored 18 books and more than 51 papers published in professional journals, more than 58 studies published in volumes, more than 55 scientific reviewer for books and curricular auxiliaries, more than 40 participations in international conferences, engaging as a director or member in over 20 projects.



Gabriel Mareş (b. February 11, 1975) received his Bachelor Degree in Science of Education (1999) from University “Al. I. Cuza” University, Iaşi, Bachelor Degree in Psychology (2007) and Master Degree (2008) since 2013 he is PhD student in Education Sciences at “Al. I. Cuza” University, Iaşi. His research concerns are in the sphere of parenting education, therapeutic relationship, working with people with special needs. These research are reflected in articles and chapters of books, textbooks, and course materials, participation at conferences. He has clinical expertise in working with HIV-infected people, people with chronic diseases and also in teaching as trainer in life skills development programs for children and young people.