Learning styles in Higher Education. A case study in History training

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Abstract

The present paper aims at analyzing learning styles at the level of first year students in Higher Education. The target population chosen is represented by the first-year History students at the University of Bucharest, and a group of MA students from various study strands as a comparative cohort. The instrument applied was Kolb’s Learning Styles Questionnaire. The primary results seem to indicate certain uniformity in learning styles, but some significant differences are also visible. At the same time the implications for the academic History curriculum are debated.

Keywords: learning styles; first-year History students; gender differences in learning styles preference; subject-based differences in learning styles.

1. Introduction

The increase in both number and diversity of students enrolled in Higher Education represents one of the challenges that characterize contemporary education. The issue is further complicated by the fact that the realities of the labor market are changing at a relatively fast pace, ensuring a delay in academic training and the perceived needs of employers. While there is a commitment towards fostering a knowledge-based society (therefore, also an economy), the actual way in which formal schooling, including the Higher Education sector, could support this trend

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is still a matter of debate. Finding the good mixture between new teaching approaches and the core elements of a field of study is always a balancing act.

The analysis of student learning styles is an approach that is part of the educational practice for more than half a century. Although a current occurrence at all levels of schooling, in Romania such studies are rare and seem to focus on specific areas such as web-based learning (Popescu, 2010). The situation is more complicated at the level of universities, where issues of institutional culture, the autonomy of the teaching staff, the different teaching styles, and the issues in the generational change create a tension between the need for diversity in teaching approaches and training paths for students and the need for assessment of progress in learning.

2. Rationale

The analysis put forth is focused on a specific target group, first-year students training to become professional historians (in the broadest sense) and/or History teachers (History students are trained in a concurrent model of initial teacher training). The choice is the result of both subjective factors (the author has as main specialization Ancient History) and objective factors: (a) although there is a fluctuation in the interest of High School graduates for an academic training, there seems to be a relatively constant interest for a career in the field of History; moreover, the number of candidates that have graduated several years before, or who already have a degree and have no direct professional interest is also significant (the number of students that already have a degree seems to be larger in the case of those studying History and Art History); (b) it is debatable to which degree the academic curriculum has changed in order to comply to new job opportunities; in a recent study on the initial History and Social Sciences teacher training, Romania ranked relatively low in terms of courses focused on interdisciplinarity, concept-based teaching, and problem-based courses (http://www.univie.ac.at/fdz-geschichte/che/index.php); (c) the diversity in student population seems to be increased, mostly in terms of age, gender, and cultural background; (d) there are relatively few studies on the transition from Secondary to Higher education, although these would be very important for calibrating induction courses (Booth, 2001).

Therefore, an empirical analysis on preferred learning styles of students in their first year of academic training might be useful for both the teaching staff (including administrators) and the students.

3. Theoretical background and methodology

3.1. Theoretical background

There are a number of definitions given to the learning styles (a brief but relevant list in Kazu, 2008). In fact, the number of conceptualizations seem to act as a catalyst for those that consider that learning style have a reduced, if any, scientific value (for a critical approach, see Scott, 2010) An early definition states that learning styles are “the way in which each person absorbs and retains information and/ or skills” (Dunn, 1984, p. 12). In 1991, Boyatzis and Kolb define the learning skill as a “general heuristic that enables mastery of a specific performance domain” (Boyatzis & Kolb, 1991, p. 280). They continue to refine this initial statement: such a skill is domain specific and knowledge rich, it describes the interaction between the learner and his/her environment, and is developed through practice; therefore, learning styles are limited to “higher order heuristics for learning how to learn” (Boyatzis & Kolb, 1991, p. 281). Later on, Y. Kolb and D.A. Kolb stress the fact that learning is a process, and therefore a learning style is represented by “individual differences in learning based on the learner’s preference for employing different phases of the learning cycle” (Kolb & Kolb, 2005, p. 194-195). Another definition is that learning styles “are a description of attitudes and behaviors that determine the preferred way of learning of an individual” (Honey & Mumford, 1992, quoted in Graf, Kinshuk & Tzu-Chien, 2009). An added element is that of the way in which information is processed, that is, if individual learners tend towards global or analytic approaches to processing the acquired data (Cutolo & Rochford, 2007). At the same time, new research tends to favor a more clear-cut distinction between cognitive style and learning style – the first is seen as representing the processing of information, and therefore more stable, while the second is regarded as describing the preferred way of answering to learning tasks (Evans, Cools & Charlesworth, 2010). Finally, learning styles have to take into consideration the relation that is established between the learner and the teacher, since there are two key concepts involved: the preference, and the
ability (Pashler, McDaniel, Rohrer, Bjork, 2008).

To sum it up, learning styles represent the preferred way of processing and using information received during instruction, and are the result of internal and external factors. While this definition is simply a working hypothesis, it stresses the fundamental elements: the psychological and biological elements, the social context, and the fact that it represents the way in which a cognitive process takes place and it develops over time. As many of the quoted authors stress, there is a direct link between the learning styles, the adaptive process of learners to new learning tasks, and the progression in developing learning skills.

3.2. Methodology

In the absence of a specialized learning style questionnaire (LSQ) for the social sciences, the research opted for a general LSQ that would enable comparisons across countries and academic fields. The choice was made for the David A. Kolb LSQ, the 3.1 version, dated 2005 (Kolb & Kolb, 2005a) as revised by Peter Honey and Alan Mumford (Honey & Mumford, 2006). This questionnaire has, in our opinion, several advantages: it is applicable, the graphic form is accessible also for non-specialists, and it offers opportunities for extending the actual research by introducing variables (Kolb & Kolb, 2005).

Most of the research done on the basis of this model focuses strictly on the questionnaire. However, taking into account the theories that underline the social aspects of learning, especially in relation to the self-regulating nature of learning (Bandura, 1971; 1976), we introduced several variables in the questionnaire: age, gender, type of High School, previous academic experience, and previous job experience. These elements were introduced in order to see if the learning styles of first-year students is influenced by their background, their possible diversity and the prior abilities that a the teaching staff might consider when designing the learning and teaching activities and also if the interest for the study of History is backed up by their learning preferences. David and Alice Kolb argue that there is a significant distribution of learning styles preferences across the academic fields (Kolb, 1981, fig. 2, p. 240; Kolb & Kolb, 2005a, 26-27)

The Kolb LSQ was applied to the first-year students in the Faculty of History at the University of Bucharest in the years 2012 and 2013. The fields of study were History, International Relations and European Studies, and Art History. The total number of students is around 400, and the number of questionnaires that were filled and returned is 164 (95 questionnaires for the year 2012-2013, and 63 questionnaires for the academic year 2013-2014, six questionnaires were eliminated for being invalid, n=158). In order to refine the approach, and to see if a long-term perspective might yield relevant information, a group of MA students (training for the teaching profession) from a number of academic fields in the Social Sciences was invited to fill in the questionnaire (n = 19).

4. Results

The results indicate a series of interesting elements. First of all, the differences between the two groups of first-year students are minimal, indicating a certain consistency within the target group on longer time-spans. Second, there is a relative balance between the four main categories identified by Kolb (Activist, Reflector, Theorist, Pragmatist). The dominant elements are Reflector and Theorist, and the least represented is the Activist component. By contrast, the MA group had a very different balance between the four categories (the Theorist group was very pronounced). On the whole, there is a dominant Reflective-Theorist character, while the Pragmatic-Activist aspects have the lowest scores. The students studying History and International Relations have a similar profile, while a rather different group is represented by the first-year students enrolled in the Art History program; their profile is the most different from the mean values for the entire target group. Gender does not seem to be a discriminating factor. Also, the profile of the High School they have graduated does not seem to be a relevant variable. It seems that the first-year students represent a homogenous group in terms of their preferred learning styles acquired during their previous formal training. The interesting element is the relative lack of importance of gender differences in the sample group in the preferred learning style.
Fig. 1 The learning style profile for all first-year students in History, sample average values (1: Activist, 2: Reflector, 3: Theorist, 4: Pragmatist)

Fig. 2 The learning style profile for male and female first-year students in History, academic year 2012-2013 (1: Activist, 2: Reflector, 3: Theorist, 4: Pragmatist)

The tendency is more visible when comparing the results with the group of MA students. While there is a similar trend, two elements are interesting. First, there seems to be a significant difference between the MA students that had a professional experience as teachers. Also, there is a more clear-cut difference in terms of gender, although data is biased by the difference in numbers between female and male students (13 to 6).
5. Discussion

The results presented raise several questions of interpretation. First of all, there is a tendency towards a more formalized approach to learning for first-year students. The dominance of the Reflector, Theorist and Pragmatist preferences seems to indicate a greater dependence of first-year students from teacher input. This balanced result is related to a greater flexibility in adapting to learning requirements (Mainemelis, Boyatzis & Kolb, 2002). The problem is that this tendency seems to be increased during the studies. Even more of a concern is the fact that personal experiences in the teaching profession limit the use of personal teaching experiences. At the level of MA students, those without practical teaching experience seem to be more interested in trying out new approaches than those that already are in the teaching profession. A first possible explanation would be that, confronted with the practicalities of the teaching activities, MA students tend to have a more focused approach, preferring more secure and direct ways to apply acquired knowledge in their teaching. A second explanation might be found in the distance perceived by that group between their formal initial training and the job requirements. These findings seem to be in agreement with other research in the field (Boyatzis, Mainemelis, 2011).

The second interesting element is related to the uniformity within the group of first-year students. The fact that there are no relevant differences in their approaches to learning raises questions on the relevance of the relation between the core curriculum and the subjects that create the specialized training profile in High Schools. While this uniformity seems to demonstrate that the option for this academic field is consistent for the entire group, which is a positive element, the fact that gender and the profile of the graduated High School are less important asks for a long-term research.

Conclusion

The diversity of learner approaches to the formal education is an element that has to be taken into consideration by the academic staff. Furthermore, the relation with the practicalities of the labor market has to be drawn into discussion when developing the academic curriculum. However, in terms of research, learning styles inventories in themselves might not be a tool able to indicate long-term shifts and trends in student population. Sociological variables, as well as job profiles have to be part of the analysis. Future research should focus on the elements that are considered by the academic staff as a prerequisite of first-year students. A “progression in learning skills” portfolio that could accompany the student in the transition from Secondary to Higher education is one of the ways in which the academic staff might be better informed on the educational needs of their students. Also, the academic curriculum might offer provisions for the diversity of learners that enter Higher education. The academic curriculum is traditionally focused on modeling an “ideal” student as a criterion for selecting and organizing the subject matter. The fact that the starting point of the students, their strengths and weaknesses might be quite different seems not to be a major concern. Finally, a reappraisal of job descriptions and their role in developing the
academic curriculum, keeping in mind that professionalization has to be moderated by the needed flexibility on the labor market might also provide insights for reconstructing the academic curriculum.

References