

Learning Styles – The Beginning for a Personalized Education

Estilos de Aprendizagem - Início de uma Educação Personalizada

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RESUMO

Estilo é um aspecto importante de nossa complexidade como seres humanos e diferentes modelos de estilo nos ajudam a entender como e por que as pessoas mentalmente configuram o mundo. Observando a natureza e o comportamento humano nós vemos algumas semelhanças, mas também é possível enxergar significantes diferenças em como nós interpretamos o que fazer com as informações que recebemos. É necessário haver um ajuste entre os estilos do aluno, professor e instituição, para que o aluno possa aprender e sentir-se motivado. A variedade de atividades é um ponto importante deste aspecto. O professor não deve preocupar-se apenas com o modelo de aula que o satisfaz, mas sim lembrar-se sempre que tem dentro da sala de aula alunos com necessidades e expectativas diferentes.

Palavras-chave: Estilos de aprendizagem, educação, personalização.

ABSTRACT

Style is an important aspect of the human being complexity and understanding these different types of styles help us understand how and why people see the world in different ways. Because of it, the need of matching the styles of the students, the teacher and the institution becomes something crucial for the success of learning. The teacher has to be aware that it is necessary to vary the activities during the classes so that he can get each learner's preferences and, as a consequence, motivate each of them.

Key words: Learning styles, education, personalization.

1 A BRIEF REVIEW OF LEARNING STYLES¹

All individuals have a learning style. Their style of learning, if accommodated, can result in improved attitudes towards learning

and an increase in productivity, academic achievement, and creativity. An American task force, comprised of leading theorists in the field, has adopted a comprehensive definition of learning style. This group has defined "learning styles" as the composite of characteristic cognitive, affective, and physiological factors,

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which serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. Included in this comprehensive definition are cognitive styles, which are, according to Keefe, intrinsic information-processing patterns that represent a person's typical mode of perceiving, thinking, remembering, and problem solving. Among many important theorists, I have chosen Kathleen Butler for her studies can be put into practice easily and, her theory has much to do with the students teachers have in their classrooms nowadays.

2 KATHLEEN BUTLER'S THEORY

2.1 The Reference Base

Style is a powerful aspect of our complexity as human beings, and different models of style help us to understand how and why people mentally configure the world. As observers of human nature and human behavior, we see some similarities but we have many significant differences in how we interpret what to do with this information. (Butler, 1995)¹

In recent years, Butler and her colleagues have focused on the relationship of stylistic differences to performance assessment. They looked for ways to view differences that were centered on real-world performance. Allen Harrison and Robert Bramson's approach, originally presented in *Styles of Thinking* (1977), and based on "inquiry modes" developed by C. West Churchman, aroused their interest. Harrison and Bramson suggest that²

When we approach problems or decisions, we employ a set of specific strategies, whether we know it or not. Each of us has a preference for a limited set of thinking strategies. Each set of strategies has

its strengths and liabilities. Each is useful in a given situation, but each can be catastrophic if overused or used inappropriately. Yet almost all of us learn only one or two sets of strategies, and we go through life using them no matter what the situation (Butler apud Harrison and Bramson 1977, p. 14).

Because Harrison and Bramson's work deals with problem solving and the decision making of adults, it has relevance for the issue of style and its relationship to student performance and authentic assessment. Furthermore, by examining their five styles of thinking – realistic, analytical, pragmatic, idealistic, and synthesist – Butler gained a broader perspective for self-inquiry, for questioning others, and for examining assessment. Interestingly, Butler found that many adults, who previously could not identify their style, found it when they learned about pragmatic style.

Harrison and Bramson's work stems from the five inquiry modes initially proposed by Churchman. They describe the modes as "basic sets of purposive methods for making sense of the world. They are built on early acquired preferences, on learned values, and on worldviews – concepts about the world and nature of reality" (Butler apud Harrison and Bramson 1977, p. 15).

Although Butler agrees with the evidence which supports the five types of thinking, she interprets the meaning and implication of style differently from either Churchman or Harrison and Bramson.

Butler describes style less as a "purposive" method and more as an internal guidance system that may well be acquired, reinforced, or learned, or even developed from neural networks, as brain researchers suggest. However, we must be aware that the origins of style may be much deeper internal or spiritual sources about which we can only speculate.

Therefore, based on Harrison and Bramson's work, Butler designed a new framework to investigate problem-solving strategies used by different styles and to look at the ways in which students develop their understanding of things. Because Harrison and Bramson do not link their work to instruction, this new territory required careful investigation and thought. As a result of extensive observations

¹ Kathlenn Butler, "Learning Styles". This quotation was taken from the entry page of Butler's web site. Available at Internet www.learnersdimension.com, September 1999.



and interviews with teachers and students using the five styles, Butler updated this study and methodology. Butler tries to put into check the implications the study of learning styles can bring to education as a whole.

Butler says “ style is a personal pattern of behavior that shows others – through your behavior – the natural qualities and abilities of your mind ” (1995/96, p.4). The author also points out that there is no best style or style of learning. However, most people are not sure about their style or necessarily have confidence that their natural approach has value. Butler claims that what she calls personal styles are the ones we were born with and, therefore, cannot be changed. Learning styles, on the other hand, are learned through life. They are the ways we are forced to behave; they are acquired. Sometimes people develop their learning style in accordance to the family because this is the first contact they have with learning. Although, the influence of the parents on the decision of a learning style seems to be a very interesting topic to be considered, in this paper we will focus more on the characteristics of each learning style. Butler believes once you have a sense of your own personal style, the way you make decisions, you will be ready to look at your learning style: how you gain knowledge in your own way, how you work with it so that it makes sense to you, and then have the ability to show teachers you understand it. According to Butler, the way you think and solve problems is directly related to the way you learn and, consequently, your learning style will depend on you personal style.

2.2 The Typology

According to Butler’s theory, there are five distinct approaches to thinking, five distinct sets of cognitive strategies which people learn as they grow up. Each has its strengths, each its liabilities. Her research proves that half of us tend to rely on a single set of strategies, with an intensity that ranges from a moderate preference for the single approach to a virtual commitment to it. Another 35 percent of us rely on a

combination of two of the five approaches.

Our preference for one or more sets of thinking strategies dictates our approach to problems, and to a great extent our behavior generally. Our preferences form the basis of our unique ability to handle tough problems and to meet the requirements of specific situations. They also lead us to mistakes and incompetence when the preferred approach does not work. Now we will take a look at each of the five styles of learning proposed by Butler.

The Realistic Thinker and Learner

A learner who takes a direct approach to the world looks for structure and direction and solves problems through careful linear work, reflecting the characteristics of the realist style of thinking described by Harrison and Bramson. The realist’s strategies call for structure, factual approaches, and opportunities to be creative in constructive ways. This learner needs clear definitions, specific ways and predictability. He/she pays much attention to time and detail. This learner needs guidance with doing open-ended assignments, developing flexibility and reducing perfectionist needs.

The Analytical Thinker and Learner

Learners who take a conceptual approach to the world look for verification and systems and solve problems through analyses of data, reflecting the analyst style of thinking as described by Harrison and Bramson. The analyst’s strategies call for logic, conceptual approaches, and for opportunities to be creative in theoretical ways. These learners seek expert teachers and love academics. This type of learner needs a quiet environment to think and work and he/she works in depth. They usually read at an early age. They are creative in ways that show depth of knowledge but they need guidance with nontraditional assignments, seeing others’ points of view and reducing the critical edge.



The Pragmatic Thinker and Learner

Learners who take a flexible approach to the world look for solutions and resolutions and solve problems through practical adaptation, reflecting the characteristics of the pragmatist style of thinking presented by Harrison and Bramson. The pragmatist's strategies call for practical techniques, experimental, and opportunities to be creative in adaptive ways. This learner loses interest in routine work easily and finds ways to get things done but the pragmatic learner has difficulty with in-depth assignments, conceptual work and taking details seriously.

The addition of the pragmatist style is one of the most significant changes in Butler's work that has been influenced by Harrison and Bramson's approach. Butler concluded, through data that teachers had given her, that a group of students were a sort of mixture of the other four styles. They were typically real-world learners, but not highly structured as were the realistic thinkers. They seemed to be quite social, but not emotion-based as were the personal thinkers, nor goal-oriented as were the idealists. They tended to be creative in the moment, but not driven by change as were the divergent thinkers or the synthesists. When solving a problem, they were temporarily analytical, but not rooted in the conceptual as were the analytical thinkers.

Some people who saw themselves as pragmatists understood themselves as a balance of the other four styles, but most did not. Nor did pragmatists represent any particularly consistent combination of the other four styles. However, many people who saw themselves as divergent when given only four choices – realistic, analytical, idealist and divergent – redefined themselves as pragmatic when it was added as a stylistic option. The ability to identify the pragmatic style has allowed a true distinction between the genuinely divergent thinker – driven by problems and unique solutions and the genuinely pragmatic thinker – driven by the satisfaction of the immediate practical solution within the situation.

As we could see in the first chapter of this paper, most of the present authors and theorists just exemplify four different types of sty-

les and due to Butler's vast experience as a phenomenologist she agrees with Harrison and Bramson's typology. Butler says,

When Harrison and Bramson described the pragmatic type of thinker as the adaptive, strategic, tactical problem solver, I realized that teachers were seeing the young developmental stage of this style in their observations. Although most students do not have the skills or maturity that accomplished adults possess, we could clearly see the tendency of some students to be adaptive in practical ways, and to be on-the-spot thinkers in tactical ways. They wanted to solve the immediate problem and move on. I adopted the term pragmatic because it fits best what we experienced with students, accurately described their approach to learning, and paralleled their potential styles as adults (1995/96, p.17).

The Idealist Thinker- Personal Learner

In the learning process, people who take a highly personal approach to the world, look for relationships and harmony, and solve problems through cooperative means are likely to reflect the characteristics of the idealist style of thinking. However, the term idealist does not aptly reflect the learning process, whereas the term personal captures the essence of this learner's experience. The personal learner's strategies call for personalization, an emotional or relational context, and opportunities to be creative in interpretative ways. This type of learner requires a lot of attention due to the fact that he is extremely sensitive to his/her own and other's feelings and can be physically upset over conflict. This learner needs guidance with specifically structured assignments, memorizing details and facts and taking things less personally.

The Synthesist Thinker - Divergent Learner

The same phenomena holds true in describing the learning process for the Synthesist



style of thinking, according to Harrison and Bramson's typology. In the learning process, people who take a highly divergent approach to the world, look for challenge and change, and solve problems through expansive and original thinking, reflect the characteristics of the synthesist's style of thinking described by Harrison and Bramson. However, the term synthesist does not aptly reflect the learning process, whereas the term divergent captures the essence of this learner's experience. The divergent learner's strategies call for exploration, investigation, and opportunities to be creative in original ways.

3 IMPLICATIONS OF LEARNING STYLES IN THE CLASSROOM AND IN INSTITUTIONS

3.1 Why Teachers Should Show Students their Different Learning Styles

People have different ideas of how to do things. As a result, when people with different styles work together they often need to communicate their differences and to compromise within the working environment. People with different styles solve problems, learn new information, relate, and communicate from different perspectives. In a classroom it will make a considering difference. However, if the teacher owns this knowledge, he is going to be inspired to look deeply at understanding individual differences in himself and in his students.

The more students know and understand about themselves – including their individual learning styles – the more opportunities they have to act in self-directed ways, to make wise choices, and to stretch their own styles rather than simply defend their own styles. Because effective educational practice has to begin to reflect our more complex understanding of learning styles, it is especially impor-

tant that students have the skills to participate in the dialogue about differences. As teachers orchestrate a variety of ways for students to learn how to demonstrate their understandings, students need the skills to be able to discuss what affects them.

Through strategies that range from cooperative learning to assessment practices such as portfolio assessment, educators have sought ways to facilitate students' active and reflective learning. We can help students go further in these areas by teaching them about the differences, choices, high quality work, and assessment standards.

The current thrust towards site-based management reinforces the importance of each school's mission to serve its client- the student- as personally and effectively as possible, and to help the students become educated citizens with confidence in all the aspects of the self that lead towards self-actualization. The more students understand their own strengths, the more they can guide their own work. The more they understand their own limitations, the more clear-headed they can be about learning how to flex and stretch.

Diagnosing and interpreting learning styles provide data as to how individuals perceive, interact with, and respond to the learning environment. A knowledge of our own learning style makes us aware of counseling interventions that we tend to favor over others, thus accommodating some counselee whose styles are similar to our own and possibly alienating others whose styles are dissimilar. The starting point in teaching and counseling is to respond to the learning style needs of students, which implies knowledge of our own preferences and a conscious effort to expand our repertoire of counseling interventions and techniques to respond to student diversity.

School counselors need to become skilled in consultation models and techniques, because they are perceived by educational professionals as particularly knowledgeable in learning theory and processes. The counselor is committed to humanizing educational systems, enhancing the school climate, and providing for individual preferences to develop the potential and uniqueness of each student. Administrators and curriculum specialists consult



with counselors, because they are knowledgeable concerning students' and parents' complaints about classes, teaching methods, course requirements, and grading practices. The experienced counselor is able to identify patterns in these complaints, e.g. teaching methods that are rigid, monotonous or unchallenging; or teaching styles that accommodate a limited number of learning styles, such as the use of lecture and discussion exclusively. In sum, classroom and curriculum strategies need to be redesigned to accommodate the variety of students' learning styles.

Colleges and universities today show an increasing disparity between faculty and students, between teaching and learning. What suffers as a consequence is the learning process itself – an observation that pervades in numerous reports on the status of higher education written in America in the 1980s.

Unfortunately, the natural differences in learning patterns exhibited by students are often interpreted by faculty as deficiencies. What may be happening, then, is a fundamental "mismatch" between the preferred styles of faculty and those of students.

When comparing the preferred learning patterns of faculty to those of students', it is not surprising to find that faculty prefer the analytical and realist style. Although, according to what we are going to present in the next chapter, the most common learning style is the personal and, as a consequence, the majority among the students. So, learners with this profile come to class seeking direct, concrete experiences, moderate-to-high degrees of structure, and a linear approach. They value the practical and the immediate, and the focus of their perception is primarily on the physical world. Their instructors, on the other hand, prefer the global to the particular, are stimulated by the realm of concepts, ideas, and abstractions, and assume that students, like themselves, need a high degree of autonomy in their work. In many ways, the contrast between the learner and the teacher characterizes the kind of frustrations experienced among many students and teachers; and it may be that this basic incongruence is the root of the dilemma in today's college and university classrooms. As faculty, teachers often create classroom environments that are

rewarding to them and to students like them, but these settings can be extremely frustrating for the students that do not fit them.

3.2 Bridging the Gap

Ongoing assessment of both student learning and the learning environment is a critical ingredient in "bridging the gap". It is apparent that students need frequent feedback on their performance. The fact that is not so obvious is the faculty's need for frequent feedback from students, on their perceptions of teaching and the effectiveness of the learning opportunities teachers provide them. Schroeder suggests that "at the end of each class, students completed a brief form that provided an overall numerical rating of the class and included space to describe the most and the least interesting aspects of the class, as well as suggestions for improvement" (1993, p. 6). This frequent feedback may enable teachers to constantly monitor students' reactions to different pedagogical approaches and help to adapt their own approach based on specific patterns in the evaluation.

This suggestion may sound a bit skillful, but it can make a difference in the classroom. Perhaps using it after every class may be repetitive, but it is easily possible to substitute it for a simple oral feedback. What is important in this subject is that teachers be aware of this variety in the classroom and find a way of getting feedback from it.

If teachers can expand the repertoire of learning activities open to them, perhaps they can greatly increase both their own satisfaction and their students' learning. It is certainly not being suggested, however, that teachers treat each student differently, designing 20 or 30 instruction plans for a single class. It is suggested that an overall understanding of how students learn and where they are in the process can help teachers meet the needs of the students who sit in classrooms. Engaging in such a process will clearly indicate that there are many paths to excellence; and perhaps the greatest contributions teachers can make to student learning is recognizing

and affirming that their paths are different from students’.

4 LEARNING STYLES INTO PRACTICE

4.1 The Development of the Practical Activity

In this chapter all the data we have collected, through questionnaires and activities, will be shown in order to prove that the theory related to Learning Styles can be used in class successfully. With this information, which represents a powerful tool for the success in class, teachers will be a step ahead in terms of knowledge and self-consciousness, and will be ready to prepare classes that will be closer to that “personalized” education we have mentioned throughout this paper.

The objective of this practical activity was to put into check the idea that all individuals have different ways of thinking in class and the unawareness of it may result in failure in the classroom.

For all the reasons cited above, the first step taken to put this theory into practice, was to select a fluent group of students, since the questionnaire we were to apply was all written in English. The group we selected was compo-

sed of six students and while giving them the instructions as to how to fill in the questionnaire, we made it clear that it was a tool which could help them identify their preferred modes of thinking, asking questions and making decisions. It was also said to them that for the questionnaire to be of maximum value, it was important that they responded it as accurately as possible, in terms of the way they believed they actually behaved, and not as they thought they should. The model of the questionnaire which was applied, was the one proposed by Allen F. Harrison and Robert H. Bramson (1977, p.189). The questionnaires, which were answered by the students, are included in the appendix of this paper.

The results of the questionnaire have proved a fact that had already been known by many theorists for some time – the Personal style is the most “popular” of the five styles. More than 37% of all the people, who answered it, have personal preferences.

In this research, the results are even more notorious due to the fact that 66% of all the people who were submitted to it showed to have personal preferences. The Divergent style, which is the least frequently found of the five styles of learning, has not had any representative in this research.

In the table below, the scores of the six students who have applied to the exam will be presented, revealing their learning styles. The darkened boxes represent the learning style they prefer.

| Student Learning Style | Analytical | Realistic | Divergent | Personal | Pragmatic |
|------------------------|------------|-----------|-----------|----------|-----------|
| Student I | 47 | 47 | 57 | 74 | 48 |
| Student II | 64 | 56 | 46 | 55 | 51 |
| Student III | 55 | 60 | 51 | 66 | 41 |
| Student IV | 64 | 48 | 45 | 68 | 45 |
| Student V | 60 | 69 | 46 | 44 | 51 |
| Student VI | 45 | 57 | 41 | 64 | 63 |

4.2 Learning Preferences according to Learning Styles

As this research served as proof to what many theorists have already said about this subject, we decided to go a step further in this research. It is claimed that differences in people's ways of thinking reflect the different ways people respond to learning situations. For example:

- Some people enjoy working independently, while others prefer working in a group.
- Some people prefer to spend a lot of time planning before they complete a task, while others spend little time planning and sort out problems that arise while they are completing a task.
- Some people can focus on only one task at a time, while others seem to be able to do several different tasks at once.
- Some people feel uncomfortable in situations where there is ambiguity or uncertainty, while others are able to handle situations where there is conflicting information and opinion.
- When solving problems, some people are willing to take risks and to make guesses without worrying about the possibility of being wrong, while others try to avoid situations where there is such a risk.
- Some people learn best when they use visual cues and write notes to make them remember, while others learn better through auditory learning, without writing notes.

Therefore, we have selected some of the commonest learning activities that are used in class and we have asked the same students to point out what their learning preferences are. The objective of this activity was to know which tasks would fit each style better as well as to show what the favorite activities to be used in class are, according to students, no matter their learning preferences. Examples of this activity are also included in the appendix of this paper.

According to this activity, the six most frequent preferences are the following:

1. I like to practice the sounds and pronunciation.
2. I like the teacher to tell me all my mistakes.
3. I like to learn many new words.

4. I like to learn by watching and listening to native speakers.
5. I like to learn English words by seeing them.
6. I like to have my own textbook.

Another interesting aspect about this activity is that students II and V, who have a realistic and an analytical style, answered they do not like to learn by conversation, and dislike to learn new words by hearing them, what has everything to do with their styles, once they both have need for a more detailed and structured work.

All the personal students answered yes for activities related to communication and contact with other people, but on the other hand, some of them said they do not like to study grammar.

The only realistic representative also said he disliked the teacher to let him find his mistakes, what is obvious if his learning style is taken into account, because he basically focuses on accuracy and for that, he needs the guidance of the teacher. In opposition to analytical and realistic students, the other three styles, (divergent, pragmatic and personal) are much more concerned about fluency rather than accuracy.

Although, we have not had enough data to come up with remarkable conclusions, it was worthwhile doing it just for the simple reason of showing that there will always be different types of students in class, and some special guidance will be necessary in order to keep students motivated and interested, considering that this is an aspect teachers usually long for.

In sum, it can be claimed that the study related to Learning Styles are not the solution for the problems teachers may find in the classroom, but it represents a concrete way of getting closer to success, that is motivation and learning always integrated.

CONCLUSION

Considering all the research and practical activities we have experienced, it is possible to say that the study of Learning Styles can



enrich teachers' formation. This study may bring contributions in two different degrees: first, for the teacher as an individual and secondly, for the teacher as a professional.

The moment teachers, as individuals, understand their own learning styles, they will have the opportunity of finding out their strengths and liabilities and, as a consequence, will be better prepared to face eventual situations which may happen in class. In addition, teachers, as professionals, have in the class environment a variety of students with different characteristics and expectations. Students have different attitudes towards learning and their own individual ways of learning. Therefore, these differences imply the need for a corresponding variety of teaching strategies.

Teachers should also feel in charge of encouraging students to realize the different methods of learning available to them and, of making students reflect on their own learning strategies in a variety of learning tasks. This suggestion corresponds to the activity we have presented in chapter four, where we asked students to point out the activities which were more interesting to them. This type of data can show the teacher the profile of the group and the students' preferences as well.

The methodological implications of this research are not particularly easy to evaluate. The ideal suggestion would be that language

classes should be constituted on the basis of learner "types", but this is simply not possible. Therefore, if a class consists of learners with an array of learning preferences, the teacher will need to provide a range of learning options and activities in class.

The moment teachers are aware of Learning Styles and their value, they will be on the way to meeting students' needs and expectations.

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