



revista
brasileira
de estudos
em
dança

Movement and Experience in Learning Preferences of the Corpo Composto group

*Movimento e Experiência nas preferências de aprendizagem
do grupo Corpo Composto*

Giovana Consorte
Elisabete Monteiro

CONSORTE, Giovana; MONTEIRO, Elisabete. Movement and Experience in Learning Preferences of the Corpo Composto group. **Revista Brasileira de Estudos em Dança**, ano 01, n. 02, p. 146-175, 2022.



ABSTRACT

This article is part of the research that we developed within the scope of the PhD in Human Motricity, in the specialty of Dance, at the University of Lisbon, and aims to investigate whether the directed study of movement influences the learning preferences of subjects beyond the dance classroom. Characterized as a case study of a qualitative nature, it seeks to make considerations about the role of body movement in learning, based on the experience of adolescents who are members of the Corpo Composto Group – a research collective on dance and adolescence, in the city of Aparecida de Goiânia, State of Goiás, in Brazil. For this writing, we present the case, theoretical framework and methodology that support the longitudinal investigation. We present the subjective perception of the experience and the preferences of movement through the analysis of interviews from the Bakhtinian perspective, through the Dialogical Analysis of Discourse (DAD). The obtained answers contribute to the identification of the first signs of a response.


KEYWORDS: experiential learning; Laban movement analysis; embodied cognition; movement preferences.

RESUMO

Este artigo é recorte da pesquisa que desenvolvemos no âmbito do Doutorado em Motricidade Humana, na especialidade de Dança, na Universidade de Lisboa, e tem como propósito investigar se o estudo direcionado do movimento influencia as preferências de aprendizagem dos sujeitos para além da sala de dança. Caracterizada como um estudo de caso de cunho qualitativo, busca tecer considerações sobre o papel do movimento do corpo na aprendizagem, a partir da experiência dos adolescentes integrantes do Grupo Corpo Composto – coletivo de pesquisa em dança e adolescência, da cidade de Aparecida de Goiânia, Goiás. Para esta escrita apresentamos o caso, referencial teórico e metodologia que amparam a investigação longitudinal. Apresentamos a percepção subjetiva da experiência e as preferências de movimento por meio da análise de entrevistas pela ótica Bakhtiniana, através da Análise Dialógica do Discurso (ADD). As respostas obtidas contribuem para a identificação dos primeiros indícios de resposta.

PALAVRAS-CHAVE: aprendizagem experiencial; análise Laban de movimento; cognição incorporada; preferências de movimento.





Movement and Experience in the learning preferences of the Corpo Composto group

Giovana Consorte (IFG)¹
Elisabete Monteiro (ULisboa)²

¹ Professor at the Federal Institute of Goiás, a doctoral student in Human Motricity, specialty in Dance at the Faculty of Human Motricity of the University of Lisbon. Master's in environmental education by FURG. Degree in Physical Education.
E-mail: gi_consorte@yahoo.com.br

ORCID: <https://orcid.org/0000-0001-6689-4949>

² Ph.D. in Dance and master's in educational sciences. Dance teacher at the Department of Education, Social and Human Sciences/Faculty of Human Motricity. Integrated researcher at INET-MD, Institute of Ethnomusicology - Center for Music and Dance Studies/Polo FMH.
E-mail: emonteiro@fmh.ulisboa.pt

ORCID: <http://orcid.org/0000-0001-8488-1826>


Initial Considerations

This article constitutes a part of the research carried out within the framework of the Doctorate in Human Motricity, in the specialty of Dance, at the Faculty of Human Motricity, University of Lisbon, and aims to investigate whether the directed study of movement influences the learning preferences of subjects beyond the dance hall. Characterized as a case study of a qualitative nature, it seeks to make considerations about the role of body movement in learning based on the experience of the adolescents who are members of the Corpo Composto group – a research collective in dance and adolescence, from the city of Aparecida de Goiânia, Goiás.

The theoretical basis is sought in Embodied Cognition, Experiential Learning Theory (ELT), and Laban Movement Analysis (LMA). It is Constituted as a longitudinal study. The investigation seeks a causal relationship between the directed study of movement and its possible influences on the learning preferences of the research subjects, considering the hypothesis raised by the authors Peterson, DeCato, and Kolb (2015) when approaching the dialectical dimensions from David Kolb's Learning Cycle (ELT) to Laban Movement Analysis frameworks, suggesting equivalences between movement affinities and learning preferences.

As key questions we ask ourselves: does the directed study of movement influence the subjects' learning preferences? If so, how does it do it? In search for answers, we propose to observe and intervene with the beginner group of dancers over seven phases to be developed during 2022. The choice of the group as the preferred locus for establishing the sample was due to the consolidated trajectory of this collective as a possible facilitator regarding the interest and permanence of the research subjects because it is a longitudinal study. In addition, the election of the Corpo Composto Group considers logistical issues since it is the workspace of one of the researchers, which allows access to the facilities, the possibility of regular classes, and flexibility for eventual adjustments, if necessary.

The choice for this group is justified not only by the ease of access but mainly by considering its place in a technical education school. The



group brings six years of research in dance and artistic production by/for young people, a period in which it establishes itself as a national reference in the federal education network, of which the Federal Institute of Goiás – Campus Aparecida de Goiânia is part of. The federal education network is committed to offering high school technical training courses, which prepare young people for the job market. For this reason, the choice to study the subjects' learning preferences supported by the ELT considers the weight that this theory attributes to the subjects' schooling and their actions in the labor market. Therefore, the discussion revolves around the possible relationship between dance – as corporal and Labanian knowledge - and the formation of a more flexible professional, prepared to act and learn in practical action.

The clipping that we present concerns the exploratory³ study that seeks to recognize the preferences of movement and also of learning manifested by the adolescents. It also aims to establish a baseline for the discussion of the possible interferences regarding the directed study of movement.⁴


The focused part that we present concerns the exploratory study that seeks to recognize the preferences of movement and learning manifested by adolescents. It also aims to establish a baseline for discussing possible interferences regarding the directed study of the movement. In this study, adolescents between the ages of 15 and 18, members of the Corpo Composto group, of both sexes, who were not involved in regular physical exercise practices or any regular physical activity, and did not present a history of formal dance study, were observed. These criteria were established so that any changes that may occur concerning the research subjects' learning preferences are not influenced by other study activities/movement practice during the investigation period.

Next, we will discuss the theoretical and methodological bases used; deepen the characterization of the case and all the challenges that we faced during the execution of this exploratory study.

Characterizing the case

³ The exploratory study comprehends phases three of the longitudinal research regarding the Doctorate.

⁴ Corresponds to the fourth phase of the longitudinal study, which is taking place.




The case that we focus in this writing takes place in the daily study and research of the Corpo Composto group of the Federal Institute of Education, Science and Technology of Goiás (IFG), campus Aparecida de Goiânia. The IFG finds its roots in the Schools of Artificer Apprentices established by a Presidential decree of 1909 (Vidor et al). Its centenary history has always been linked to training manpower for work, and resisting several changes in legislation, government, and structure. To consider this secular past is also to glimpse the original split that, according to Amaral, translates as “one of the mechanisms of power that sustains the workings of professional education in Brazil, since its creation, the duality between general training and technical training (2022, p. 4).” From this point of view, hierarchies are created between areas of knowledge, generating tensions between professors and students.

Despite the traces of the IFG taking us back to the beginning of the 20th century, the Federal Institutes only received this nomenclature and autonomy from Law No. 11,892 published in 2008. The document discusses the formation of a new model of technological professional education institution, and there is a noticeable effort in the conception of the letter of the law towards a more integrated formation. At the same time that its text encourages training for the job market, the law uses expressions that point to integration of converging knowledge to omnilateral training, (Barbosa, 2017, p.102). However, although there is this integrative movement in the legislation, the fact of having written it did not guarantee that the teachers working in these spaces would share the same understanding. In order to handle this training, a change of thought was needed in the re-signification of the relationships between knowledges, but above all between people.

The proposal of the Federal Institutes understands education as an instrument of transformation and enrichment of knowledge, capable of modifying social life and giving greater meaning and scope to the whole of human experience (Vidor et al, 2011, p.47)

In order to consider an education that attributes this meaning to the human experience as a whole, it is essential to rethink the relationship between the body and learning, opening spaces for the necessary dialogue. This relationship is more easily established in general education disciplines,




with Art and Physical Education as its main exponents. The urgency of provoking learning experiences in/through the body directs us to the case in question, which has a context on the Aparecida de Goiânia campus of the IFG, in the countryside of Goiás. This space is the home of the dance research group Corpo Composto and it is with them that we develop a set of sessions that configure the case presented here. We consider this place to be very promising to spark a debate about the relationship between the body and learning, because despite being linked to a century-old network, the IFG Aparecida is a new campus, having been created after Law nº 11.892/2008. This young age perhaps allows an opening to destabilize to some extent the image of this false dichotomy, opening space and giving body to an integral learning.

The Aparecida campus has three technical courses integrated into high school – in the fields of Food, Buildings and Chemistry, in addition to courses in the Youth and Adult Education (EJA) modality, a bachelor's degree, two degrees and a Master's in Art program⁵. In this context, the Corpo Composto group is a collective of students dedicated to dance research for teenagers, in the form of a research project registered at the institution since 2016. Due to its youth focus, the group works with students of high school technical courses, asserting itself as a formal research territory.

The integrated technical courses have classes in the morning and afternoon, leaving little space for mandatory activities, such as research groups. For this reason, the meetings of the Corpo Composto group take place twice a week, during the lunch break, lasting one hour. In addition, students join the project voluntarily through an internal call held at the beginning of each year, aimed at students curious about the research, regardless of their previous experiences with dance. Considering this dynamic, the group is structured in two groups of studies with different levels of depth, a beginner group and an advanced group. Remaining or withdrawing from the group is a decision of the students themselves and is related to their interest and bodily availability to compose the works (Ferreira e Souza, 2019).

In this troubled context, students often have to choose between

⁵ Two technical courses integrated in the EJA modality - Food and Apparel Modeling, a Bachelor's Degree in Civil Engineering, a Degree in Dance, a Degree in Bilingual Pedagogy and a Professional Master's Degree in Art.



doing tasks related to technical disciplines or fulfilling the commitment assumed in the project. As students of the federal network, dancers experience a recurrent tension in the school routine between technical disciplines and disciplines related to body movement. In the veiled hierarchy of knowledge, the body ends up coming last. In addition to being the result of the dichotomy between general and technical training, these tensions result from different, often contrasting, conceptions and understandings about how subjects learn and develop. By building this overview, we realized the potential of the Corpo Composto group as a provocateur of debate that, being located on a young campus, is configured as a promising locus for research development.

Once a few of the reasons for our choices have been explained, we move on to the context in which the first phase of the set of sessions that make up the case studied took place. The students that make up the sample returned for the first time to the face-to-face class format after the suspension of the school calendar and subsequent implementation of what was configured as emergency remote teaching.⁶ The academic semester began in April 2022, and in the following May, the Corpo Composto group opened a call for new members. It is essential to point out that, although the group remained active during remote teaching, our research interest falls on the beginner class composed after the aforementioned call. From this group of beginners, we are interested in observing the possible effects of the directed study of movement on the subjects' learning preferences. For that, we observed the clipping of twenty study meetings that took place between May and July 2022.

Learning as an act of the body

The interest in the role of body movement in learning led us to research learning from an active and experiential perspective, searching for relationships between body movement and perspectives of cognition and learning, as we have already mentioned. During this search, we came across a 2015 article in which Peterson, DeCato, and Kolb suggest a

⁶ Is the set of didactic-pedagogical procedures adopted by the IFG to mediate learning during the social isolation resulting from the Covid 19 epidemic, which remained active between august, 2020 and march, 2022.

relationship between the Experiential Learning Theory (ELT) and the study of movement, from the perspective of Laban Analysis.

For a more systematic search, we resorted to two large databases – Scopus and ERIC, using the descriptors: “learning theory” AND “movement analysis,” “embodied cognition” AND “learning theory,” “experiential learning” AND “Embodied cognition”, “learning theory” AND “movement analysis”; A total of 43 papers were found, which resulted in 36 studies when excluding duplicities. Only 2 related to the objectives of this search - a repeat occurrence of the article by Peterson, DeCato and Kolb (2015). We identified in this scarcity of works that relate the study of movement and its possible effects on different forms of learning a promising gap that seems to indicate a potential for significant studies.

Despite the lack of direct references, we moved the study as a network, starting from references in the text read to find other works of interest, gathering the results in three main themes: Embodied Cognition, Experiential Learning Theory and Laban Movement Analysis LMA.

So that we can address learning preferences, we must present the bases that support our understanding of the subject. We open the debate by bringing the understanding of learning in Hannaford, (2005), as a natural process that occurs in the interaction of subjects with other beings and with the environment, through sensorimotor experiences and the sense of connection and appreciation. In this sense, learning and cognition are closely related. The experiences the author refers to happen in/through the body, from the perspective of embodied cognition. As a theoretical model, Embodied Cognition considers the body and mind as a set that plays a significant role in the cognitive mechanism (Wilson, 2002). Embodied theories of cognition view the sensorimotor activity as fundamental to learning, knowledge, and reasoning.

In this direction, several studies relate movement to improving cognitive skills, involving different areas of knowledge. Kronsted and Gallagher (2021), concluded that dance can improve critical thinking; Bläsing et al (2012), conducted a study on neurocognitive control in dance perception and performance, and point out that dance can provide insights into cognitive, emotional, and aesthetic functions and behaviors. Beyond dance itself, it is also possible to find studies in other disciplines, Zohar and Levy (2021) found an increase in the conceptual understanding of chemistry in students who experienced different degrees of bodily involvement through an interactive

device; Smyrnis and Ginns (2016) conducted a study in which movement prior to performing mathematical tasks pointed to an improvement in the quality of learning; Jostmann, Lakens, and Schubert (2009) point out that the elaboration of abstract thought - as a concept of value or importance - can be influenced by bodily experiences that involve weight resistance.

The perception that the body and the environment are intertwined in cognitive activity led some authors (Beer, 1995; Greeno and Moore, 1993; Thelen and Smith, 1994; Wertsch, 1998; Clark and Chalmers, 1998; Hannaford, 2005) to the understanding that Cognition – and consequently, learning itself – is not an isolated activity of the mind, but an interactive relationship that includes body, mind and environment (Wilson, 2002). Considering this perspective, cognition depends on the body's movement; therefore, learning will result from experience.

Experience as key to cognition and learning is also the basis for the Theory of Experiential Learning Theory - ELT (Kolb, 1984). In this perspective, knowledge is conceived as a continuous process of transformation, and learning goes through experience in an objective and subjective wathrough experience objectively and objectively (Kolb, 2015). Based on these assumptions, the ELT indicates two dialectically related ways of apprehending and transforming experience, which unfold in a cyclical model involving four stages: concrete experience (CE) and abstract conceptualization (AC) - related modes of apprehending experience; reflective observation (RO) and active experimentation (AE) - related modes of experience transformation (Cerqueira, 2000).

This structural model of learning is the basis of the measurement instrument called the Learning Style Inventory (LSI), which aims to identify the learning style of individuals. Originally, the LSI presented four learning styles – Accommodator, Assimilator, Convergent and Divergent. The model of learning cycles and the LSI became quite popular (Sobral 2005, Schmidt and Domingues 2016), and the instrument has undergone several updates since its original version, the biggest of which occurred in 2011, switching from the four original styles to nine styles of learning, even adding the learning flexibility index as a numerical data in the KSLI 4.0 version. Previous inventory versions can be easily found on the internet, but we found no references to a published version of KLSI 4.0. Only in one of the publications by Peterson and Kolb (2017) is there a link to this version of the test performed online. Currently, this content is no longer available, and the online test has been

replaced by the so-called Kolb Experience Learning Profile (KELP) launched in 2021.

According to the authors, their learning style is like a learning comfort zone, and the styles inventoried by the KELP profile can be described as follows:

- Initiating Style relates to the initiative in dealing with different experiences and situations;
- Experiencing Style finds meaning through a deep involvement in the experience;
- Imagining Style develops the imagination of possibilities through observation and reflection about experiences;
- Reflecting Style aims through reflection to connect experiences and ideas;
- Analyzing Style integrates ideas into concise models and systems through reflection;
- Thinking Style finds meaning through engaging in abstract and logical reasoning;
- Deciding Style searches through theories and models to decide on problem-solving and directions of action;
- Acting Style configures a strong motivation for goal-directed action that integrates people and tasks;
- Balancing Style adapts by weighing the pros and cons of acting versus reflecting, and experimenting versus thinking.

Although the ELT refers to profiles as *learning styles*, this study adopts the term learning preferences, as it considers that the idea of learning styles is not unanimous. Cavellucci (2006) states that the term *learning preferences* is more appropriate to refer to the set of preferences that will determine an individualized approach to learning. Felder (1993) refers to learning styles as individual preferences in receiving/processing information. Considering these issues, we seek to understand the subjects' preferences in a more profound and accurate way, with the aim of contemplating the subjects' subjective experiences. Understanding the relationship between body movement and its possible influences on learning preferences may lead us to a place of 'between', broader than styles, as it considers movement and experience, but without the intention of structuring a new model.

In order to understand body movement, we used the theories of Rudolph Laban, a researcher, artist, dancer, and choreographer, who built a

complex movement language system, later called Laban Analysis of Movement (Fernandes, 2006). Through the construction of a metaphor, Boyette (2012) refers to LMA as an alphabet for the language we already speak, since the proposed categorization of the movement is analogous to the characterization of the letters as we know them.

Didactically, the LMA can be divided into four sections, or categories, of understanding: Body, Effort, Shape, Space. Within each of these categories, a collection of terms and ideas – like the letters of the alphabet – can describe any movement the subjects can perform. In Peterson, DeCato, and Kolb's (2015) proposition, the Effort category is used as a convergence point for their Hypothetical Flexibility Model.

According to Fernandes (2006), the Effort category relates to how subjects express themselves, subdividing into four factors or movement affinities that transit between two polarities, namely: time (accelerated/decelerated), weight (strong/light), space (direct/indirect) and fluency (free/controlled). Each affinity can be expressed in body movement and can be taught and trained. The possibility of a relationship between movement preferences and learning appears at the basis of Peterson, DeCato, and Kolb's (2015) proposition about a possible theoretical correspondence between ELT and Laban Movement Analysis. According to the authors, the Effort category presents a connection with Learning Styles, as each of the four factors is made up of two elements, which exist in a continuum of contrasting poles between indulgence and resistance qualities (2015, p. 233). The Hypothetical Flexibility Model suggests that your expressive movement affinities correspond, in their polarities, to the nine styles of Experiential Learning.

For the affinities that find a place in the 'condensed' polarity, the following correspondence is proposed: contained flow/Analyzing, direct space/Thinking, strong weight/Deciding, and accelerated time/Acting. About the movement affinities that make up the 'delivered' polarity, the following correspondences are raised: free flow/Initiating, indirect space/Experiencing, lightweight/Imagining, slowed down tempo/Reflexing. The style that does not correspond is called Balancing. It refers to the ability to adapt your preferences to the needs of the concrete situation. Considering this premise, the authors point out that the study of movement could increase learning flexibility toward a more balanced style.

Materials and Methods


This investigation was approved by the Board of Ethics for Research of the Faculty of Human Motricity, under the opinion of CEIFMH nº19/2022, and is configured as applied research, supported by the theoretical framework to analyze the particular reality. In the perspective pointed out by Nascimento (2016), this type of research is dedicated to building knowledge to solve a specific problem, involving local truths and interests for practical application in a particular situation.

Supported by the qualitative paradigm, it is configured as an incorporated case study, as it is dedicated to the analysis of multiple units, characterized by a single case Yin (2001). From the reality investigated with the Corpo Composto group, we are interested in assessing the validity of the theoretical proposition formulated by Peterson, DeCato & Kolb (2015), based on the observable implications collected in the case of the studied context. Regarding the choice of investigating a single case, we agree with the understanding of Yin (2001, p.62) when he signals that:

A rationale for a single case is found when it represents the decisive case in testing a well-formulated theory. The theory specified a clear set of propositions and the circumstances under which the propositions are believed to be true. To confirm, disprove, or extend the theory, a single case must satisfy all the conditions for testing the theory.

By characterizing itself as a single case study, the investigation is assumed to be particularistic, deliberately focusing on a specific situation, and assuming an interpretative character. It is intended to consider the case as a complete entity, beyond the sum of its independent variables.

Choosing a non-probabilistic sample as a convenience sample was due to considering the amount of work foreseen for the investigation and the respective limitations of personnel, structure, and financial resources (Mattar, 1999). Despite acknowledging the gains that a probabilistic sample could represent for the research, it is important to remember that the investigation is characterized as a case study, and its objective is not to generalize the results obtained. Authors such as Oliveira (2001), Curwin and Slater (1991), consider that a non-probabilistic sampling survey, when well conducted, can produce satisfactory results more quickly and at reduced costs.



Considering the above, the proposed investigation concentrates its focus on the convenience sample that characterizes the selected case study, which does not prevent its results from encouraging other researchers to embark on more robust future studies. Next, we present the structure of the exploratory study that embodies this article and contributes to establishing a baseline for the ongoing longitudinal investigation, which it references.

Initially, the bibliographic review moved the research to deepen the understanding of the three great areas of knowledge that involve this study - Cognitive Sciences, Theory of Experiential Learning, and Laban Analysis of Movement, as we have already mentioned before. The references visited allowed the organization of thought and the conceptual structure of the work, as well as instrumentalized the construction of the initial planning of the exploratory study, from a Labanian perspective.

Laban (1978 and 1990), Hodgson and Preston-Dunlop (1990), Fernandes (2006), Bradley (2008), Boyett (2012), Rengel (2003), Maletic (1987), Davies (2006), Hodgson (1990) allowed us to structure a content program to be developed during the exploratory study, namely: Basic body preparation exercises proposed by Bartenieff; Laban Analysis of Movement and the Effort category; Planes and levels of movement; Crystalline forms and spatial directions; Studies individually directed to movement factors weight - light and strong qualities, time - accelerated and decelerated, space - direct and indirect, fluency - free and restrained; Perception of movement factors as modifiers of choreographic processes; Basic effort actions; Body actions of complete efforts (Movement Impulses) and incomplete (Motion States); Awareness of gesture, successive and simultaneous gestures; Observation for motion analysis; Effort Affinities and Spatial Direction. The bibliographical review also allowed the tracing of a consistent methodological trajectory for the development of the investigation, considering its complexity and conditions of existence.

In a second moment, we conducted an exploratory study with the Grupo Corpo Composto. This stage intended to present a study of movement vocabulary that would allow the identification of processes by nomenclature, from a proposal of movement study from a Labanian perspective, considering its affinities with Kolb's Experiential Learning Cycle. This phase was proposed to develop greater body awareness and perception of movement in the subjects, to enable the discovery of their movement preferences. In order to allow clearer and less error-prone


communication, familiarity with Laban Movement Analysis was necessary to establish a unique vocabulary of observation and analysis.

The structure of this stage was configured from twenty study meetings, each lasting one hour and occurring twice a week, in which LMA contents contained in the Effort category were addressed, and organized in a balanced way, considering the affinities with Kolb's Learning Cycle. At the end of each meeting, there was a moment for sharing sensations, impressions, questions, and any other issues related to the studied contents. This sharing logic allowed space for students to contribute, in time, to a broader evaluation of the study process, providing important information to be considered for planning adjustments. In addition, students were constantly encouraged to interrupt both the expository discussion processes of theoretical concepts and movement experiments in case of doubt or discomfort.

Concerning this intervention, data was produced from the triangulation perspective (Denzin 1978 and Flick 2013), based on production in different periods and measured by different sources to obtain a more detailed and accurate description of the phenomena. To do so, data was produced through a reflective diary with observations and reflections of the investigation during the activities in the field, seeking to meet the functions raised by Stigger (2007) namely, cathartic - when recording feelings and apprehensions arising from the field -, empirical - seeking to record the events observed -, reflective - linking to analysis resulting from the observation process.

A movement analysis work was also carried out, supported by LMA of free improvisation processes in the last five meetings. From the indication of open improvisation, "Considering the movement studies carried out previously, build an investigation in dance based on your preferred movement qualities", the students got involved in activities of improvisation in dance - for a time interval of five minutes each -, which were recorded on video for later analysis. The experiments with improvisation were carried out in silence so that there was no interference of the musical stimulus in the subjects' movement choices.


Although there is a validated instrument to identify learning preferences according to the Experiential Learning Theory, the same does not happen to infer the movement preferences of research subjects in the face of LMA. For this reason, different



procedures were needed - in format and collection period. Once the collection of movement data was completed, the subjects were submitted to a semi-structured interview to assess the self-perception of movement and the preference for the active or reflective dimension along with Kolb's Learning Cycle. The structure of the questionnaire was elaborated in the light of Manzini's understanding (2003), considering principles of the theory of action - more precisely the concept of verbal action - which implies a concern in identifying the theme of the question, its required action and the objective behind the question. The interview questions were developed considering three major axes: subjective perception of experience, movement preferences, and learning preferences. These distinct axes were designed with the aim of collecting data that could contemplate the objectives of the preliminary investigation, that is, to identify the movement preferences of the participants, considering the LMA - and also to infer whether the correspondence between movement affinities and learning preferences makes sense, in the context of the case studied.

Questions were proposed to seek answers about movement preferences within the themes of evaluating the experience of classes and improvisation processes. In addition to the personal perception of changes in the body movement of the subjects involved. These questions aimed to identify and infer movement preferences, considering movement factors in the effort category and their polarities. With regard to learning preferences and possible equivalence between movement qualities and learning styles, the questions were constructed considering the dimensions that underlie the Kolbian learning cycle, with a view to allowing participants to point out preferences and behaviors that may reflect, in the context of the study of movement, the dimensions involved in the process of transformation of experience, as well as the grasp of each subject's experience. The purpose of these questions was to identify the learning preferences of the Kolb cycle, applied to the dance context. It is important to emphasize that care was taken not to use language identical to that used by Kolb's Experiential Learning Profile inventory, to avoid possible interference when applying the KERP profile - carried out after the semi-structured interview.

Considering the above, we started from the basis Manzini (2003) proposed for an analysis of the verbal actions expressed in the script, which allowed for the necessary adjustments before the pilot interview. Once the script's first version was constructed, it was applied to one of the students



who were part of the Corpo Composto group - excluded from the study for performing regular physical activity practices. The student answered the questions and provided feedback considering the appropriate language and meaning of the questions. Once this preliminary stage was concluded, the questionnaires were applied individually during the last school week of the first semester of 2022, after completing the twenty practical study meetings to which the interview referred to. The transcription of each interview was carried out in a naturalistic way, considering the meticulous transcription of what was said exactly as it was said, advocating the preservation of the different elements of the interview in addition to the verbal content, such as non-verbal language, contextual and interaction aspects with the interviewer and the interviewee (or third parties involved). (Azevedo et al, 2017, p. 161). To confirm its veracity, it was submitted for validation by the participants, to guarantee its credibility.

In addition to the interview, which sought to consider subjective perception and movement preferences, it was necessary to apply the KELP instrument to identify the subjects' learning preferences. However, the instrument was built in English and it was necessary to carry out a process of reverse translation and cultural transduction, carried out in the light of the understanding expressed by Cassepp- Borges, Balbinotti and Teodoro (2010) – in order to guarantee its functionality in the context and language used in Brazil. Due to this need, the work with the KELP instrument was concomitant with the movement studies and involved several steps that will be the subject of future publications.

Results and discussion

Once the data production phase was over, it was necessary to move towards the different analyses to compare the information - collected from different instruments at different times - and then reflect on how they can help us search for the answers that move the investigation. Each instrument produced a particular type of data which, for this reason, engendered further analysis and interpretation processes. For this article, we chose to present the analysis of interviews from a Bakhtinian perspective, through Dialogical Discourse Analysis (DDA). We recognize the complexity of the other phases, reserving the impetus for future

writings.

In light of this understanding, the interview is a discursive genre, which in turn belongs to a discursive chain that generates responses and should be taken as a concrete statement. In other words, the interview generates responsive attitudes in the subjects and the researcher, making it important to understand the discursive context in which the reports were produced.

Our study took place at the IFG – Aparecida de Goiânia Campus facilities, with the beginner class of the Corpo Composto group. It had a total of twelve participants, four male, and eight female, identified below by letters. The structure we chose for the presentation is based on three axes of analysis that are dialogically related in the search for understanding the investigated preferences. In this way, we are interested in understanding the statements both in their dictionary meanings – content, and in their individual meanings – characterized by an understanding that goes beyond the meaning of words, taking into account the ideological context. (Souza, 2005). In Bakhtin's (1988) understanding, discourse comprises a set of statements belonging to an equivalent ideological domain.

Initially, we present the first axis that structures the questionnaire - Subjective perception of the experience -, constructed to identify what the participant considers relevant to highlight about the experience and allow space for the subjects to suggest preferences for content or learning dynamics. We are also interested in understanding which dimensions of human experience this perception is linked to. With these objectives as a basis, questions were constructed aimed at the first axis: 1. How has your experience in our classes been?; 2. Have you noticed any kind of change in the way you move?; 3. Something you would like to add?; in addition to the answers referring to these specific questions, the meanings of this axis also appear interspersed in other answers throughout the interviews.

When we analyzed the utterances, we realized that the subjects' responses constituted four distinct categories: emotional-affective, moving, relational, and conflict. These categories appear in the spontaneous repetition of meanings in different responses, they are not necessarily exclusive and speak of a plural and complex experience.

The dancers' speeches suggest an emotional-affective meaning, related to the expression of feelings and affective embracement, which can be perceived in the excerpts that follow:

So I was **very happy** to find a place with dance, and I **really liked** it, because I always wanted to do Contemporary Dance, and here I found it, and I was **very happy, I really liked** how the classes are, how **everything is very natural** and kind, **comforting, there is not all that pressure**. (transcript of the interview by B. §5)

When analyzing the statement, we found a series of intensity markers that tell us about the student's enthusiasm for the experience. The use of the word comforting refers to a sensitive, emotional-affective meaning. Besides, it is possible to perceive a veiled conflict, when the student points out with some surprise the way the classes happen, "how everything is very natural... without all that pressure". The student exposes the first idea of dance as something unnatural and subject to great pressure. This idea can be attributed to a brief experience that the author reports having had as a child, but also to other discourses conveyed by the entertainment industry and socially refracted that portray the study of dance as something rigid and hard. The plot of this utterance is marked by dialogism in the student's discourse, reinforcing that no utterance exists in isolation but as part of a network of historical utterances that constantly interact with other utterances in a society.

From an emotional-affective dimension, we find W's statement, attributing an affective quality to the experience. At the same time, he suggests that the IF - here inferred from the Aparecida campus - as a space of conflict, since it is essential for him to cut out the space of the Corpo Composto group as a place where he feels good.

My experience at Corpo Composto can be said that it has been, I can put it this way, an **emotional anchor** for me to be able to be here at the IF. Because, well, the Corpo Composto is a place, the area, where I feel good, it's where I express myself, **it's where I show my feelings in the form of art**, what I want to work out, telling stories through dance, this whole process is magnificent. (transcript of W.§7 interview)

And then when I started doing it, my God, it seemed like I was dreaming, **I couldn't believe it**, I said to my parents "**can you believe I'm dancing at school?**". (interview transcript from I.§5)

Once again, we can perceive a kind of parallel between an emotional-affective dimension and a conflicting one, which coexists in the same space and are intertwined in the subjects' utterances. For I. the idea of dancing at school does not seem real/plausible "it felt like I was

dreaming”, suggesting a dance imagery that does not fit in the school environment. Still, within that sphere, R. recognizes with a certain regret:

I feel that I deprive myself of not being so open to fully experiencing the experiences proposed in the Corpo Composto. I have this fear of moving, and expressing myself in general. But when... my feelings are more out in the open, I feel like I move better. (interview transcript from R. §5)

For this author, the emotional-affective relationship stands out in a place of deprivation, expressed in recognizing oneself as a limiting agent of one's own experience, reinforced when there is a need to move disconnected from a triggering feeling. It is important to bring the report of those who do not approach the others, as this choice builds a divergent and equally relevant meaning for themselves. It still speaks of an emotional-affective relationship, although supported by a different affection.

We transcribe a few excerpts in full, to illustrate categories reinforced in the course of several interviews. We could highlight other statements that, in their structures of meaning, reinforce these categories, whether in the use of expressions such as “little corner of refuge”⁷ (J. §7), “It's like a therapy”⁸ (U. §17), “my place of comfort”⁹ (I §9) as well as the use of intensity markers such as “happier”¹⁰ (G §5), “I loved a lot”¹¹ (I §5). These expressions illustrate many others and suggest that an important part of the subjective perception of the experience is anchored in the emotional-affective dimension. Conversely, conflicts appear more subtly, crossing the other axes that structure the interview script.

In addition to this, a second identified category can be related to a self-moving dimension, contemplating the body in its movement. Take the example of J., who, when referring to the experience with the Corpo Composto, says of “an experience of self-knowledge with my body. What I am and how I move”¹² (§7). Recognition of oneself, of one's body in motion, is highlighted in other statements, “The experience was that I learned to move, I learned to move my body”¹³ (M. §5); “Expanding my body more,

⁷ J.s interview §7, august, 8th, 2022

⁸ U.s interview §7, august, 8th, 202

⁹ I.s interview §9, august, 8th, 2022

¹⁰ G.s interview §5, august, 9th, 2022

¹¹ I.s interview §5, august, 8th, 202

¹² J.s interview §7, august, 8th, 2022

¹³ M.s interview §5, august, 10th, 2022

because it was always too much in my place¹⁴ (L. §11)”. The clippings have in common the recognition of the materiality of the experience lived in/by the body, a perception of movement that expands and broadens the subjective understanding of the subjects. Still, regarding the embodiment of the experience, comparative relations appeared, such as “... at the beginning, I felt very stuck, but today I am already feeling more developed...¹⁵ (A. §7)”, Before I was very more stuck... Today I'm more relaxed, and loose in life¹⁶ (G. §7). When we observe these constructions, we identify an implicit evaluative judgment that is also corporeal, speaking of a place of self-recognition based on corporeality.

We also recognize the recurrent incidence of a relational meaning, both of the subject in relation to the world and in relation to peers. This logic supported by relationships is evident in statements such as “the way of seeing the world is different. Very different. I don't know, like, you start to see the world through the eyes of dancing. That the strange is normal¹⁷.” (W. §13), a similar structure can be found in (E. §7) “both speaking in a more poetic way, and in the true sense of the word, the Corpo Composto made me see the world in a different way.¹⁸” The metaphor of the eyes appears in both utterances, revealing a previous conception of limited visibility, translated into a distance/denial of multiplicity. By recognizing in the relationship with the world the possibility of estrangement, they find in poetry and in the connotation of the word, indications that speak to us of a significant experience, capable of inviting them to reflect on broader existential horizons.

Still in a relational perspective, this time directed to peers, we recognize a considerable emphasis on the involvement between colleagues in the analyses of statements. We can see these structures in the following excerpts: “now I have other people, and I dance with them, and I really liked that part, because I think that, I don't know, I managed to connect with other people, and I found it very cool. That's it¹⁹” (Y. §47). We found a similar structure in “I think that's just really the part where I feel excellent about doing the Corpo Composto itself, having contact with other

¹⁴ L.s interview §11, august, 10th, 2022

¹⁵ A.s interview §7, august, 9th, 2022

¹⁶ G.s interview §9, august, 9th, 2022

¹⁷ W.s interview §13, august, 10th, 2022

¹⁸ E.s interview §7, august, 9th, 2022

¹⁹ Y.s interview §47, august, 8th, 2022

people who love dance is something beautiful to experience²⁰.” (L. §39)., and also in “I really liked the people and living with these people all day, and sometimes I'm at the water cooler and “ah, are you going to the Corpo Composto?²¹” (B.§5). By highlighting this relational nature of the experience, they indicate coexistence as an important part of the research work together with the Corpo Composto. This recognition of the complexity of the experience, considering affective, relational, and movement perception aspects converge, signaling the education of/through movement as a possibility of attributing greater meaning to the human experience as a whole, a principle that is related to the education proposal of the Federal Institutes. Regarding the identification of the research subjects' movement preferences, the second axis was constituted by the mixture of direct questions with more open ones, with the intention of leaving the interviewee at ease to revisit his experience and reflect on how his body moves, they were: 1. Have you noticed any kind of change in the way you move?; 2. Considering our meetings, which class/dynamic/experience did you feel most comfortable with?; 3. What was the most challenging class?; 4. Regarding the contents that we studied, is there any that you think about/experience more often when you dance?; 5. what is your favorite quality of movement?; Below, we will present a table with excerpts from the students' speeches, considering the occurrence of express manifestation of the subjects by one or another quality of movement.

Table 01 – Summary table of students' movement preferences

Subject	+ comfortable / - comfortable
A.	I'm quite versatile at this, but I don't know... the quality of movement I feel most comfortable with would be light, sustained and multi-focused / the quality I feel most uncomfortable with would be strong, quick and focused
B.	I think... like speed, being faster and lighter, I think that when I go dancing, this is what comes the most. Try to be quick and light. / Strong Weight. I think that's what I have the most difficulty
E.	I think I like light and quick, but I also like (digressing) I think it's cool to transition / I prefer lighter than strong, because strong is more difficult to maintain and to do in the body

²⁰ L.s interview §39, august, 10th, 2022

²¹ B.s interview §5, august, 8th, 2022

G.	Greater intensity in the faster movement / the difficulty is like in the movements that require you to put force into them
I.	Strong weight, sustained, the very painful one, which we can use the expression. Stronger than sustained. / And what I have the most difficulty with is the light
J.	My body feels more comfortable when dancing in light movement quality / When we talk about strong movement quality, I feel more uncomfortable
L.	I think something more quickly, more swirling, you know? / I have a lot of difficulty putting into practice a more rigid and heavier movement, I can't elaborate as much
M.	Light. Neither fast nor slow / I have more difficulty in strong weight
R.	The way of moving that I feel more comfortable with, that I identify with more and stronger, is my favorite / The quick quality is more difficult for me
U.	But I think my favorite would be multi-focused, because I already do it, so it's easier for me and quick, because I like it fast. / Strong weight, strong I have difficulty doing with strong.
W.	I like light better/ A better to move slowly, very slow; I'm connected to 220V, so slow is something very difficult.
Y.	Light weight, I think the main category is lightweight / I have more difficulty on focused.

Next, we constructed a summary table, considering the preferences expressed in the aforementioned clippings and other occurrences in allusion to the qualities of movement that appeared at different interview moments.

Table 02 - summary of students' movement preferences

Subject	Summary table of students' movement preferences	
	Preference	Difficulty
A.	Light, sustained and multi-focused	Strong, quick and focused
B.	Light and quick	Strong
E.	Light and quick	Strong
G.	Quick	Strong
I.	Strong	Light
J.	Light	Strong
L.	Quick	Strong
M.	Light	Strong
R.	Strong	Quick
U.	Multi-focused	Strong
W.	Light	Sustained
Y.	Light	Multi-focused

When we look at the summary table, we can see that some students consider more than one quality as a preference, even when asked about possible differences in intensities. In a first analysis, we could raise two hypotheses, one that refers to the dancers' versatility or balance of expressive quality, and another that considers a failure in the perception that

the student may have of his own movement. The preferences expressed here should be compared to the analysis of movements recorded in the videos, which will be the subject of discussion at another time to assess a more precise response.

As the last structuring axis of the questionnaire, we proposed questions that could infer, to some extent, correspondences between experiential learning and preferences for action in dance practice. For that, we built the following questions: 1. When we are going to try a new choreographic sequence, and the class needs to be divided into groups, do you prefer to go in the first or second group? Why?; 2. When improvisation is free, is there anything you look for? Or even a way of thinking/acting that is repeated? When questioning the subject's initiative in experimenting or observing, we stress one of the guidelines of the learning inventory, the "prehension" dimension, structured from the opposition concrete experience (CE) versus orientation towards abstract conceptualization (AC). When we question the way of operating during improvisations, we envision understanding the dimension of experience transformation, supported by the opposition between reflective observation (RO) and active experimentation (AE).

The combination of these elementary orientations in dialectical opposition gives rise to the nine learning styles that we identify in Kolbian theory. Our intention with the questions in this axis was to try to infer possible correspondences, based on the relationship between body and learning, in the context of dance practices. When we look at the table, we can see that there are occurrences of six of the nine styles identified through the KELP profile.

sujeito	Resultado KELP	Correspondência esperada Peterson, DeCato & Kolb (2015)	Preferência expressa na entrevista	Preensão Transformação
A.	Analyzing	Bound	Light, sustained, multi-focused	CA/EC EA
B.	Reflecting	Sustained	Light and quick	CA/EC EA
E.	Thinking	Focused	Light and quick	CA OR
G.	Experiencing	Multi-focused	Quick	CA EA
I.	Reflecting	Sustained	Strong	CA EA
J.	Reflecting	Sustained	Light	CA OR
L.	Imagining	Light	Quick	CA EA
M.	Imagining	Light	Strong	CA EA
R.	Analyzing	Bound	Multi-focused	CA OR
U.	Reflecting	Sustained	Light	CA/EQ OR
W.	Imagining	Light	Light	EC EA
Y.	Balancing	balance of qualities	Light	EC OR

Caption: concrete experience (EC) abstract conceptualization (CA); reflective observation (OR) and active experimentation (EA)

As we can observe in the table, regarding the analysis of interviews, the proposition of the authors Peterson, DeCato & Kolb does not seem to find an echo in the context of the case studied. Considering that the twelve subjects that comprise the sample, only one presented correspondence aligned with the authors' proposition. It is important to point out that this is just a part of the analysis, leaving the proposed triangulation with the reflective diary and the movement analysis to build a more precise argument. The responses analyzed in this article speak of students' perception of themselves and their bodies in motion, these perceptions being subjective and crossed by external factors over which we have no control.

Considerations in movement

Uncertainty in investigative processes is one of the inseparable elements of the knowledge process and navigating amid uncertainty requires focus and openness to reevaluate paths when necessary. Therefore, we trailed a careful journey during this first stage of analysis, considering the results in their diversity, reporting the perceived meanings without distinctions of a personalistic nature.

The data that we present are the first pieces of a complex jigsaw puzzle, they are far from presenting a solution, but they instigate a stimulating debate about the body, learning and experience. We reached the end of this text with the certainty that the experience of dancing in the Corpo Composto group is perceived in multiple ways, comprising a body as a physicality, but crossing an emotional-affective and relational dimension. This intense perception of experience can give meaning to the set of human experience.

We finish this writing envisioning horizons of movement, far from any definitive conclusion, but certain that the path trodden in this writing is valuable in itself. Heating up the debate about the role of the body in learning and mobilizing a school community around the construction of scientific thinking are important movements both in the school context and in society as a whole.

References

AZEVEDO, Vanessa *et al.* Transcrever entrevistas:: questões conceptuais, orientações práticas e desafios. **Revista de Enfermagem Referência**, Coimbra, v. IV, n. 14, p. 159 - 172, 22 maio 2017. Disponível em: <https://www.redalyc.org/journal/3882/388255675017/388255675017.pdf>. Acesso em: 30 jul. 2022. <https://doi.org/10.12707/RIV17018>

BARBOSA, Sebastião Cláudio. **A formação integrada omnilateral: fundamentos e práticas no Instituto Federal de Goiás partir do PROEJA** 2017. 202 p. Tese (Doutorado em Educação) - Faculdade de Educação da Universidade Federal de Goiás, [S. l.], 2017. Disponível em: <https://repositorio.bc.ufg.br/tede/bitstream/tede/7074/5/Tese%20-%20Sebasti%c3%a3o%20Cl%c3%a1udio%20Barbosa%20-%202017.pdf>. Acesso em: 2 mar. 2022.

BLÄSING, Bettina. *Neurocognitive control in dance perception and performance. Acta Psychol (Amst)*, [S. l.], v. 139, n. 2, p. 300 - 308, 1 fev. 2012. DOI 10.1016/j.actpsy.2011.12.005. Disponível em: <https://www.sciencedirect.com/science/article/abs/pii/S0001691811002320?via%3Di%3Dhub>. Acesso em: 13 jan. 2022

BRADLEY, Karen. **Rudolf Laban, Routledge Performance Practitioners**. [S. l.]: Routledge., 2009.

BEER, Randall D. A dynamical systems perspective on agent-environment interaction. **Artificial Intelligence**, [S. l.], v. 72, n. 1-2, p. 173-215, jan. 1995.

BOYETTE, Marie C. **The Universality of Laban Movement Analysis**. 2012. Tese (Master of Fine Arts) - Virginia Commonwealth University, [S. l.], 2012.

CASSEPP-BORGES, Vicente; BALBINOTTI, Marcos A. A.; TEODORO, Maycoln L. M. Tradução e validação de conteúdo: uma proposta para a adaptação de instrumentos. p. 506-520. *In PASQUALLI, L. Instrumentação psicológica: fundamentos e práticas*. [S. l.: s. n.], Porto Alegre: Artmed; 2010.

CAVELLUCCI, Lia C. B. Estilos de aprendizagem: em busca das diferenças individuais. **Academius Retrieved**. [S. l.], p. 1 - 12, 31 out. 2021. Disponível em: http://academius.com.br/portal/images/stories/953/estilos_de_aprendizagem.pdf. Acesso em: jan. 2021.

CERQUEIRA, Teresa Cristina Siqueira. **Estilos de aprendizagem em universitários**. 2000. 155 p. Tese (Doutorado em Educação) - UNICAMP, [S. l.], 2000.

CLARK, Andy; CHALMERS, David. The Extended Mind. **Analysis**, [S. l.], v. 58, n. 1, p. 7-19, 3 jan. 1998. DOI <https://doi.org/10.1093/analys/58.1.7>. Disponível em: <https://academic.oup.com/analysis/article-abstract/58/1/7/153111?redirectedFrom=fulltext>. Acesso em: fev. 2022.

CURWIN, Jon; SLATER, Roger. **Quantitative methods for business decisions**. 3. ed. [S. l.]: Chapman & Hall, 1991. 426 p.

DENZIN, Norman K. **The research act: a theoretical introduction to sociological methods**. [S. l.]: Routledge., 1978. 382 p.

FELDER, Richard M. Reaching the Second Tier: learning and teaching styles. **Journal of College Science Teaching**, [S. l.], v. 23, n. 5, p. 286-290., jan. 1993.

FERNANDES, Ciane. **Sistema Laban/Bartenieff na Formação e Pesquisa em Artes Cênicas**. 2. ed. São Paulo: Annablume, 2006.

FERREIRA, R. S. ; CONSORTE, G. . Sobre pesquisar, dançar e adolecer - Grupo Corpo Composto como experiência artística no Ensino Médio.. In: Editora Poisson. (Org.). **Educação no Século XXI - Volume 49 Gestão, Inclusão Educacional**.. 1ed.Belo Horizonte: Poisson, 2019, v. 49, p. 51-67

FLICK, Uwe. **Introdução à metodologia de pesquisa: um guia para iniciantes**. 1. ed. São Paulo: Penso, 2012. 256 p.

GREENO, James G.; MOORE, Joyce L. Situativity and symbols: Response to Vera and Simon. **Cognitive Science**, [S. l.], v. 17, n. 1, p. 49–59, jan. 1993.

HANNAFORD, Carla. **Smart moves: Why learning is not all in your head**. [S. l.]: Great Rivers Books, 2005.

HERNÁNDEZ-NIETO, Rafael. **Contributions to Statistical Analysis: The Coefficients of Proportional Variance, Content Validity and Kappa**. [S. l.]: BookSurge Publishing, 2002. 228 p.

HODGSON, John; PRESTON-DUNLOP, Valerie. **Rudolf Laban: an introduction to his work & influence**. 2: Northcote House Publishers, 1995. v. 139.

JOSTMANN, Nils B.; LAKENS, Daniël; SCHUBERT, Thomas W. Weight as an Embodiment of Importance. **Psychological Science**, [S. l.], v. 20, n. 9, p. 1169–1174, 1 set. 2009. DOI <https://doi.org/10.1111/j.1467-9280.2009.02426.x>. Acesso em: 13 jan. 2022.

KOLB, David. **Experiential learning**. Englewood Cliffs, New Jersey: Prentice Hall, 1984.

___. **Experiential Learning: Experience as the source of Learning and Development**. 2ed. Pearson Education, 2015.

KRONSTED, Christian; GALLAGHER, Shaun. Dances and Affordances: The Relationship between Dance Training and Conceptual Problem-Solving. **Journal of Aesthetic Education**, [S. l.], v. 55, n. 1, p. 35–55, 1 abr. 2021. DOI <https://doi.org/10.5406/jaesteduc.55.1.0035>. Disponível em:

<https://scholarlypublishingcollective.org/uip/jae/article/55/1/35/233075/Dances-and-Affordances-The-Relationship-between>. Acesso em: 14 set. 2021.

LABAN, Rudolph. **O Domínio do Movimento**. Summus Editorial, 1978.

___. **Dança Educativa Moderna**. Ícone, 1990.

MATTAR, Fauze. **Pesquisa: Metodologia e planejamento**. Atlas, 1999.

MANZINI, Eduardo José. Considerações sobre a elaboração de roteiro para entrevista semi-estruturada. In: MARQUEZINE: M. C.; ALMEIDA, M. A.; OMOTE; S. (Orgs.)

Colóquios sobre pesquisa em Educação Especial. p.11-25, 2003.

MARQUES JUNIOR, Nelson Kautzner, & Arruda, Danilo. Análise do jogo de voleibol com novo scout elaborado no excel. **RBPFEEX - Revista Brasileira De Prescrição E Fisiologia Do Exercício**, 11(68), 525-541, 2016.

NASCIMENTO, Francisco Paulo. Classificação da Pesquisa. Natureza, método ou abordagem metodológica, objetivos e procedimentos. In Nascimento, F. P. & Souza,

S. L. L. **Metodologia da Pesquisa Científica: teoria e prática**. Thesaurus. 2016.

OLIVEIRA, Elaine Teresa Gomes de. **Faces e interfaces do cotidiano do aluno com necessidades educacionais especiais no ensino superior**. 2001. 197 p. Dissertação (Mestrado em Educação) - Faculdade de Filosofia e Ciências, Unesp, [S. l.], 2001. Disponível em: https://repositorio.unesp.br/bitstream/handle/11449/91252/oliveira_etg_me_mar.pdf?sequence=1. Acesso em: 3 maio 2022.

PETERSON, Kay, DECATO, Lisa, & KOLB, David A. Moving and Learning: Expanding Style and Increasing Flexibility. **Journal of Experiential Education**, 38(3), 228–244., 2015. DOI: <https://doi.org/10.1177/1053825914540836>

PETERSON, Kay & KOLB, David. **How you learn is how you live: Using nine ways of learning to transform your life**. Berrett-Koehler Publishers, 2017.

ROCHA, Marisa Lopes da e AGUIAR, Katia Faria de. Pesquisa-intervenção e a produção de novas análises. **Psicologia: Ciência e Profissão [online]**. 2003, v. 23, n. 4 [Acessado 31 Outubro 2022] , pp. 64-73. Disponível em: <<https://doi.org/10.1590/S1414-98932003000400010>>. Epub 28 Ago 2012. ISSN 1982-3703.

SCHIMIDTT, Camila da Silva e DOMINGUES, Maria José Carvalho de Souza. Estilos de aprendizagem: um estudo comparativo. **Avaliação: Revista da Avaliação da Educação Superior** (Campinas) [online]. 2016, v. 21, n. 2 [Acessado 31 Outubro 2022] , pp. 361-386. Disponível em: <<https://doi.org/10.1590/S1414-40772016000200004>>. ISSN 1982-5765.

SMYRNIS, Eleni; GINNS, Paul. Does a Drama-Inspired 'Mirroring' Exercise Enhance Mathematical Learning?. **The Educational and Developmental Psychologist**, [S. l.], v. 33, n. 2, p. 178-186, 24 nov. 2016. Disponível em: <https://www.cambridge.org/core/journals/educational-and-developmental-psychologist/article/does-a-dramainspired-mirroring-exercise-enhance-mathematical-learning/CC4F2533AA18A62DEC3D390AC4F1E05F>. Acesso em: 18 ago. 2021, 33(2), 178-186. doi:10.1017/edp.2016.17

SOBRAL, Dejan T. Inventário de Estilo de Aprendizagem de Kolb: características e relação com resultados de avaliação no ensino pré-clínico. **Psicologia: teoria e pesquisa**, 8(3), 293-303, 1992.

SOUZA, Elmara Pereira de Souza; PEREIRA, Claudia Pinto Pereira, GARCIA, Rosângela Silveira. Análise dialógica do discurso em pesquisas na área da informática na educação. In: PIMENTEL, Mariano; SANTOS, Edméa. (Org.) **Metodologia de pesquisa científica em Informática na Educação: abordagem qualitativa**. Porto Alegre: SBC, 2021. (Série Metodologia de Pesquisa em Informática na Educação, v. 3) [Acessado em 31 Outubro 2022] Disponível em: <https://metodologia.ceie-br.org/livro-3/>

STENGERS, Isabelle. **Quem Tem Medo da Ciência?** Siciliano, 1990.

STIGGER, Marco Paulo. Estudos etnográficos sobre esporte e lazer: pressupostos teóricometodológicos e pesquisa de campo. In: STIGGER, Marco Paulo; GONZÁLEZ, Fernando Jaime, SILVEIRA, Raquel da. **O esporte na cidade: estudos etnográficos sobre sociabilidades esportivas em espaços urbanos**. p. 31-50. Porto Alegre: Editora da UFRGS, 2007,

SMITH, Linda B.; THELEN, Esther. **A Dynamic Systems Approach to the Development of Cognition and Action**. [S. l.]: Bradford Books, 1994.

VIDOR, Alexandre; REZENDE, Caetana; PACHECO, Eliezer; CALDAS, Luiz. Institutos federais: Lei no 11.892 de 29/12/2008 – Comentários e reflexões. *In*:

PACHECO, Eliezer. **Institutos Federais, uma revolução na educação profissional e tecnológica**. [S. l.: s. n.], 2011.

WERTSCH, James. V. **Mind as action**. Oxford University Press., 1998.

WILSON Margaret. Six views of embodied cognition. **Psychonomic bulletin & review**, 9(4), 625–636, 2002. <https://doi.org/10.3758/bf03196322>

YIN, Robert. **Case study research: design and methods**. Sage, 1986.

__. **Estudo de Caso, planejamento e métodos**. 2.ed. São Paulo: Bookman, 2001.

ZOHAR, Asnat. R., & LEVY, Sharona T. From feeling forces to understanding forces: The impact of bodily engagement on learning in science. **Journal of Research in Science Teaching**, 58(8), 1203–1237, 2021. doi:10.1002/tea.21698

Received on October 31st, 2022.

Approved on November 26th, 2022.



REALIZAÇÃO



UFRJ

PPGDAN
UFRJ

Anda
associação nacional de
pesquisadores em dança