

# World Journal of Biology Pharmacy and Health Sciences

eISSN: 2582-5542 Cross Ref DOI: 10.30574/wjbphs Journal homepage: https://wjbphs.com/



(RESEARCH ARTICLE)



# The intersection of art and health: exploring physical fitness through rodin's sculptures

MARIA GISELE DOS SANTOS \* and CINTHIA LOPES DA SILVA

Department of Physical Education, Federal University of Paraná, Brazil.

World Journal of Biology Pharmacy and Health Sciences, 2025, 21(02), 023-029

Publication history: Received on 12 December 2024; revised on 28 January 2025; accepted on 31 January 2025

Article DOI: https://doi.org/10.30574/wjbphs.2025.21.2.0079

### **Abstract**

This article addresses an interdisciplinary pedagogical experience in the initial training of Physical Education teachers, highlighting the importance of the integration between Auguste Rodin's art and health. Although students have access to content from the Natural Sciences, Human and Social Sciences, in addition to specific knowledge applied to Physical Education, they often do not identify the correlation or interdisciplinarity between these areas. The objective of this research was to report and discuss the contributions of the use of the statue game, inspired by Rodin's sculptures, as an innovative strategy for teaching the components of physical fitness focused on health and anatomy in the Physical Education course at the Federal University of Paraná (UFPR). By using Rodin's works, it seeks not only to facilitate the understanding of the learning processes of physical qualities and musculature, but also to promote a greater appreciation of art as an educational tool. This qualitative study collected data through a question sent by e-mail to the teacher of the discipline of Fundamentals in Physical Education and Health, who proposed the theme. The analysis of the response was carried out based on studies on leisure and Educational Communication. The results indicate that the integration of art and health through Rodin's sculptures creates a creative and emotionally engaging pedagogical experience, facilitating access to knowledge and improving the learning process of Physical Education students.

**Keywords:** Higher Education; Apprenticeship; Emotions; Health; Art

#### 1. Introduction

The human body is much more than a collection of muscles and bones; It represents a person's identity, expresses their differences and quirks, and, in Western society, body image often becomes a reflection of success or failure. Within this context, the role of the Physical Education teacher becomes crucial. He is not only an instructor of movements and physical activities, but a mediator of culture, meanings and senses attributed to the body. Its social function goes beyond the teaching of motor skills; It involves the mediation of a series of issues related to the body, health, and self-image. In this sense, the study of Auguste Rodin's works of art in Physical Education courses emerges as a valuable and innovative strategy to prepare future teachers who will work in the school environment, especially with regard to physical fitness and anatomy studies.

Rodin's sculptures, with their rich depiction of the human form, offer a unique starting point for exploring the intersection of art and science. Through his works, students can not only appreciate the aesthetics of the human body, but also deeply understand the components of physical fitness and the anatomy involved. The objective of this research was to report and make notes on the contributions of the use of the statue game as an innovative pedagogical strategy for the teaching of the components of physical fitness focused on health and anatomy, in the Physical Education course of the Federal University of Paraná (UFPR). This approach aims to facilitate the understanding of the learning process

<sup>\*</sup> Corresponding author: MARIA GISELE DOS SANTOS.

of the physical qualities and musculature involved in each sculpture of the Rodin Museum, promoting new educational approaches.

The didactic intervention was carried out in the discipline of Fundamentals in Physical Education and Health, where a recurrent difficulty in the theoretical-practical learning of contents related to physical fitness and anatomy was perceived. Statue play emerged as a creative alternative to overcome these challenges, providing students with a more accessible and engaging way to acquire knowledge that is, by nature, complex and abstract. By using this game as a didactic resource, future teachers not only absorb the content in a more dynamic way, but also develop new pedagogical skills, essential to make their future classes more attractive and meaningful.

Didactic resources are materials and strategies used in the teaching-learning process to make classes more effective. In the case of the statue game, the didactic resource is used as a tool that promotes mediation between academic knowledge and the student, facilitating the absorption of concepts and their practice. All undergraduates who participated in the Fundamentals in Physical Education and Health discipline in 2023 were involved in this pedagogical experience, which used Rodin's sculptures as a basis to explore anatomy and physical fitness in a new and interactive way.

By integrating Rodin's art into the Physical Education curriculum, we create a deeper connection between the study of human form and the practice of physical activities. This approach not only enriches the academic background of future teachers, but also broadens their understanding of the body as a whole complex biological and cultural system, where health and self-image are intimately intertwined. The use of Rodin's sculptures allows students to visualize and understand the interaction of muscles and joints in a way that anatomy books and labs can't always convey, making learning more tangible and relevant.

In addition, this methodology promotes inclusive teaching, meeting the needs of different types of learners, whether they are more visual, auditory or kinesthetic. The statue game transforms learning into an active experience, where students are called to physically participate in the class, reinforcing knowledge in a practical and lasting way. By acting out the poses in Rodin's sculptures, students internalize knowledge about the function of muscles and joints in a way that transcends simple memorization, better preparing them to teach these concepts in the future.

Finally, the use of Auguste Rodin's works in the teaching of Physical Education and Health is not only a pedagogical strategy, but a way to cultivate a greater appreciation for art and its connection with the human body. Rodin, known for his ability to capture the essence of the human form in his sculptures, offers us a window into understanding the beauty and complexity of the body in motion. By studying his works, future teachers not only broaden their cultural repertoire, but also become more aware of the importance of teaching physical fitness in a way that respects and values bodily diversity and different forms of physical expression.

# 2. Methodology

This is a qualitative investigation in which an interdisciplinary pedagogical experience based on the theme of Auguste Rodin's works is reported for undergraduate students of the Physical Education course at UFPR. This type of investigation involves meanings, beliefs and aspirations, which correspond to a deeper space of relationships, processes and phenomena, which cannot be reduced to the operationalization of variables (MINAYO, 1994).

The methodological procedures adopted were based on the report of a pedagogical experience. As a research technique, a question was sent by email to the professor of the discipline, author of this work: how was the pedagogical strategy (using the Rodin theme) created? The answer given was in the format of a narrative, based on and inspired by the work of Ferreira, Prezzoto & Terra (2020) and Aguiar and Ferreira (2021). The narrative gives a certain freedom to the author, in this case the respondent, to expose his impressions based on the pedagogical experience carried out.

In the analysis of the narrative, we started from the ideas of Marcellino (1987) to support education through leisure and Ferrés Prats (2014) to support the learning process based on neurosciences. We initially tried to make an interpretation of the narrative to, subsequently, make some relationships with this mentioned work.

The methodological dynamics proposes the participation of two authors of the work, one that we will call the author teacher and the other the co-author researcher, in the case of the narrative (here made by the respondent – author teacher) is the one who reports the pedagogical experience, and the co-author is the one who makes the interpretations in order to have the proper distance from the narrated facts to make the movement of making the stranger familiar and, thus interpreting what was said in the narrative and establishing a dialogue with literature. After completing the

interpretation and analysis stage, the text returned to the teacher of the author to make additions or changes she wanted, thus arriving at the final version of the text.

#### 3. Results and discussion

In the pedagogical experience, the author's teacher reported how the construction of the pedagogical strategy of playing with statues was:

"This is an old and very fun game. The indoor soccer court was used so that it could have plenty of space, due to the large number of students. Everyone had to stand on the end line of the indoor soccer court and move around the entire court with formations of Rodin's sculptures. I was in the final line on the opposite side of the students, at a certain point, I spoke the word "STATUE" and turned to face the students. At that moment, everyone stood still like a statue, representing one of Rodin's sculptures. When I turned my back to the students, they moved on the court towards the end line. And when everyone reached the finish line, the game was over. At the end of the game, we formed a circle, and each one would have to explain the history of the chosen sculpture, describe what were the components of physical fitness, and which muscles were being used at the time of the execution of the chosen sculpture" (author teacher).

Few artists have been able to exploit bronze like Auguste Rodin (1840-1917), one of the greatest sculptors of all time. Rodin's museum was inaugurated in 1919, at the Hotel Biron, a place that had been used as a workshop by Rodin since 1908.

The museum brings together works by Rodin and the artist's entire collection, including paintings by Vincent van Gogh and Pierre-Auguste Renoir that he acquired when he was alive, along with works of art from Ancient Egypt, Greece, Rome and then the Far East. The collection has 6,600 sculptures, 25,000 photographs, 8,000 drawings and 7,000 art objects. Behind the museum building there is a beautiful garden, small lake and a restaurant that is worth visiting.

# 3.1. Auguste Rodin's trajectory is marked by ten important works

#### 3.1.1. The Bronze Age

This sculpture was very important because it originated from the 1880 commission for the creation of "The Gates of Hell". It was produced eighteen months, before being exhibited at the Paris Motor Show. Originally, Rodin had placed a spear in the figure's hand but decided to remove it and left the subject open to public interpretation, as well as the ambiguous pose of the reproduced man. The sculpture has such a real naturalism that Rodin was even accused of having made plaster casts directly from the body of the model who inspired the work.

# 3.1.2. The Gate of Hell

In 1880, Auguste Rodin was commissioned to create a set of monumental bronze doors for a new museum of decorative arts in Paris. Dante Alighieri's book "The Divine Comedy" inspired the artist with its impactful depiction of the journey through Hell. Rodin's sculpture shows about 185 figures, with dimensions ranging from 15 centimeters and one meter, suffering and writhing, among them identifiable characters from Hell. The work was produced for 37 years (from 1880 to 1917) and the doors were only cast in bronze after Rodin's death. Several pieces of the work inspired other sculptures such as "The Thinker", "The Kiss" and "The Three Shadows".

# 3.1.3. The Thinker

This sculpture is one of the best known in the world. In the beginning, it was called "The Poet". "The Thinker" was first conceived as a figure in "The Gate of Hell," as if he were sitting at the top of the door watching the damned people below him. "The Thinker" represented the universal figure surrounded by a multitude of shadows. There are those who say that this thoughtful man presents in the would be Dante himself, but others believe that this was not Rodin's intention, since Dante was not muscular like the sculpture. It has also been suggested that the man was a biblical Adam, contemplating the sins of those who came after him. The sculpture "The Thinker" was first exhibited in 1888, and in 1904 it was enlarged to a monumental size. Many marble and bronze editions, including various sizes, were created during Rodin's lifetime, but the most famous version is bronze, measuring 1.8 meters and standing in the gardens of the Rodin Museum in Paris.

## 3.1.4. The Kiss

The Kiss was also initially designed as part of "The Gates of Hell". It originally represented Francesco and Paolo, characters from the Divine Comedy, who arrived in Hell after being killed by Paolo's brother, who was married to

Francesco, when he found them embracing. In 1886, Rodin decided that the image of the couple embracing did not fit thematically into the larger work and decided to replace it. The love delusions experienced with Camille Claudel, his assistant, inspired the new sculpture. But, always critical, Rodin went so far as to say that the sculpture was "a big trinket and that it only followed the usual formula". He only agreed to exhibit it in 1898, if its presentation was next to his famous work Monument to Balzac.

#### 3.1.5. The Burghers of Calais

In 1885, Auguste Rodin received a commission from the city of Calais to create a work that commemorated heroism during the Hundred Years' War (1337-1453), fought between England and France. This statue depicts six men on their way to execution. Let me explain after the city of Calais was besieged by English forces, King Edward III (of England) ordered that the keys to the city be handed over and that six leading citizens of Calais surrender their lives as volunteers to die at that historic moment. The sculpture is remarkable for its expressions, symbolism and size.

#### 3.1.6. St. John the Baptist

St. John the Baptist was an itinerant preacher from Judea and Galilee at the time of Herod (28 AD). He had many followers and preached saying that they should exercise virtue and righteousness, using baptism as a symbol of purification of the soul in his messianic movement. Rodin was not religious, but when he met an Italian peasant named Pignatelli, who offered himself as a model, Rodin immediately decided to create the work. He said at the time that when he saw the peasant, he was immediately impressed. "This rough and disheveled man expressed violence through his gait, his features and his physical strength, but also the whole mystical character of his race. Immediately, I thought of making a São João Batista".

#### 3.1.7. The Walking Man

Rodin had a penchant for reusing old molds and reworking his previous ideas. This sculpture was called "A Study for St. John the Baptist." It was created from a plaster test of a pair of legs that were being used in the work in honor of the saint. In 1900, Rodin exhibited the resulting life-size plaster version of the sculpture, and later renamed this larger version The Walking Man (1907). It is a work that exists only by itself, like a sculpture without context. The sculpture subverted the contemporary academic tradition by having a totally revolutionary form for the time: without arms and without a head.

#### 3.1.8. The Cathedral



Figure: wikied common

Auguste Rodin had an intense passion for the expression of human hands and this work explores just that: two hands that practically merge into one and with fingers that are about to touch. Created in stone in 1908, the work is only sixty-

five centimeters high and thirty centimeters wide. The work is called Cathedral because the empty space generated between the two hands resembles the internal structure of a Gothic cathedral. Auguste Rodin had the ability to explore deep spiritual themes through ostensibly simple forms like a pair of two intertwined hands. With "The Cathedral" we can observe the sacred space in which we explore in life, death and spirituality. Rodin suggests that to detect life or death we just have to look inside ourselves.

We see, with this, the richness of the proposed interdisciplinary teaching experience that uses the knowledge of the biological sciences together with the arts and elements of leisure, resulting in the facilitation of the teaching and learning processes, without considering the humanization process involved, which should be present in any teaching experience. In previous productions portraying an interdisciplinary pedagogical experience, it was also possible to observe success in the didactic process (SANTOS et al, 2023).

The sculptures described above, when discussed with the students after the "statue" game, gain movement and life when they enter the imagination of the students. This process not only enriches knowledge about the art but also serves as an effective strategy to facilitate the teaching of complex content, such as anatomy and health-related physical fitness. Topics that, in general, require intensive memorization, are addressed here in a playful way, allowing students to actively participate in a game that engages them emotionally and motivates them to learn.

Studying Rodin's works of art with students allows us to add knowledge from the biological field with that of art, creating an interdisciplinary composition that, although uncommon in the institutional context of Physical Education, proves to be extremely fruitful. By analyzing the sculptures, the undergraduates not only contemplate aesthetic beauty, but also explore human anatomy and health-related physical fitness, connecting these themes through practical activities, such as statue play. This leads them to a deeper and more integrated understanding of the topics, while also becoming familiar with the complexities of the human body.

The statue game is a clear example of education through leisure, as described by Marcellino (1987), where leisure acts as a vehicle for mobilizing emotions. Fun, an intrinsic element of leisure, facilitates the production of emotions, which, in turn, promotes a more effective learning process. According to Ferrés Prats (2014), the set of knowledge travels a longer path in the brain when associated with positive emotions, which facilitates the assimilation and retention of content. Thus, by incorporating elements of leisure, such as the statue game, into the classroom context, the learning experience becomes more attractive and effective for students.

This is because playful activities such as playing with statues synthetically condense the themes proposed for the class. During this activity, students not only have fun, but also reflect on the elements of physical fitness and musculature involved in Auguste Rodin's sculptures. When observing a work such as "The Thinker", for example, they are encouraged to identify the fundamental role of the biceps muscle in the movement of the elbow, as well as the importance of the gastrocnemius, or calf, in the movement of the ankle. This playful exercise facilitates the memorization of muscle groups, a process that is often carried out arduously in anatomy laboratories, where students spend days studying cadavers to identify different muscles or muscle groups.

By using Rodin's art as a didactic tool, Physical Education teachers introduce an aesthetic dimension to the teaching of anatomy, making learning more engaging and memorable. Rodin's sculptures, known for their anatomical accuracy and realistic depiction of the human body, offer a visual resource that complements traditional teaching methods. They allow students to visualize muscles in action, understanding how each muscle group contributes to the posture and movement portrayed in the works.

In addition, this approach also promotes a greater appreciation of art and its relevance in the study of the human body. Rodin, one of the masters of sculpture, was able to capture the essence of the human form in his works, highlighting not only physical beauty but also the tension, strength, and fragility inherent in the body. By studying his sculptures, Physical Education students develop a deeper understanding of how the body functions in different positions and under different muscle tensions, knowledge that is fundamental to the practice of physical fitness and health.

Another important aspect of this methodology is that it promotes interdisciplinarity, integrating the fields of art, science, and physical education. By exploring Rodin's sculptures, students are exposed to artistic concepts such as composition, form, and expression, while also deepening their understanding of anatomy and biomechanics. This not only enriches their academic repertoire but also prepares them for innovative pedagogical approaches in their future careers as teachers.

The relationship between art and physical education, particularly through the study of Rodin's sculptures, offers numerous advantages for teaching and learning. First, this approach makes the teaching of anatomy more accessible and interesting for students. Visualizing the muscle and bone structures in the sculptures allows students to better understand the interactions between different parts of the body, making it easier to apply this knowledge in practical contexts.

In addition, the use of art as a didactic tool contributes to the development of students' aesthetic sensitivity and critical capacity. When analyzing Rodin's works, students are encouraged to reflect on the representation of the human body in art and how this relates to contemporary notions of health, beauty, and strength. This critical reflection is essential to train Physical Education teachers capable of promoting a holistic view of health, which includes not only the physical aspect, but also the cultural and emotional aspect.

Another relevant point is that this methodology promotes active learning. By physically involving students in class, statue play transforms the classroom into a space for experimentation and discovery. Instead of just passively absorbing theoretical information, students participate in an activity that challenges them to apply their knowledge of anatomy in a practical and fun context. This not only reinforces learning but also increases student engagement and motivation.

The teaching of physical fitness through Rodin's art also opens doors to the exploration of social and cultural issues related to the body. Rodin's sculptures, often centered on themes of suffering, struggle, and resilience, can serve as starting points for discussions about the relationship between the body and society. For example, by studying works such as "The Walking Man" or "The Bronze Age," students can reflect on how different cultures and eras have idealized the human body and how these idealizations influence health and fitness practices today.

Additionally, this approach can help students develop a more inclusive and empathetic view of the human body. By exploring the different shapes, sizes, and postures represented in Rodin's sculptures, students are encouraged to value bodily diversity and to recognize that health and physical fitness can manifest in a variety of ways. This is particularly important in an educational context, where future PE teachers will have a responsibility to support all students, regardless of their physical abilities or appearances.

Finally, the use of Rodin's art in teaching physical fitness can also inspire students to explore their own creative expressions. By seeing how Rodin used sculpture to capture the movement and emotion of the human body, students can be motivated to experiment with different forms of artistic expression in their teaching practices. This will not only enrich your lessons but also contribute to the development of your skills as creative and innovative educators.

The integration of Rodin's art into the teaching of Physical Education and Health represents an innovative and effective pedagogical approach. By combining the study of Rodin's sculptures with playful activities such as statue play, teachers can create a learning environment that is both educational and engaging. This methodology not only facilitates the understanding of complex concepts of anatomy and physical fitness, but also promotes a deeper appreciation of art and body diversity. As a result, future Physical Education teachers will be better prepared to teach these topics in an inclusive, creative, and effective way, contributing to the formation of a generation of healthier and more aware students.

### 4. Conclusion

In this text, we report and present the following notes about the pedagogical experience carried out:

- The study of Auguste Rodin's works of art, when explored together with students, allows for a rich integration between knowledge from the biological field and art, demonstrating that physical fitness and health can be taught in a more holistic and meaningful way.
- The statue play exemplifies how education through leisure can be a powerful vehicle for learning, using fun and emotional engagement to facilitate the understanding of complex concepts related to the human body.
- When elements of leisure, such as Rodin's art, are brought into the classroom context, they make learning more attractive and accessible, especially when tackling difficult topics such as anatomy and physical fitness.
- The interdisciplinary teaching experience, which combines art and science, facilitates not only the teaching and learning processes, but also contributes to the humanization of pedagogical practice, making knowledge more relevant and connected to the lives of students.
- These notes lead us to reflect on the need for Physical Education courses to:

- Encourage and value interdisciplinary knowledge, recognizing that the fusion between art and science enriches the training of future teachers.
- Recognize students as active and creative subjects in the teaching and learning process, allowing them to explore their own expressions and discoveries in varied contexts.
- Encourage differentiated pedagogical experiences that go beyond traditional teaching, promoting a more dynamic and engaging approach.
- To work bodily and from elements of leisure diverse contents, especially those related to Biological and Natural Sciences, using art as a tool to make these concepts more accessible and memorable.
- Encourage a closer relationship between Education and Art, recognizing the fundamental role that art can play
  in promoting health and well-being.

The results we reached indicate that creative and exciting pedagogical experiences, such as the integration of Rodin's art in the teaching of Physical Education, are essential for Higher Education students to learn in a fun and humanized way. Art not only enriches the curriculum, but also promotes deeper learning, connecting the body and mind in a process of continuous discovery.

Pedagogical experiences that encourage emotion and creativity are not only welcome but necessary, as they have the potential to transform education into a more engaging and meaningful journey. Such approaches contribute significantly to initial teacher training courses, preparing them to teach in a more effective, inspiring and humanized way.

# Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

### References

- [1] AGUIAR, Thiago Borges de, FERREIRA, Luciana Haddad. Indicative Paradigm: narrative approach to research in the context of teacher training. Educar em Revista, Curitiba, 37, e74451, p.1-22, 2021.
- [2] FERREIRA, Luciana Haddad, PREZOTTO, Mirassol, TERRA, Juliana. Trust. Confi(n)ar: the narrative as a formative strategy in the face of recent social transformations. Brazilian Journal of (Auto)Biographical Research, Salvador, v.05, n.16, p. 1664-1681, Special Edition, 2020.
- [3] FERRÉS PRATS, J. Screens and the emotional brain. Barcelona: Editorial Gedisa, 2014.
- [4] MARCELLINO, N. C. Leisure and education. 11 ed. Campinas: Papirus, 1987.
- [5] MINAYO, Maria Cecília. de S. (ed.). Social research: theory, method and creativity. Rio de Janeiro: Vozes, 1994.
- [6] RODIN MUSEUM. Sculptures. 2024.
- [7] SANTOS, Maria Gisele dos; SILVA, Cinthia L. da; KANAN, Lilia A.; VELOZO, E. L. The teaching of bioenergetics in the interdisciplinary perspective: an experience in the initial training of teachers. REAMEC Magazine, Cuiabá/MT, v. 11, n. 1, e23078, jan./dec., 2023.