INTERIOR DESIGN CLASSROOM AND BEDROOM GENERAL FOR TWO YOUNG CHILDREN IN THE FAMILY

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DOI: 10.37550/tdmu.EJS/2025.01.611

Article Info

Volume: 7 Issue: 1 March: 2025

Received: Dec. 18th, 2024 **Accepted:** Jan. 15th, 2025 **Page No:** 59-71

Abstract

This paper is devoted to guiding parents in organizing classrooms and bedrooms for their children, ensuring that they have the most reasonable position to rest and study. That is how to design, arrange, and select items in a room to serve two children of the same sex, aged from 6 to 18. Arrange the bed to suit the cramped housing situation. Install study tables and chairs so that children can sit and study comfortably. Choose to buy a bookshelf and hang it on the wall so that it is steady and within reach of your children's operation and use. Essential daily items are arranged neatly so that children can conveniently take them out, use them, and store them in the right place. Thanks to having an ideal room to rest, study, and conveniently use equipment, children will develop well in literature, physical skills, and aesthetics and will always love their family. Later, when the children grow up, no matter where they go, the image of the beautiful little room of their childhood will always be kept in their memories. The interior design of the classroom and bedroom for two small children in a family is fully and clearly shown in 3D images by us. We have presented how to arrange and install items in the room so that everyone can apply this design to their family situation.

ISSN (print): 1859-4433; (online): 2615-9635

Keywords: bookshelf, bunk bed, desk, room, wardrobe

1. Introduction

Interior design is a broad profession that can strongly influence how people perceive and use a room (Anushka Shorewala and Andrew Ardito, 2021). Interior design is an extremely important step to building a beautiful and complete house (Le Minh Son et al., 2017). According to common psychology, everyone wants to have the most suitable space to work, study, and rest. This article focuses on that. We give a proposal for designing the interior of a room for two children (two sons or two daughters) in a way that saves the most floor space while still guaranteeing maximum comfort.

The family is a social cell, the cradle for the development and formation of each person's personality. In the family, parents are the ones in charge of guiding their children through the most meaningful childhood period. Children have the right to play,

ISSN (print): 1859-4433; (online): 2615-9635

study, and rest with the love and care of their parents. During the day, after studying at school, interacting with friends, teachers, etc., and returning home at night, it is essential for children to have a private space to study and rest. Children spend more time at home than anywhere else (Gifford & Lacombe, 2006). One-third of a child's life takes place in the bedroom (Buyukpamukcu, 2004). Half of a person's life is spent at home; family life mainly includes resting, living, studying, eating, doing housework, etc. (Xiaoxing Zhang, 2023). Children need to be provided with their own space according to their preferences so that they can grow healthily (Sarjoo Patel & Pooja Shah, 2018).

Children are the most adorable members of the family. Every parent wants the best for their child. Among all the rooms in the house, children's rooms are the most interesting to decorate (Sarjoo Patel & Pooja Shah, 2018). Today, children begin to feel a sense of ownership very early, knowing which objects and places are their own. As children grow up, they need privacy, a place to play, and a place to keep things (Hardy, 1955). A child's room is not just a room, but "it is a palace, a forest, a sailboat, a rocket, or maybe a hideaway" (Sarjoo Patel & Pooja Shah, 2018).

Parents always want their children to develop well physically and intellectually and to bond with the family. However, many parents have not thought about the need to build a separate room to ensure comfort for their children. In reality, due to busy work and a fast pace of life, many parents spend very limited time with their children, sometimes ignoring or not thinking about the need to take care of a place to sleep, a place to study, and a place to play. Give your child a scientific way. There are parents who make the mistake of not knowing how to arrange tables and chairs for their children to study. Which table the parents sit at, the child sits at, even when their children are grown up, they still let them sleep with them, and the furniture is left messy and untidy. Therefore, designing an impressive, comfortable room for children is something every parent must think about. The interior design for a room suitable for two children will be presented in detail by us.

Before this design by us, there will certainly be many designs by many other authors. However, each person has their own views and ideas. Our view is to present the design with 3D images and use the most common words, ensuring that all readers can understand.

2. Interior design classroom and bedroom general for two young children in the family

2.1. Choose the room

Here, we chose a room with dimensions of 3.5 m wide and 4 m long (floor area $S = 3.5 \times 4 = 14 \text{m}^2$), minimum height of 3m, surrounded by brick walls, a ceramic tiled floor, full windows, and the main door as shown in figure 1. According to Vietnamese Standard TCVN 4450: 1987, the size of the room is just enough for two or more people to work, study, and rest. The windows use sliding doors; the main door is an in/out door; the door is made of steel frame with glass and has enough hooks and locking latches. Paint the walls pink or white if this room is for two girls; the walls should be painted blue or white if this room is for two boys, or parents can consult with their children. According to research by many other authors, color can be used to enhance the utility and functionality of a room (Anushka Shorewala and Andrew Ardito, 2021); most girls like to paint their rooms pink and white, and boys like to paint their rooms blue and white (Meryem Yalcin et al., 2015).

The window should not let the sunlight be too bright, nor should it be obscured by the wall of the house next door. If possible, parents should not turn the window to the east or west, because at that time it is easy to be exposed to direct sunlight. Parents should try to choose so that their children's classrooms use as much natural light as possible. Natural light has many benefits, such as boosting vitamin D and keeping people's circadian sleep cycle on track (Anushka Shorewala and Andrew Ardito, 2021). Students in classrooms with lots of daylight improved 20% faster on math tests and 26% faster on language arts tests than students in classrooms with little daylight more naturally. More natural light also results in significantly higher student test scores (Loisos, 1999).

2.2. Choose a table and chair model and a sitting position for your children to study

Tables and chairs for children to study on must be at an appropriate height for their age. The height of tables and chairs needs to change as the children grow up. Currently, on the market, there are all kinds of good-quality tables and chairs that can be increased or decreased in height, and the prices are also moderate. Parents can refer to some types of tables and chairs for their children, as shown in figure 1.



Figure 1. Choose a desk and chair for your children to study (Girls choose pink tables and chairs; boys choose blue tables and chairs)

In addition to the table and chairs shown in figure 1, in our opinion, parents can also choose the table and chair set as shown in figure 2. This is a table and chair set designed by us. The chair is similar to a traditional chair, with a base and backrest made of soft material, and is especially durable to good steel and wood materials. The table is drilled with holes and screwed tightly to the wall. As the children grow taller and older, the parents can also raise the table, which means we have to drill another hole in the wall and install the table a little higher.

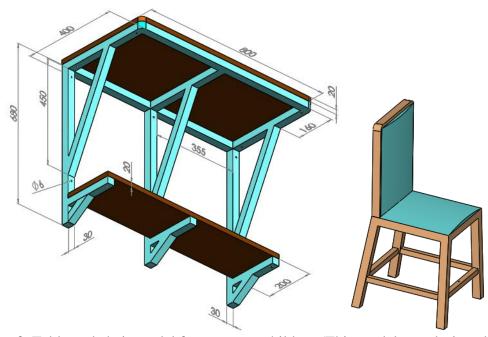


Figure 2. Table and chair model for your two children (This model was designed by us)

The structure of the table includes a steel frame using 30mm square steel, 1.4mm thick, with a 20mm thick wooden board on top. Install the table legs to the wall with screws as shown in figure 3. We can change the height of the table top compared to the floor by changing the holes drilled into the wall and thereby changing the screw holes into the legs table (on average, every 1.5 years, the height of the tabletop above the floor should be increased once). According to Joint Circular No. 26/2011/TTLT-BGDĐT-BKHCN-BYT, for people to sit on a chair and write at a reasonable level (not too hunched or too straight), the height from the table surface to the chair surface is between 190mm and 280mm. Therefore, we designed a table that could increase or decrease the height of the table top compared to the chair surface according to this data range.

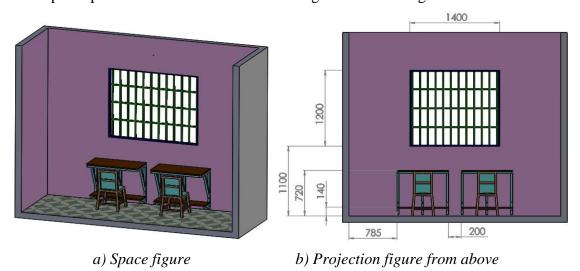


Figure 3. Install the desk on the wall with screws (table height can be changed).

The placement of children's desks is also very important. We should use a place with enough light and a natural wind direction. Therefore, we install the desk near the window and align it evenly with the window. The two sitting positions of the two

children are symmetrical, with the vertical axis passing through the center of the window, ensuring enough light and airiness. If there is not enough light, we must install more light bulbs with yellow or white light.

2.3. Choose a bed model for two children

According to the above section, we chose a room for two children with a floor size of 3.5×4.0 m. If we put a bed measuring 1.8×1.4 m for two children to sleep together or spread a mattress directly on the floor to sleep, it is inconvenient because it will take up a lot of floor space in the room, and really, children don't like it either. Therefore, we chose a bunk bed style with stairs up and down. Currently, on the market, there are all kinds of bunk beds, wooden or steel beds. Parents can refer to bunk bed models as shown in figure 4.

Bunk beds must have safe stairs to go up and down and enough drawers for children to store their belongings and tools. When choosing to buy bunk beds, parents should first choose a few models that suit the room. After that, the parents show it to their children, and the parents will decide which model they like. If we buy a bed for a girl, we should choose a pink one, like in figures 4a, b; if we buy a bed for a boy, we should buy a blue, yellow, or red wood color, as shown in figures 4c, d, and e. Steel bunk beds like figure 4f are not suitable for children because the stairs are not safe and the design is not beautiful and suitable for children. Parents should limit the use of this type.





a)b)





c) d)

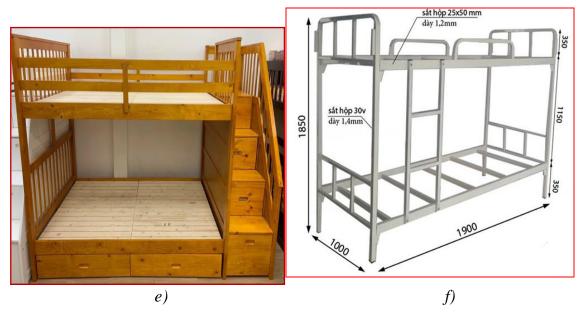


Figure 4. Choose bunk beds for your 2 children

In addition, in this article, we also propose to design a steel bunk bed model as shown in figure 5. This is a bunk bed model connected to a wardrobe. Parents can buy additional patterns (available at places that produce steel beds, places that sell windows, etc.) and attach them to the positions of this steel bed that parents think are most beautiful.

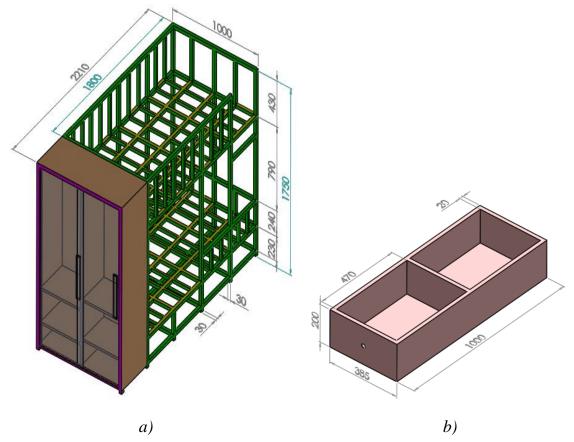


Figure 5. Bunk bed model for your two children (this model was designed by us) *a) A steel bunk bed combined with a wooden wardrobe; b) Drawers for other items*

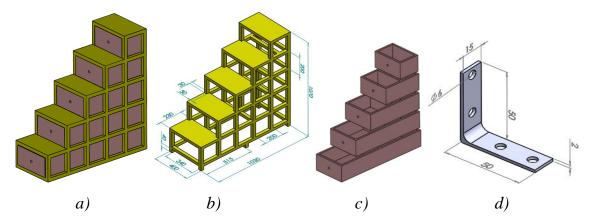


Figure 6. Steel stairs and wooden drawers a) The stairs have enough drawers installed; b) The stairs; c) drawers; d) square corner

We relied on commercially available steel bunk bed designs to design a new bed model. The bed model shown in figure 4f is made from 30mm square steel bars, 1.4mm thick. Our new bed model is also made from similar steel bars. However, we used more steel bars to reinforce the bed, making it much stronger and safer than other steel beds on the market. We designed such a sturdy and expensive bunk bed for children to use for a long time. The children have used it since they were 6 to 18 years old, and the bed has not broken down yet. Even when the children have grown up, that bed is still there. At that time, when the children looked at the bed, their childhood came back, and the love between family and parents became deeper.

The steel bunk bed designed by us, as shown in figure 5, is much stronger and safer than steel bunk beds available on the market. We also designed a steel staircase and wooden drawers, as shown in figure 6. There is no need to use the stair handle because it is placed very safely between the wall and the bed, as shown in figure 7. The location of bunk beds and the stairs in the room are as shown in figure 7.

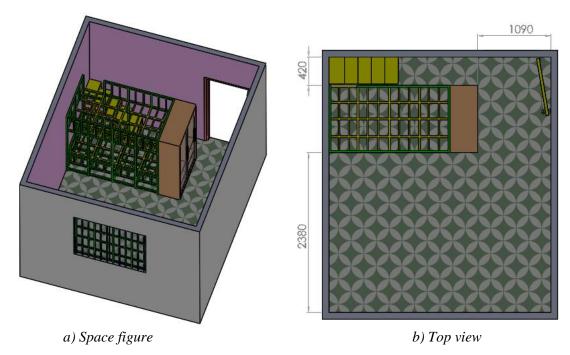


Figure 7. Place bunk beds and stairs in the correct position in the room

2.4. Choose a wardrobe model

The wardrobe for two children is a symmetrical two-compartment cabinet, with each child using one compartment. As we presented in the previous section, the wardrobe designed by us is attached to the bunk bed, as shown in figure 5. It is a wooden cabinet with two symmetrical vertical compartments and small compartments below. However, parents can choose to buy plastic or wooden wardrobe models, as shown in figure 8. Parents should choose the color of the wardrobe according to their children's preferences, and then the children will be happy and satisfied. Enjoy every time you go to your own room.



Figure 8. Some wardrobe models

2.5. Choose a bookshelf model

Currently, wooden bookshelves are sold a lot on the market. Parents can refer to and choose to buy bookshelves, as shown in figures 9 a, b, and c. However, to fit the size of the room, we designed wooden bookshelves as shown in figure 9d and placed them in the room as shown in figure 10. Note: It is necessary to drill the wall and screw, firmly pressing the bookshelves close together.

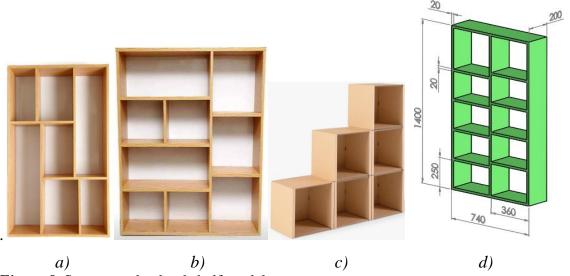


Figure 9. Some wooden bookshelf models *a, b, c) bookshelf models; d) bookshelf designed by us*

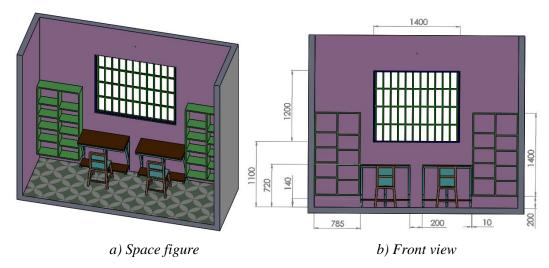


Figure 10. Install two bookshelves in the room

2.6. Choose other tools and equipment

Other tools and equipment in the room must also be chosen to be suitable for children. In this way, the tools and equipment in the room where young children spend most of their time will play a large role in their living environment (Burdurlu et al., 2004; Moore, 2002; Garbarini, 1999). Nowadays, there are many exploratory mass media tools for young children (such as phones, tablets, computers, internet-connected TVs, etc.), so parents are becoming more and more aware of the great influence of such devices on children's development (Yalcin, 2011). To fully equip a room, we suggest adding tools and equipment, as shown in figure 11. Specifically, as follows:

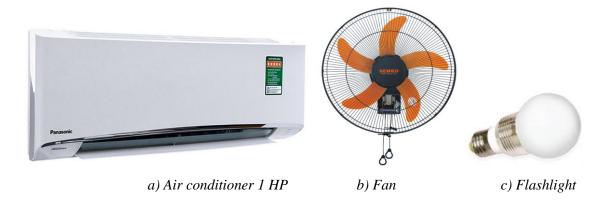
1 HP air conditioner (1 set). If parents do not have economic conditions or do not like air conditioning, they can use a fan hung on the wall (the purpose is not to cause collisions when the children walk, but they must choose the most suitable location possible).

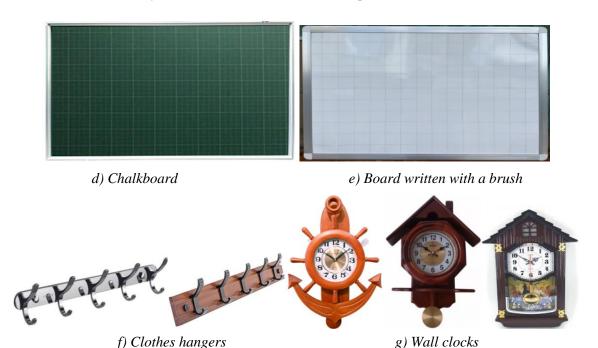
Chalkboard or marker pen (2 pieces, size 1000×1200mm). Thanks to the board, children can freely manipulate and draft exercises on the board, helping them become more confident.

Wall clock (1 piece) or alarm clock (1 piece for each child).

Electric light bulbs with enough brightness (3 bulbs, 2 of which are placed on the desk, and 1 bulb is hung on the wall).

Hangers for hanging tools, clothes, hats, etc. (1 set for each child). You should use wall hooks as shown in figure 11.

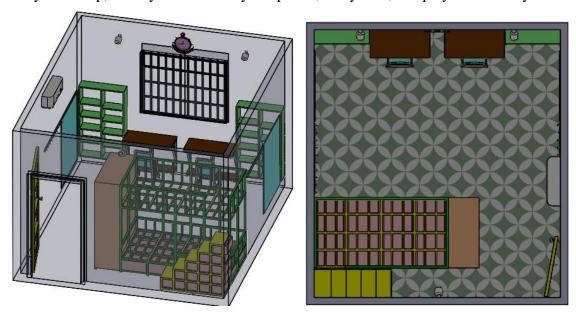




ISSN (print): 1859-4433; (online): 2615-9635

Figure 11. Other tools and equipment for the room

After having all the tools and equipment, we install them in the correct position in the room, as shown in figure 12. Each tool and piece of equipment needs to be placed in the correct position to exploit its full potential. At the same time, it is also convenient for children to use; when they need it, they can get it right away without having to take many extra steps. Parents can also monitor the devices and tools in their children's rooms to see if they are working properly. If any part is inconvenient, parents need to fix it immediately and also regularly remind their children to make it a habit to put tools, briefcases, books, pens, notebooks, clothes, hats, etc. in the right place. The children all have their own place to store personal belongings and a clear and comfortable place to study and sleep, so they will definitely sleep well, study well, and play comfortably.



a) Space figure b) Top view Figure 12. The room after being fully equipped with equipment and tools

3. Results and discussion

Through this article, we want to share with readers about home comforts and parents' care and education for their children. Some points of view that need to be discussed are as follows:

ISSN (print): 1859-4433; (online): 2615-9635

First, parents are proud to sacrifice for their children all their lives. Providing amenities in the classroom and bedroom for children to use effectively is something parents need to do from the time their children are young until they become adults.

Second, people need to know how to arrange their homes neatly. If household items are properly selected, placed in the right location, and used by the right person, then they can fully utilize their functions and serve our lives well.

Third, people are priceless assets. People need to be educated and given conditions to develop comprehensively in literature, body, and aesthetics. In particular, parents are the leaders in guiding their children from the moment they are born. Parents teach their children all the things that have been learned from experience from one generation to the next. However, not all parents know how to arrange and use all the functions of household items; not all parents know how to arrange tables and chairs in the correct position and choose a well-lit and airy place for their children to study; not all parents regularly remind and monitor their children to put school supplies, clothes, hats, etc. in the right place. Therefore, this article wants to send everyone a specific solution, which is how to arrange and arrange items in a bedroom as a study room for two children of the same sex, for everyone to refer to and be able to use. apply to your family situation.

Fourth, for families with only a small house, bunk beds are most appropriate. We make the most of the extra space below the bunk beds or stairs to make storage drawers, which is the optimal solution. Of course, taking advantage of that extra space must ensure aesthetics and convenience for users.

Fifth, parents need to buy and arrange for their children the most comfortable and convenient items, ensuring their children have the fewest unnecessary movements when using those items. This shapes the children's effective working style, just like the 5S rule that we have been guided to and implemented at the company and factory.

Sixth, parents train their children to feel that "there is no place like home" and "your parents are your homeland." Later, when the children grow up, no matter where they go, they will still remember the special room designed just for them by their parents. It is an unusual table that my father mounted on the wall and still has screw holes printed on it, proving the children's maturity. It is a steel bunk bed designed by my father that is extremely sturdy and can be passed down from generation to generation. All the memories of our children's homeland, family, parents, siblings, etc. in the future are created by us today.

4. Conclusion

Interior design elements have a positive impact on children's learning, happiness, comfort, and development. We have done that. We have designed a room to study and rest for two children of the same sex, aged from 6 to 18. In particular, we focus on how to arrange items so that the children can take full advantage of their functions and use them in the most convenient way. Children don't have to make extra movements to get items out or put them in the right place.

ISSN (print): 1859-4433; (online): 2615-9635

We send a message to parents: take more care of your children; create all conditions for them to play, rest, and study in the most harmonious and meaningful way. A room with all the necessary amenities for two children; What part is common will be shared by our two children, and what part is private will be clearly defined and must be used separately. Avoid as much as possible the cases of children arguing or quarreling with each other.

We have consulted many studies and directly interacted with many families with two children of the same gender who are of school age from elementary school to high school. Most of them believe that a separate room for two children needs to have a layout suitable for family lifestyle, with enough light, airy, necessary amenities, and must create a good learning environment. However, they only talk in general terms and do not have any blueprints indicating what size room should be used, what types of items should be used, what size each item is, how to arrange items in what position in the room, etc.

In this study, we have created a specific design, we have proposed using bunk beds to save floor space, using height-changing desks to suit children's ages, dividing separate items between the two children so they are less likely to argue, and arranging items in the most scientific way in our opinion. We think that our design is very specific, the vast majority of families with young children can apply and follow.

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