

ECIE4012

The Principles of Learning and Teaching

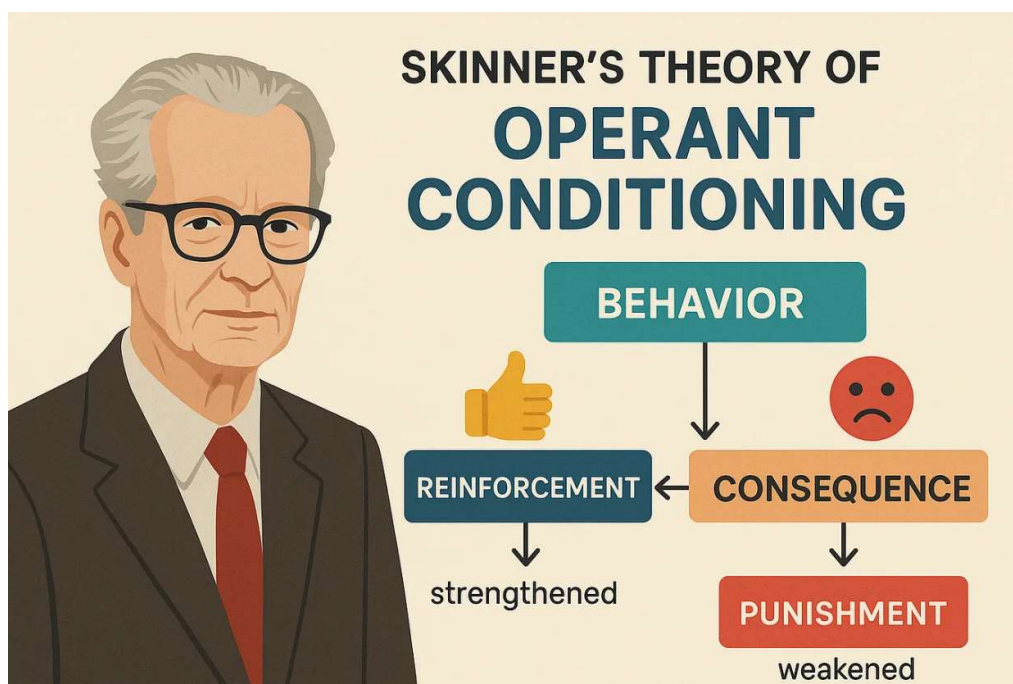
**Portfolio**

Student Number:

2411835

## **Blog 1** Demonstrate your understanding of a theory of learning from the following list: Bruner, Skinner, Piaget, Vygotsky, Froebel

This blog will demonstrate my understanding of the theory of learning from B.F. Skinner, who believed that human behaviour is shaped by consequences. He experimented it using his own designed “Skinner boxes” using pigeons and rats and showed that consistent reinforcement can shape behaviour. To him, if it works in animals then it can certainly work to humans. His Theory is called “Operant Conditioning” (Skinner, 1953).



MaxLearn Microlearning Platform, (2025)

**What truly drives human behaviour?** In today's world, have you ever stopped to think about why we repeat certain actions like checking our phones or even saying simple phrases like the basic expressions of respect, “*please*” and “*thank you*”? Every choice we make, whether it's showing up to work with enthusiasm or simply getting through the day, bears consequences that quietly shape our future decisions. Psychologist B.F. Skinner known for his ‘Skinner Box’ emphasised on the role of environmental factors in shaping behaviour and this blog will explore his theory of operant conditioning (1953) and how this mechanism helps explain how rewards and punishments modify human actions.

# Skinner's Operant Conditioning And Learning

|                 | <b>REINFORCEMENT</b> - Increase/maintain or strengthen behaviour                                                  | <b>PUNISHMENT</b> - Decrease/vanish or weaken the behaviour                                                        |
|-----------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Positive</b> | <p>Add pleasant stimulus</p>     | <p>Add aversive stimulus</p>     |
| <b>Negative</b> | <p>Remove aversive stimulus</p>  | <p>Remove pleasant stimulus</p>  |

communicationtheory.org

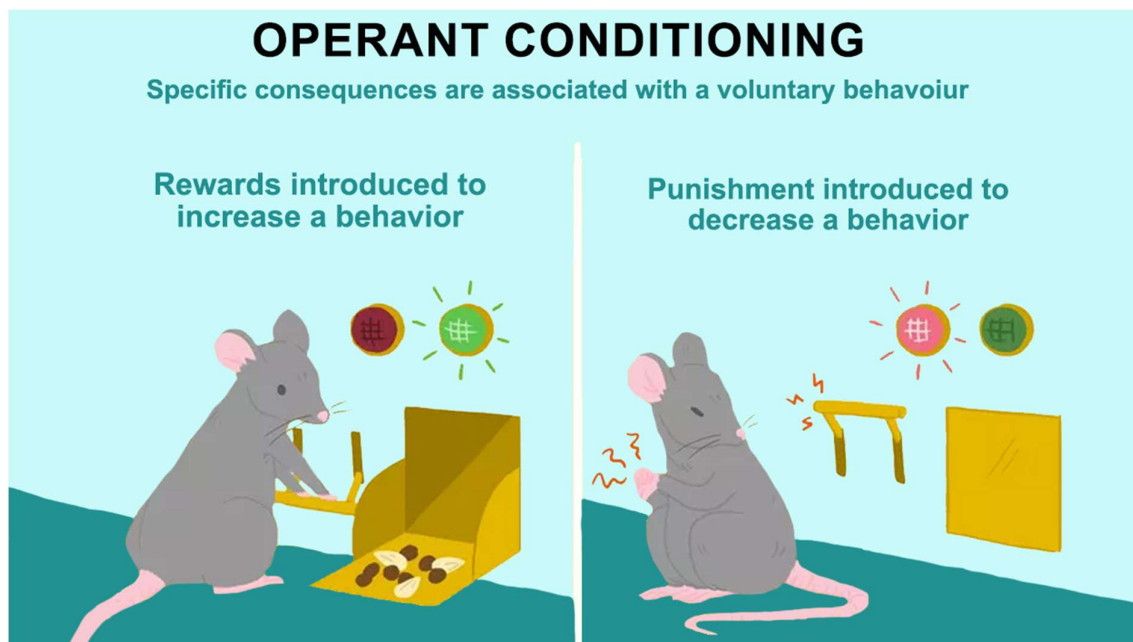
Communication Theory, (2025)

## So, what is operant conditioning?

- ✚ Operant conditioning, developed by B.F. Skinner in the mid- 20<sup>th</sup> century is a type of learning where behaviour is influenced by its consequences.
- ✚ It suggests that the tendency of a behaviour happening again depends on the consequences that follow.
- ✚ The core idea is simple: behaviours that are followed by positive outcomes (reinforcements) are more likely to be repeated, whereas those followed by negative outcomes (punishments) are less likely to occur in the future.
- ✚ This process of modifying behaviour through reinforcement and punishment is what Skinner referred to as “operant conditioning” (McLeod, 2025).
- ✚ This approach to learning, can be traced back to Edward Thorndike (2025), whose law of effects proposed that behaviour followed by a positive result or a sense of satisfaction, are more likely to be repeated in the future.

## Human behaviour as a product of conditioning

- ✚ Skinner presented human behaviour very predictable through Operant conditioning which is simply the idea that we learn based on what happens after we act.
- ✚ If a behaviour results in a reward, we are likely to repeat it or strengthen it; if it leads to something unpleasant or punishment then we will avoid it (weakens).
- ✚ This straightforward concept influences nearly everything we do, and once we start paying attention, we can see operant conditioning at work all around us.
- ✚ It is important to understand the pattern because it helps explain why learners respond to sticker rewards; how both good and bad habit takes place and why motivation can soar or disappear depending on feedback.



Fity.club. (2025)

## Evaluation/ Critique

- ✚ B.F. Skinner idea is maybe decades old, but it is still relevant today. Whether we are raising children, teaching learners or trying to build better habits ourselves, the results that follow our actions continue to shape what we do next (Cardwell, 2012).
- ✚ However, this made me wonder: are we being manipulated by the response-reinforcement cycle? If that were the case then surely, I still choose the things that make me feel good. And in doing so, I am exercising personal choice and free will which contradicts Skinner's theory all along as he believes that the existence of free will is merely an illusion (Cardwell, 2012).
- ✚ It is also important to remember that much of Skinner's work is based on animal research. Critics argue that such studies cannot confirm nor refute hypotheses about human behaviour. At most, they can only suggest new hypotheses to consider understanding human behaviour.

## Blog 1: Reference list

Cardwell, M.; Flanagan, C. (2012). Psychology A2 "The Complete Companion Student Book" 3<sup>rd</sup> Edition

McLeod, S. (2025). Edward Thorndike: The Law of Effect Available at: <https://www.simplypsychology.org/edward-thorndike.html> Accessed: 17/11/2025

McLeod, S. (2025). Operant conditioning: What it is, how it works, and examples Available at: [Operant Conditioning In Psychology: B.F. Skinner Theory](#) Accessed: 09/11/2025

Skinner, B. F. (1953). *Science and Human Behaviour*. New York: Macmillan. Available at:

<https://www.bing.com/search?q=skinner+1953+science+and+human+behavior&form=ANNTTH1&refig=690e849c967b4c37ab376fecdb0b8f66&pc=U531&pq>  
Accessed: 07/11/2025

MaxLearn Microlearning Platform (2025). *Why Operant Conditioning Still Matters in Today's Digital Learning Age*. [online] Medium. Available at: <https://maxlearn-microlearning.medium.com/why-operant-conditioning-still-matters-in-todays-digital-learning-age-bd2707c04c73>. Accessed: 24/11/2025

Communication Theory, (2022). *B.F. Skinner's Theory of Operant Conditioning*. [online] Available at: <https://www.communicationtheory.org/b-f-skinners-theory-of-operant-conditioning/>. Accessed: 24/11/2025

Fity.club. (2025). *Operant Conditioning Theory Week 12, March 6, Tuesday Inquiry 3*. [online] Available at: <https://fity.club/lists/suggestions/operant-conditioning-theory/>. Accessed: 24/11/2025

## Blog 2

Demonstrate your understanding of a theory of learning from the following list:

Bruner, Skinner, Piaget, Vygotsky, Froebel. The theory must be different to Blog 1.

This blog will demonstrate my understanding of Friedrich Froebel's "Theory of Play".

**Friedrich Froebel 1782-1857 (Gill, 2015)**



"Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul."

I have raised my children and spent countless hours watching them play when they were little just like any other parent do. I was often struck how creative they were and mesmerized over the naivety look on their faces. It looked fun as they were entertaining themselves just like what I did in my childhood; they were laughing, exploring, enjoying themselves and not a care to this world. Play according to Julia Berry is what children and young people do when they follow their own initiatives and curiosity in their own way and for their own reasons (2022). But to Friedrich Froebel, founder of Kindergarten Movement; translated as "garden for children", the play time were not only for entertainment but was also the most meaningful and natural way the children can learn about themselves and the world around them (Froebel Trust, 2020).

## Understanding Froebel's Theory of Play

Before we dived into Friedrich Froebel's groundbreaking approach to education, it is worth pausing to reflect on his early life. I believe that understanding his childhood experiences will offer valuable insight into how his approach of play and learning took shape.

Friedrich Froebel (1782-1852) was born in Germany, the son of a Lutheran pastor. Tragically, his mother passed away when he was just nine months old, and his father remarried by the time Froebel was four. His childhood was marked by feelings of neglect and unhappiness, leading him to eventually live with his maternal uncle, a changed that provided him with stability.

He was educated and through his studies, he developed a deep appreciation for artistic perspective and symmetry. These interests were not merely hobbies: they became foundational to his later work. When he established the kindergarten, he applied these principles in the design of his famous educational tools and activities that encouraged children to explore patterns, balance and creativity in their play called the 'gifts' and 'occupations' (State University, 2025).



Koblin, (2021)



Koblin, (2021)

### **Play as A Language of the Soul**

Froebel's approach emphasised that through play, children can express their thoughts, emotions and ideas before they can even describe them. In other words, play have become the language of the child; a way to communicate, to explore, to make sense of their experience and even to solve problems. He realised that children need a real life, hands-on experiences to foster creativity and make sense of their environment. In this sense, what may look like simple fun to adults, is actually children engaging in learning through activity and self-reflection which is a holistic view of development; and the use of tools like 'gifts' and 'occupation' to facilitate exploration (Froebel Trust, 2020). Froebel saw play as important to healthy development, supporting not only intellectual growth but emotional and social too (Bruce,2021).

### **Friedrich Frobel's legacy**

- Understanding Froebel's approach will help early years educators appreciate the value of child play in learning.

- Froebel's theory of play continues to shape classrooms and policies across the globe, reminding us that play is not a luxury but a foundation of learning and development (Early Excellence, 2025).
- In the UK alone, his approach is well reflected with in the early years foundation stage (EYFS) statutory framework, which acknowledges the importance of play-based learning as foundation for early years learning and development (Early Excellence, 2025).
- Montessori education that operates around the world extends Froebel's theory by including practical learning skills to help children develop self-reliance. The Reggio Emilia in Italy believe that children cultivate knowledge through play, probe and artistry (Early Excellence, 2025).
- The Welsh government (2002) have adopted the 'play policy', coined from the UNRC 'children's Right' Article 31, recognising the value of children's play as fundamental and an important dimension of the pleasure of children and is an essential component of children's development.



Ryan, (2025)

### **So, what have we learned? (Louis et al., 2020)**

- Childhood is a unique stage of life, and it is not just a rehearsal of what comes next.
- Childhood should be valued in its own right, rather than seen merely as a preparation for school or adulthood.
- Children growth flourishes if we notice their abilities, value and celebrate their journey and achievements.
- Children use play to represent their ideas and make symbolic meaning connecting their inner world to the outside one.



Ryan, (2025)

### **Froebel's theory limitations**

- ❖ Froebel's theory is based on the 19<sup>th</sup> century, back when the view of children is a smaller version of an adult capable of discipline and can be instructed at an early age hence it was also revolutionary at the time (Froebel Trust, 2020). It can be argued that our world today is focused on diversity and inclusivity, and his idea must be adapted to modern contexts,

balancing the value of play with the demands of literacy and numeracy in our educational system.

- ❖ Over-generalization – Some critique said that play is overly presented to automatically lead to development which can potentially underestimate the need for an adult guidance and intervention to expand learning (Brostrom, 2017).

## Blog 2: Reference list,

Berry, J., (2022). WJEC GCE A level Health and social care, and childcare-childcare pathway units 3&4. Cardiff: WJEC. Pp77-79

Brostrom, S., (2017). Available at: Nordic early Childhood Education Research: Values, Issues and Research Paradigm. Accessed 25/11/2025.

Bruce, T. (2021). *Friedrich Froebel: A Critical Introduction to key themes and debates*. London; New York: Bloomsbury Academic. Accessed 25/11/2025.

Early excellence Inspirational learning, (2025) Friedrich Froebel: His Principles, Play Theory, and Legacy in Education. Available at: [Friedrich Froebel: His Principles, Play Theory & Educational Legacy](#) (Accessed: 21/11/25)

Froebel Trust (n.d.) *About Friedrich Froebel: The power of play*. Available at: <https://www.froebel.org.uk/about-us/the-power-of-play/about-friedrich-froebel> (Accessed: 20/11/25)

Gill, C., (2015) The influence of Froebel. Available at: [The Influence of Froebel - Play Create Learn](#) (Accessed 27/11/25)

Koblin J, (2021), *Froebel's Kindergarten: The Origins of Early Childhood Education* Available at: [Froebel's Kindergarten: The Origins of Early Childhood Education - Sprouts - Learning Videos - Social Sciences](#) (Accessed: 27 November 2025)

Louis, S.; Powell, S. (2020) About Friedrich Froebel: Who invented kindergarten. Available at: [Froebel Trust | About Friedrich Froebel, who invented “kindergarten”](#) (Accessed: 21/11/25)

Ryan, P. (2025). *Friedrich Froebel: His Principles, Play Theory, and Legacy in Education*. [online] Early Excellence. Available at: <https://earlyexcellence.com/practice-and-pedagogy/friedrich-froebel-theory/> (Accessed: 24/11/25).

StateUniversity.com (n.d.), (2025). *Friedrich Froebel (1782–1852) – Biography, Froebel's Kindergarten Philosophy, The Kindergarten Curriculum, Diffusion of the Kindergarten*. Available at: <https://education.stateuniversity.com/pages/2033/Froebel-Friedrich-1782-1852.html> (Accessed: 25 November 2025).

United Nations (1989) *Convention on the Rights of the Child*. Treaty no. 27531. United Nations Treaty Series, 1577, pp. 3–178. Available at: [https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-](https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-14%20AM/Ch_IV_11p.pdf)

[14%20AM/Ch\\_IV\\_11p.pdf](#) (Accessed: 24 November 2025).

Wales Government, (2002) Play Wales: Available at: [Current play policy in Wales - Play Wales](#) (Accessed: 21/11/25)

## Blog 3

Identify, discuss, and evaluate the theoretical approaches to learning linked to your theories from Blogs 1 and 2.

This blog is going to explore the theoretical approaches to learning of both Friedrich Froebel's 'Theory of Play' and B.F. Skinner's learning theory of 'Operant Conditioning'.

### **Friedrich Froebel VS B.F. Skinner**

Myteachingcupboard.com(2024)



Ar.inspiredpencil.com (2024)

These two theorists I believe, stand out each time we think of educational theory and that could probably be due to its contrasting ideas. Friedrich Froebel often called the father of kindergarten, reminds us that children thrive if given the chance to explore, create and connect with nature (Early Excellence, 2025). B.F. Skinner on the other hand is the father of operant conditioning that offers a scientific framework for shaping behaviour through reinforcement (Skinner, 1953). These are two different ideas all together one is rooted in freedom and connection to nature, whilst the other is through structure and control yet they both enabled us to understand how learning takes place.

### **Key Elements of F. Froebel's theory of play: (Early Excellence, 2025)**

- ✚ Child-centred philosophy- Focus on the child's interest creativity and natural inquisitiveness.
- ✚ Play as the foundation- Emphasis on Child-led learning, purposeful play and self-activity as mode of learning.
- ✚ Connection to nature- He believed that everything in the universe is interconnected.
- ✚ Holistic development- Children's thought, feelings, and actions should be seen as a part of whole and not separated.
- ✚ Educational tools- Introduction of "gifts" such as the wooden blocks and yarn balls; and "occupation" or the hands- on activities allowing them to discover mathematics.



### **Froebel Trust, (2020)**

**“To learn a thing in life and through doing is much more developing, cultivating and strengthening than to learn it merely through the verbal communication of ideas” (Froebel Trust, 2020).**

### Key Elements of B.F. Skinner's Operant Conditioning Theory: (Skinner, 2014)

- ✚ Behaviourist foundation- It is based on behaviourism, and the cornerstone is through observation rather than feelings or initiatives.
- ✚ Reinforcement and punishment- The focus is the role of reinforcement (rewards) and punishment in shaping observable behaviour.
- ✚ Emphasised on environmental control or the three term contingency: Learning follows a cycle: stimulus-response-consequence.
- ✚ Structured environments- Activities are mostly teacher-directed resulting in a measurable behaviour.
- ✚ Shaping complex behaviour- learners can push their limits driven by the rewards ahead.

## Principles of Operant Conditioning

- ❑ **Reinforcement :-** Behaviour that is positively reinforced will reoccur; intermittent reinforcement is particularly effective
- ❑ **Shaping:-** Information should be presented in small amounts so that responses can be reinforced
- ❑ **Stimulus generalization :-** Reinforcements will generalize across similar stimuli producing secondary conditioning



### Strength and Limitations:

| Features                | Froebel<br>(Early Excellence, 2025) | Skinner<br>(Skinner, 1953)                   |
|-------------------------|-------------------------------------|----------------------------------------------|
| Goal of education       | Holistic development of the child   | Acquisition of specific observable behaviour |
| Learning environment    | Nature based, free flow             | Structured, measured, controllable           |
| View of the child       | Active, naturally curious, creative | Passive, shaped by the environment           |
| Role of the teacher     | Observer, facilitator, guide        | Controller of stimuli and reinforcers        |
| Core driver of learning | Play, imagination, exploration      | Reinforcement and punishment                 |

### **Evaluation/ Critique**

- ✚ Friedrich Froebel and B.F. Skinner had two different philosophies in learning.
- ✚ Froebel theory values inner motivation and creativity helping children to understand consequences of their action (Early Excellence, 2025).
- ✚ B.F. Skinner's over- reliance on extrinsic rewards risking behaviour to become habitual (McLeod, 2025).
- ✚ There could be a potential connection between them as both are observed to acknowledge the environment to shape learning.
- ✚ Froebel's nurturing "kindergarten" opposite Skinner's reinforcement are both pointing at external factors influencing children's developments.
- ✚ Both have recognised motivation as central to learning in Skinner's reward and Froebel's creativity.

## Blog 3: Reference list

Ar.inspiredpencil.com (2024) available at: [B F Skinner Box Experiment](#) Accessed 7/12/2025

Cranmore, J., (2022) Available at: [.B. F. Skinner: Lasting Influences in Education and Behaviorism | SpringerLink](#) Accessed 3/12/2025

Early excellence Inspirational learning, (2025) Friedrich Froebel: His Principles, Play Theory, and Legacy in Education. Available at: [Friedrich Froebel: His Principles, Play Theory & Educational Legacy](#) Accessed 1/12/25

Froebel Trust (n.d.) *About Friedrich Froebel: The power of play*. Available at: <https://www.froebel.org.uk/about-us/the-power-of-play/about-friedrich-froebel> Accessed 3/12/2025.

Louis, S.; Powell, S. (2020) About Friedrich Froebel: Who invented kindergarten. Available at: [Froebel Trust | About Friedrich Froebel, who invented “kindergarten”](#) Accessed 1/12/2025

Mcleod, S., (2025) Operant Conditioning: What it is, how it works, and example Available at: [Operant Conditioning In Psychology: B.F. Skinner Theory](#) Accessed 3/12/2025

Myteachingcupboard.com (2024) Available at: [Froebel's Theory of Play for Early Childhood Education — My Teaching Cupboard](#) Accessed 7/12/25

Practical Psychology, (2023). Available at: [B.F. Skinner \(Psychologist Biography\) - Practical Psychology](#) Accessed 1/12/2025

Skinner, B.F., (2014). Available at: [Contingencies of Reinforcement](#) A Theoretical Analysis B.F. Skinner Foundation. Accessed 3/12/2025

Skinner, B.F., 1953. Available at: [Science and human behaviour.](#) Accessed 3/11/2025

Slideshare.net, (2020) Available at: [Theory of Operant Conditioning - B F Skinner | PPTX](#) Accessed (7/12/2025)

## Blog 4

Draw on experiences from your own setting to identify resources and strategies used to support effective teaching and learning, linking back to your chosen theories in Blogs 1 & 2

My previous blogs have attempted to demonstrate my understanding of Friedrich Froebel with his “Theory of Play” and B.F. Skinner with his Theory “Operant Conditioning”. This time, I am going to take you into my workplace, which I consider contemporary, and together we will explore how interestingly both approaches are unknowingly woven into our daily practice.

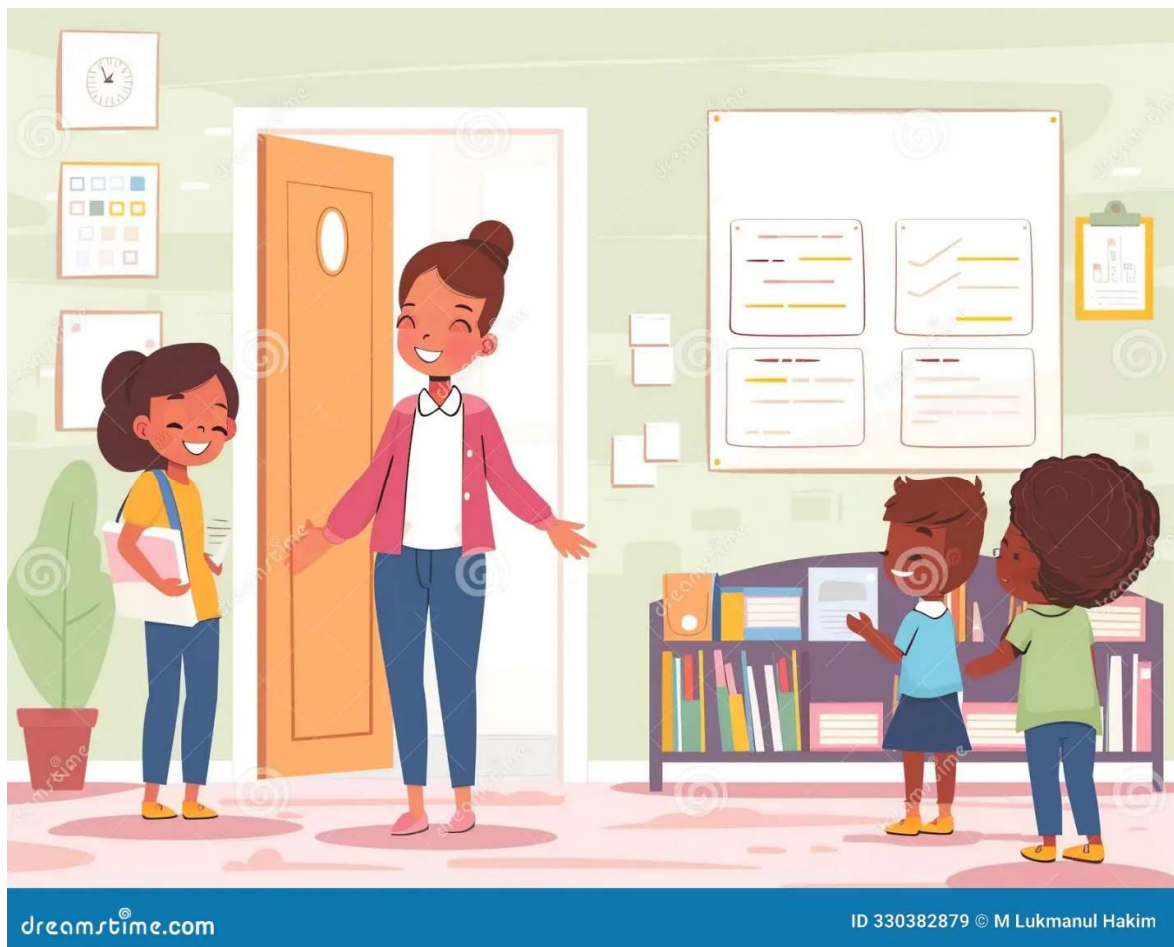
### **Rewards and recognition foster pride and motivation in learners**



Michelle, (2025)

### Our setting:

- ✚ At our school, we start the day with a warm greeting from our pastoral manager, who stands at the door to welcome people in. A few picture frames of students lifting trophies, performing drama, as well as framed quotations from famous people, hang all over the foyer and continue along the corridors.
- ✚ The classrooms are no different. However, instead of laminated frames and posters, the walls display the names of learners. It's all about them. Their drawings, crafts, projects and a few encouraging sayings are glued to the wall.
- ✚ In our Pathway Class, a sofa set is notable, along with shelves filled with boardgames such as a chess set, wooden jigsaw puzzles, colourful stick dice and many more. This area is sometimes called the “play corner”.



dreamstime.com

ID 330382879 © M Lukmanul Hakim

Dreamstime.com, (2025)



Opening the book, (2025)



Amazon, (2025)

### My own reflection:

- ✚ I have been working as classroom support for few years now, and I've watched teachers rolled out their personal purchase of stickers, sweet treats, positive points as merits and "post card" to take home.
- ✚ Each week, a "star student" is celebrated with their names displayed until another learner earns the spot.
- ✚ Most of all, I've seen teachers offer verbal expressions of appreciation each time a learner achieved success.
- ✚ I have witnessed the unconcealed delight of these learners and often felt my own delight for them, especially when their efforts might otherwise go unnoticed by the teachers.
- ✚ It always gives me déjà vu as to when my children were younger, and their happiness and pride that lit up their eyes each time they presented me with an earned sticker or treat from their day.

### Strategies in action:

1. Warm greetings, picture frames of achievements and quotations
  - These follows a tone of belonging and care as well as symbolic representations and inspirational quotations. These can be link to Froebel's approach emphasising a nurturing environment and that

education should be rooted in relationships and joy as well as connecting learning to a higher value (Brodie, 2025).

- The above can align to Skinner who argued that behaviour is shaped by reinforcement (Skinner, 1953). The warm greeting for example is a silent positive reinforcement for respect.
- Froebel's intrinsic motivation (Froebel Trust, 2020)), complements Skinner's extrinsic reinforcement, resulting to a balanced learning environment.

## 2. Learners' names and achievement glued on the wall

- This can be link to Froebel's perspective of symbolic play and joyful recognition and celebrating individuality is align to holistic approach. (Early excellence, 2025)
- Skinner would explain this as reinforcement mechanism, shaping behaviour by linking effort to obvious rewards (McLeod, 2025)

## 3. Play corner

- This is where both Froebel and Skinner theories go hand in hand as it is not just a fun space, but it can be seen as learning laboratory. Froebel's intrinsic joy coming from the play itself (Early Excellence, 2025), and Skinner's extrinsic reinforcement like rewarding effort and creativity, strengthens positive behaviour (McLeod, 2025).

## Evaluation/critique:

- ✚ Friedrich Froebel's strength weighs on promoting intrinsic motivation, creativity and holistic development (Early Excellence, 2025), but some critiques argue that it may lack the structured guidance of formal educational models.
- ✚ B.F. Skinner's strength provides practical tools for shaping behaviour and maintaining classroom order but risks over-reliance on rewards (McLeod, 2025).
- ✚ Combining Froebel's play-based resources with Skinner's reinforcement strategies, will create a classroom that is both nurturing and structured.

## Blog 4: Reference list

Brodie, K., (2025) Early Years TV Available at: <https://www.earlyyears.tv/friedrich-froebel-power-of-play/> Accessed 9/12/2025

Early Excellence Inspirational Learning (2025) Available at: [Friedrich Froebel: His Principles, Play Theory & Educational Legacy](#) Accessed 10/12/2025

Froebel Trust (n.d.) *About Friedrich Froebel: The power of play*. Available at: <https://www.froebel.org.uk/about-us/the-power-of-play/about-friedrich-froebel> Accessed 9/12/2025.

Image Available at: [https://www.amazon.co.uk/Nene-Toys-BALLFALL-Montessori-Colorful/dp/B0C5RJNH12/ref=pd\\_lpo](https://www.amazon.co.uk/Nene-Toys-BALLFALL-Montessori-Colorful/dp/B0C5RJNH12/ref=pd_lpo) Accessed 9/12/2025

Images Available at: [Tempting Book Displayers - Opening the Book North America](#) Accessed 9/12/2025

Images Available at: [Smiling Teacher Welcoming Students To Classroom with Bookshelves and Bulletin Board Stock Illustration - Illustration of entrance, education: 330382879](#) accessed 10/12/2025

McLeod, S., (2025) Operant Conditioning: What it is, how it works, and example Available at: [Operant Conditioning In Psychology: B.F. Skinner Theory](#) Accessed 10/12/2025

Michelle, X., (2025) Available at: [A Simple Classroom Rewards System that Works - TEACH SMART with me](#) Accessed 8/12/2025

Skinner, B.F., 1953. Available at: [Science and human behaviour.](#) Accessed 9/12/2025