A short guide to the THE LEARNING PIT
THE LEARNING PIT

The Learning Pit helps students to be more comfortable with challenge; to develop problem solving strategies; and to articulate their learning. Created by James Nottingham in the early 2000s, it is now used in thousands of schools around the world. An online search generates 250 million results, making it one of the most popular and enduring illustrations of learning.

What do students gain from the Learning Pit?

The Learning Pit is being used with pre-K to 12 students (ages 3-19) and adult learners to help them with:

- **Improving ATTITUDES** towards challenging situations (including SEL – social and emotional learning; determination; sensitivity; open-mindedness; focus; analysis; and a growth mindset)
- **Developing SKILLS** of learning (including curiosity, collaboration, critical thinking, metacognition and problem-solving)
- **Deepening KNOWLEDGE** and understanding (including making connections, drawing distinctions, synthesising, reflecting, reasoning and explaining)

Of course, these gains don’t come simply from sharing an image of the Learning Pit with your students! They are developed over time within a culture of learning in which critical, creative, caring and collaborative thinking are sensitively and strategically grown. The Learning Pit provides the backdrop and student-centred reference point for this mission.

It is therefore important to be mindful of the ways in which the Learning Pit is established. This is why demonstration lessons are a key part of the support we offer educators. Give us any class of students of any age and we’ll show you the Learning Pit working in your context. Afterwards, we’ll review the lessons together and design some clear steps for building the learning culture you want.
Introducing the Learning Pit with a clear set of values is an important first step to this. Here, then, are some of the key messages we advocate:

**Learning can be frustrating**
When you learn something new – or try to improve something you can already do – it can feel as if things get worse before they get better. For example, you find information to answer a question but then you come across complications or contradictions; or you try a new skill and start with ‘beginner’s luck’ but then you can’t seem to replicate that success. This feeling of taking one step forward followed by two steps back can be frustrating; it can even make you want to quit. And yet, these feelings are normal; they are all part of the learning journey. So, do not despair! Instead, tell yourself you are in the Learning Pit. Know that if you keep going, try a different approach, apply more effort and determination, or organise things differently, you will come out the other side with a much better solution – one that will be far more applicable and adaptable.

**Learning should be hard**
The more you struggle, the more you will remember. Or, to put it another way: easy come, easy go. If you find your answers quickly, complete a task without hesitation, or perform a skill without having to concentrate, then the chances are, you won’t remember the lessons for very long. In fact, it seems that if you fail first before you succeed then this will lead to much more adaptable and proficient skill and understanding than if you experience easy success. Therefore, my job is to design lessons that will make you struggle! I will still encourage you; I will still guide you and teach you; but I will also challenge you to step out of your comfort zone and into the Learning Pit so that your learning will be much more sustainable and adaptable.

**Let’s talk about our learning**
The main purpose of schooling is to learn. It’s also about being safe and enjoying our lives – but the fundamental purpose is that of learning. So, let’s talk about our learning – not just what we’re learning, but also how we’re learning; why we’re learning the things we are; and when we need to adapt our learning to different circumstances. The Learning Pit can help us with this.

**LEARNING PIT RESOURCES**
There is a wide selection of illustrations on our website, all available to download. These include bilingual pits – perfect for language teaching.

We have graphics available for you to create your own

![The Learning Pit](image1)

![The Learning Pit](image2)

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[Download them here](#)
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1. **First response**
   
   At step one, we can think about our first responses; what we thought; what we found; what we tried; and what we imagined might happen. Our learning journey didn’t start with knowing ‘nothing’; it started with knowing something. However, that ‘something’ wasn’t enough – yet – for deep understanding or well-practised skills. That’s why we went into the Learning Pit: to discover the nuances, exceptions and conditions associated with important concepts and abilities.

2. **Complications and contradictions**

   At step two, we can describe the information and actions that complicated matters. We can identify what didn’t work and why; talk about the counterexamples we found; and think about the causes of our mistakes and missteps. We can also share how we responded when things felt like they were going wrong. Reminding ourselves how a positive attitude kept us going, even when we wanted to give up or find quick fixes, could be useful too. As psychologists, Bjork & Bjork, once wrote: “Desirable difficulties enhance learning!” (1994)

3. **Strategy and focus**

   When we’re at the bottom of the Learning Pit, we can turn our attentions to strategy: what methods we tried and why; which approach helped us the most and which hindered; who we collaborated with and which roles each of us took; and how we marshalled our resources (for example, our time, energy, and focus) in order to make progress. Reminding ourselves of the benefits of collaborating with each other should also help us to strengthen our community of inquiry.

4. **Organising and creating**

   As we climbed out of the Learning Pit, we can reflect on the ways in which we arranged, synthesised or fashioned our responses to make sense of our learning. The awareness of progress and efficacy we typically experience at this stage is reassuring, but it is also important not to clutch at straws – we need to ensure our solution isn’t going to lead to further problems or inaccuracies later. Also be brave in sharing with others what you let go of or adapted even though you were hesitant to do so.

5. **Eureka!**

   *Eureka* means, ‘I found it’. It does not mean someone else did it for you; nor does it mean you dodged the challenge. It means something has clicked for you, bringing with it new confidence and clarity. It’s not always an obvious moment – sometimes it’s more gradual – but when you experience the eureka moment, it reminds you just how satisfying learning can be. So, enjoy the moment and encourage others to keep persevering so that they too might experience their eureka moments.

6. **Connect and apply**

   Now that you’re out of the Learning Pit, you should be feeling a great deal of satisfaction with the progress you have made. Look for ways to connect this new learning to other experiences and contexts: how is it similar and different; what would you repeat and what would you avoid; how might the outcomes have changed if you had done things differently? Also think about applying your learning to different circumstances: this will help to broaden and extend the gains you have made.
BOOKS ABOUT THE LEARNING PIT

James Nottingham has written 11 books for teachers, leaders, and parents. To take a deeper dive into the Learning Pit, we recommend these books:

The Learning Pit (Nottingham, 2020)
The best book to give you an overview and quick start to using the Learning Pit with students aged 3-19.

"Profound, practical and precise: The Learning Pit tells you how to make your classroom a place where young people would love to be."
Professor Guy Claxton, Author of Building Learning Power

The Learning Challenge: Guiding Students Through the Learning Pit (Nottingham, 2017)
An in-depth guide to guiding 7-19-year-olds through the Learning Pit, including plans, strategies, and recommended concepts.

"The Learning Challenge is a must read, not only for teachers but also for students to understand and be deliberate about the way they approach the challenges, thrills and processes of learning."
Summer Howarth, Director of Learning Design and Events Education Changemakers, Melbourne, Australia

Challenging Early Learning (Nottingham & Nottingham, 2018)
Activities, recommendations, and adaptations to guide young children aged 3-7 through the Learning Pit. Covering the best ways to develop dialogue, challenge, feedback, mindset, questioning, self-efficacy, and the Learning Pit with pre-school and infant school children.

School’s Out, Learning’s In: Home-Learning Activities (Nottingham, Bergmann, & Nottingham, 2021)
Resource book for parents and carers, packed with recommendations and activities to engage 3-12-year-olds at home.

Learning Challenge Lessons: Primary (Nottingham & Nottingham, 2018)
Ideas and resources to guide 5-12-year-olds through the Learning Pit by exploring central and important concepts across the curriculum.

"The Learning Pit books explain the complex in a way that is accessible and inviting. They help you cut through the urban myths and misinterpretations of research and focus instead on actions of high impact – all with great clarity and humour"
Professor Carol Dweck, 2019

Learning Challenge Lessons: English Language Arts (Nottingham, Nottingham, & Bollom, 2019)
Lesson guides and resources for English teachers to engage 11-19-year-olds students in classic and significant plays, novels, speeches and historical non-fiction.

More info on our books here
**DRAWING AND REFERENCING THE LEARNING PIT**

When drawing a Learning Pit, you should ensure the exit is higher than the start so that your students know their efforts will lead to enhanced understanding and skills.

*The start & finish points are the same level

*The finish point is higher than the start, helping to show the effort of going through the pit will lead to improved outcomes

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**REFERENCING THE LEARNING PIT**

It still gives us a thrill to know how widely used the Learning Pit is – and we’re sure part of its success has come from James Nottingham’s insistence that his model should be open source. However, there are some who abuse this goodwill, so we have now been granted the trademark, *The Learning Pit*, by the Intellectual Property Organization (IPO). Our first recourse will always be to request first though.

Illustrations by you or your students (eg posters or artwork for use in school) should state clearly the following:

- Illustration by (your name)
- From the Learning Pit by James Nottingham

No commercial use is permitted unless with written permission from James Nottingham. Further trademark and copyright details are available on LearningPit.org

Patent & Trademark, Reg. No. 6,381,157

Class 16: Books, educational materials, lesson plans, manuals, brochures, presentation slides and reports

Class 41: Educational consulting services
QUESTIONS TO GUIDE STUDENTS THROUGH THE LEARNING PIT

Earlier in this introduction, the Learning Pit journey was broken down into six stages. The questioning strategies often associated with each of these stages are as follows:

1. First Response
   - Could you tell us more?
   - Can you give an example?
   - Do you think that would always work?
   - Go on …
   - Could anyone else add an example?

2. Complications and contradictions
   - Would someone explain that a bit more?
   - Can we think of counterexamples?
   - Are you suggesting that …?
   - What is the difference between …?
   - What if …?

3. Strategy and focus
   - What do we already know about …?
   - Who or what would benefit from …?
   - Are there alternative ways to …?
   - Are these ideas of equal value?
   - When would that make it worse / similar / different?

4. Organising and creating
   There are many ways to help students climb out of the Learning Pit. The following strategies are described and illustrated in Section 6.3 of The Learning Challenge (Nottingham, 2017)
   I. Concept Targets
   II. Interchange
   III. Ranking
   IV. Opinion Lines
   V. Opinion Corners
   VI. Concept Lines
   VII. Concept Circles
   VIII. Concept Tables
   IX. Venn Diagrams
   X. Inference Squares

5. Eureka!
   - How do you feel about this now?
   - What do we know now that we didn’t know before?
   - Which strategies helped you the most?
   - Which question led to the most (progress, thought, confusion, etc)?
   - What advice do you have for people still in the pit?

6. Connect and apply
   - What questions do you still have?
   - What misunderstandings, misconceptions or assumptions did you uncover?
   - How could you adapt your new learning to another situation?
   - What would be the best way to summarise your learning?
   - Would you use a different sequence next time to be more effective?