

**Discover | Learn | Create**

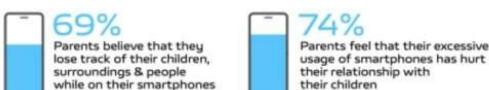
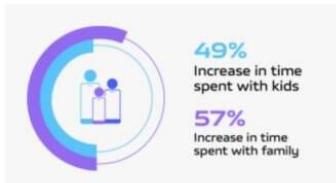
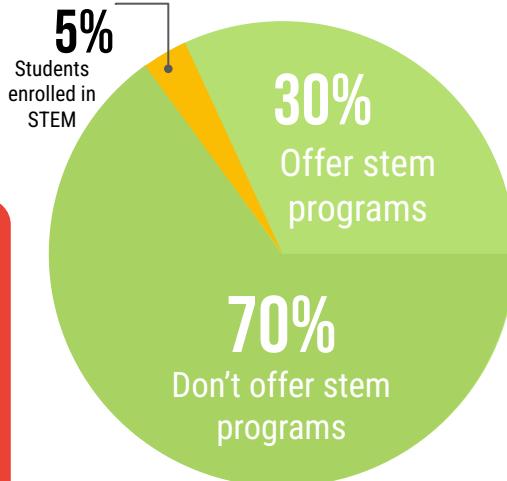
Help your children learn with engaging  
STEM-based educational kits

# STEM EDUCATION

## THE RESEARCH

“Our research strives to improve STEM curriculum by producing science comics for use in K-12 education, college education, and adult learning. A major difficulty in STEM education is the difficulty that students have in becoming engaged with the concepts and developing deeper comprehension.”

Northeastern University

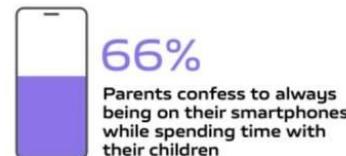


### HOW PROFICIENT ARE SECONDARY SCHOOL STUDENTS IN INDIA?

- 57% of 14-18 year olds can't do a simple division
- 40% of 18 year olds can't read a simple sentence in English
- 25% in the 14-18 age group cannot read basic text in their own language
- Only 5% school students are taking some kind of vocational education
- 42% of 14-18 age group students are working regardless of their schooling
- 76% could count money
- 58% cannot read their state map, 14% could not read India map
- Female drop-out rate **rises** with age
- 75% youth have their own bank account

66% of students take tuitions for 2-4 hours after school. Cambridge Assessment International Education

<sup>a</sup>Vivo SwitchOff 2021 survey



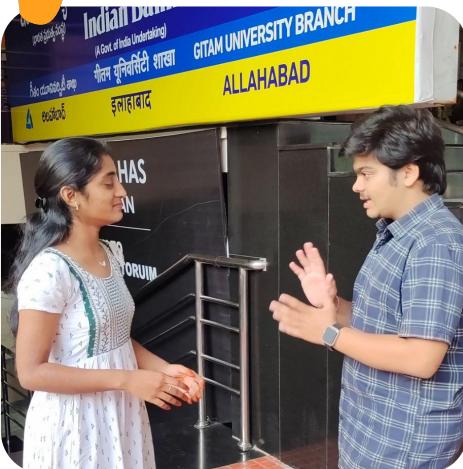
90%  
Parents report that their children display some signs of aggression

85%  
Parents feel that their children find it difficult to mix with other children in a social setting and they find the overall outdoor experience to be daunting

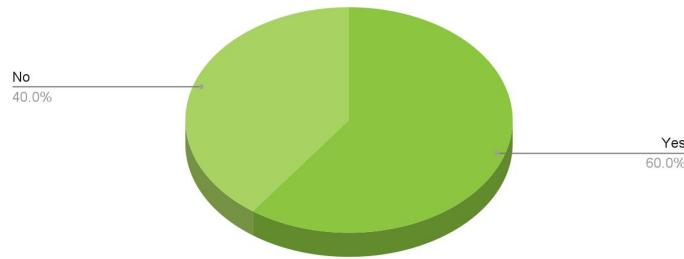
90%  
Parents feel that their children are sometimes found to be lacking in acceptable moral and social behavior

# THE RESEARCH CUSTOMER DISCOVERY

Number of Parents	36
Number of Students	140
Number of educators/entrepreneurs	24

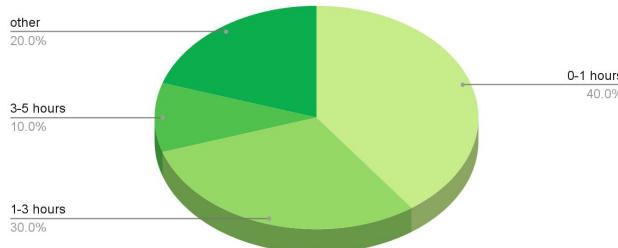


Do you have a hard time finding easy-to-understand and inclusive educational materials?



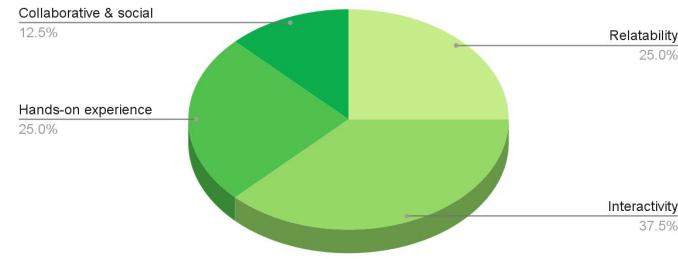
**Insight:** Parents do have a hard time finding easy-to-understand and inclusive educational materials.

How much time can you invest to engage with STEM concepts?



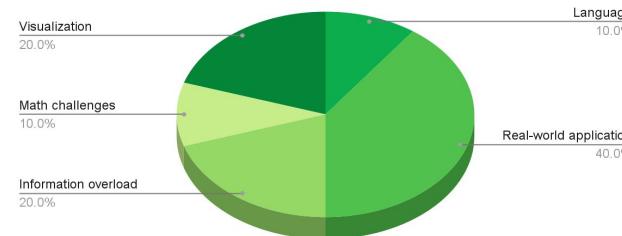
**Insight:** An hour per day or a few hours on the weekend is something that students can invest in for STEM learning.

Suggest some ideas on how to make STEM concepts more engaging.



**Insight:** Real-life examples, interactive experiments, gamification and storytelling with rewards are great ways to increase engagement within students.

What difficulties do you face engaging with STEM/abstract concepts?



**Insight:** Lack of real-word application and information overload with no-visualization inhibit STEM learning.

## CUSTOMER PAIN POINTS

# LEARNING TODAY ISN'T INTERESTING KNOWLEDGE IS.

Students struggle with engaging in STEM concepts, abstract ideas, and real-life applications.

Limited collaborative and social learning opportunities.

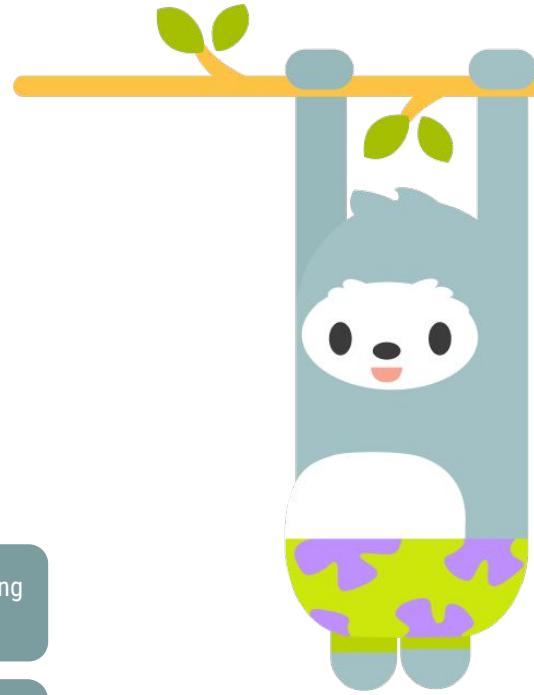
Difficulty finding comprehensive, inclusive educational resources promoting critical thinking.

Environmental impact of educational materials and their recycling.

Lack of immersive, interactive and fun learning experiences.

Excessive gadget use hampers parent-child interaction and outdoor engagement.

Takes in a lot of their time to study and perform well.



## GLOSSARY

### STEM

Science | Technology | Engineering | Mathematics  
Incorporates experimental interactive hands-on learning through real-world applications, igniting creativity and critical thinking, and strengthening their foundation.

# THE PROBLEM



Traditional education falls short in engaging young minds with STEM subjects, grasp abstract ideas, lacking immersive and comprehensive experiences, hindering effective holistic learning and inhibits their ability to apply knowledge in real-world scenarios.



**30%**  
Understanding and engagement with traditional learning methods



**57%**  
Grapple with the daunting challenge of solving basic division



**13,000 students**  
died in 2021 in India at the rate of more than 35 every day, with **864** out of **10,732** suicides being due to “failure in examination.”

# OUR SOLUTION

STEMQuest is an educational kit that brings the joy of learning to children to create a unique comprehensive learning experience that keeps children **excited, entertained, and educated** while fostering **creativity and parent child interaction** through

Engaging  
storylines



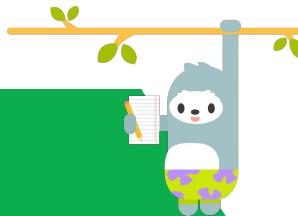
Hands-on  
experience



Immersive &  
Imaginative



Self-Assessment



# MINIMUM VIABLE PRODUCT

# PLATFORM PREVIEW



The home page features a vibrant, cartoon-style illustration of a forest with various trees, a small stream, and a blue sky with birds. In the center, there's a large, friendly-looking orange fox standing on its hind legs. To the left, a brown bear and a green frog are visible. To the right, a pink rabbit is looking towards the viewer. The title "STEMQuest" is prominently displayed in a large, bold, dark blue font at the top left. Below it is a paragraph of placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit." At the bottom left, there's a "Know More:" section with two buttons: "as student" (blue) and "as educators" (pink). The overall design is clean and modern, with a focus on education and exploration.

1

HOME PAGE

The explore concepts page has a header with the "STEM QUEST" logo, a search bar, and a user profile icon. Below the header, a sub-header reads "Explore our vast range of concepts" with a subtitle "Explore our vast range of concepts". There are ten cards arranged in two rows of five. Each card includes a thumbnail image, the concept name, a brief description, and a rating of 4.5 stars from 142 reviews. The cards are: "Into the Mitochondrion" (Thumbnail: red mitochondrion), "Indian Mythology" (Thumbnail: Ganesha), "Cell Reproduction" (Thumbnail: scientist with microscope), "Reproduction" (Thumbnail: circular DNA helix), "The Evolution" (Thumbnail: horse skeleton), "Life Forces: The Heart" (Thumbnail: heart), "Sensors Demystified" (Thumbnail: pink sensor), "Why Do Chemicals..." (Thumbnail: flask with bubbling liquid), "The Golden Treasure..." (Thumbnail: mountain), and "Life Forces: The Sci..." (Thumbnail: person with DNA). The "PREVIEW" card is partially visible on the far right.

2

EXPLORE CONCEPTS

# MINIMUM VIABLE PRODUCT

# PLATFORM PREVIEW



## STEM QUEST

Search by comic/edition

### Explore our vast range of concepts

Explore our vast range of concepts

Sort Filter

 Into the Mitochond... Lorem ipsum dolor sit am... ★★★★★ 142	 Indian Mythology Lorem ipsum dolor sit am... ★★★★★ 142	 Cell Reproduction Lorem ipsum dolor sit am... ★★★★★ 142
 Reproduction Lorem ipsum dolor sit am... ★★★★★ 142	 The Evolution Lorem ipsum dolor sit am... ★★★★★ 142	 Life Forces: The He... Lorem ipsum dolor sit am... ★★★★★ 142

X

### Read Preview

Read Preview  
Lorem ipsum dolor amet sit ametuer lorem ipsum

## Into the Mitochondria

Edition One Age 12-18 Biology

This is a placeholder for the text which describes the gist of the comic.

This is a placeholder for the text which describes the gist of the comic. Placing dummy text for prototyping purposes. This is a placeholder for the text which describes the gist of the comic. Placing dummy text for prototyping purposes.

Learn More Let's Customize

## STEM QUEST

Search by comic/edition

### CUSTOMIZATION

## Into the Mitochondria

Edition One

Enter a prompt on how would you like your comic to be customized...

Generate Comic

### Your kit includes

 Comic Supporting line text lorem ipsum dolor sit amet, consectetur	<input checked="" type="checkbox"/>
 Origami Supporting line text lorem ipsum dolor sit amet, consectetur	<input checked="" type="checkbox"/>
 VR Headset Supporting line text lorem ipsum dolor sit amet, consectetur	<input type="checkbox"/>
 Mixed Reality Content Supporting line text lorem ipsum dolor sit amet, consectetur	<input checked="" type="checkbox"/>
 Assessment Platform Supporting line text lorem ipsum dolor sit amet,	<input checked="" type="checkbox"/>
 Worksheets Supporting line text lorem ipsum dolor sit amet,	<input type="checkbox"/>

SCIENCE #1  
INTO THE MITOCHONDRIA

Total ₹5000 Proceed to Cart

3

SELECT A COMIC

4

CUSTOMIZE YOUR KIT

# MINIMUM VIABLE PRODUCT

# PLATFORM PREVIEW



## STEM QUEST

Search by comic/edition



ADDRESS & PAYMENT

**Home**  
Dr. No. 50-103-4,  
Uma Sivam Residency,  
T.P.T. Colony, Seethammadara,  
Visakhapatnam,  
Andhra Pradesh, India - 530013  
**Contact:** +91 90591 45216

**Work**  
1600,  
Amphitheatre Pkwy,  
Mountain View,  
California,  
United States - 94043  
**Contact:** +1 650-253-0000

**Clinic**  
10-50-72,  
Rockdale Layout,  
Behind Seven Hills I  
Ram Nagar, Visakh  
Andhra Pradesh 53  
**Contact:** +91 94411

**Pay with Apple Pay**

**Pay with UPI**

or pay with card

**Email**  
manasmalla.dev@gmail.com

**Billing Address**

**Home**  
Dr. No. 50-103-4,  
Uma Sivam Residency,  
T.P.T. Colony, Seethammadara,  
Visakhapatnam,  
Andhra Pradesh, India - 530013  
**Contact:** +91 90591 45216

**Work**  
1600,  
Amphitheatre Pkwy,  
Mountain View,  
California,  
United States - 94043  
**Contact:** +91 90591 45216

**Card Information**  
1234 5678 9012 3456  
12/24 ...

**YOUR CART**  
3 ITEMS

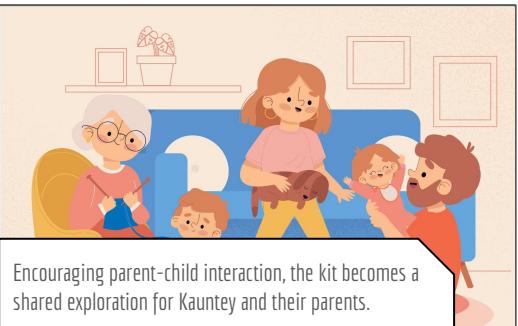
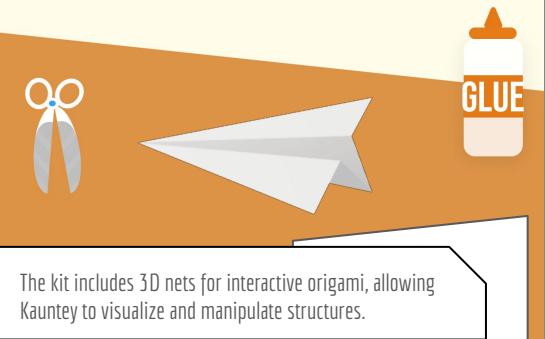
	<b>Into The Mitochondria</b> This is a placeholder for the text which describes the gist of the comic. Qty 1	5000
	<b>Indian Mythology</b> This is a placeholder for the text which describes the gist of the comic. Qty 2	6,000
	<b>Mixed Reality Headset</b> This is a placeholder for the text which describes the gist of the comic. Qty 1	10,000

Total: 16,000

# THE STORY USE CASE



Kauntey, a 10-year-old STEM enthusiast, eagerly anticipates their monthly educational kit.



# WHAT WE OFFER

## OUR FEATURES

### Engaging Comics

Explore a gadget-free comic character franchise blending education and fun seamlessly.

### Audiobooks

Empowering visually impaired with immersive stories via audio, anytime, anywhere.

### Crafts and Activities

Offer visual-tactile STEM learning for practical understanding.

### Immersive Virtual Reality

A VR playground with AI, powered by Generative AI, answers to all your curiosity.

### Assessment Platform

Boost learning with error-guided assessments for confidence and critical thinking.

### Worksheets

Interactive, personalized learning for kids to test traditional problem-solving.

### Collaborative and Social Features

Promote community through group projects, discussions, and challenges.

### Parental Involvement and Supplementary Resources

Encourage parent-child conversations with guides, tips, and offline activities.

### Sustainability

*Prioritize eco-friendly materials, encourage recycling with points.*



# CUSTOMER VALUE PROPOSITION

## OUR PRODUCT

### FOR STUDENTS

- Makes learning fun, engaging and personalized through a comic character franchise blended seamlessly.
- Offers visual-tactile STEM learning for practical understanding through hands-on learning.
- Boosts hypothetical thinking and curiosity through a VR playground with AI.
- Boosts learning with error-guided assessments for confidence and critical thinking.
- Promotes community through group projects, discussions, and challenges.
- Empowering visually impaired with immersive stories via audio, anytime, anywhere.

### FOR PARENTS

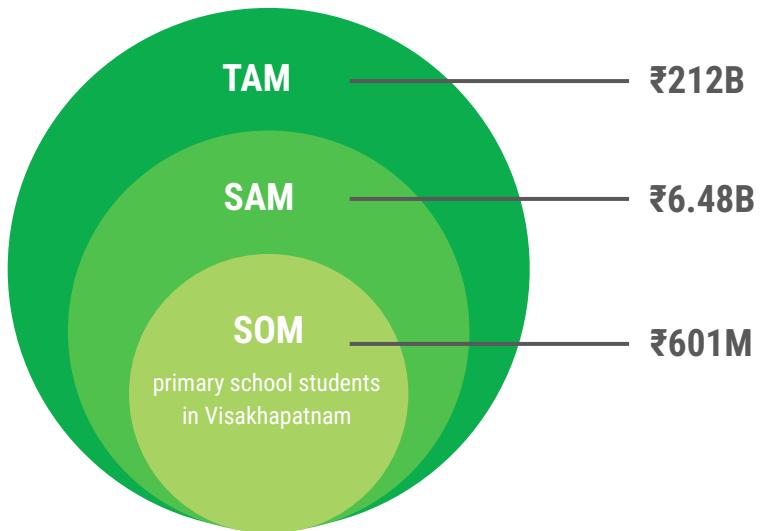
- Provides an engaging and gadget-free option for parents to supplement their child's traditional learning covering a wide range of STEM topics
- Encourages parent-child conversations with guides, tips, and offline activities.
- Offers regular updates and progress reports to track their child's development.
- Provides hassle-free experience for easy ordering, delivery, and user-friendly kits, especially for hustling-bustling parents.
- Prioritize eco-friendly materials, encourage recycling with points.



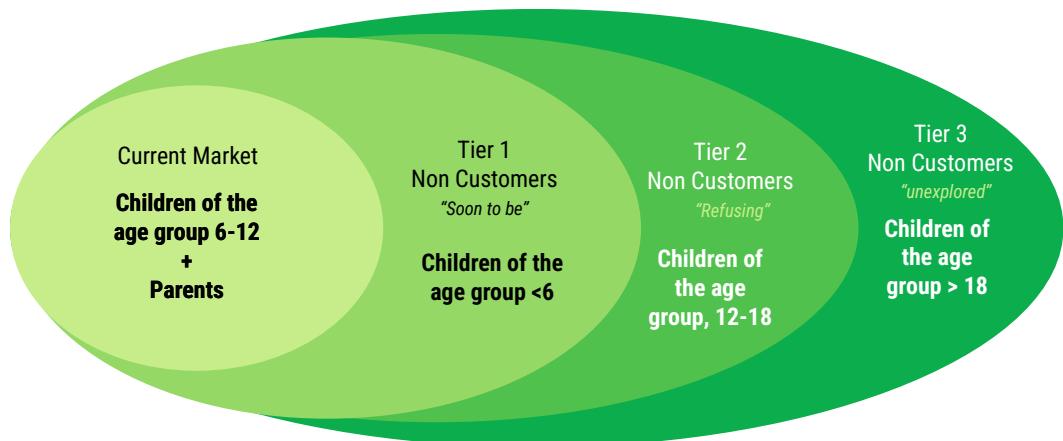
# COMPETITIVE ANALYSIS

	 elan learning LABS	 BYJU'S	 Flintobox	 Learn With Coals	 TECHXR	 STEM QUEST
Comprehensiveness	✓	✓	✗	✗	✗	✓
Immersiveness	✗	✓	✓	✓	✓	✓
Real-life based learning	✗	✓	✓	✓	✗	✓
Assessments	✗	✓	✓	✗	✓	✓
Origami and Activities	✗	✗	✓	✗	✗	✓
Collaborativity	✓	✗	✗	✗	✗	✓
AR-VR aided learning	✗	✗	✗	✗	✓	✓
Curriculum-based learning	✓	✓	✗	✓	✗	✗

# MARKET SIZE



# THE THREE TIERS OF NONCUSTOMERS



NUMBERS! NUMBERS!  
AND MORE NUMBERS!

**\$16.05B**  
Global Comic Market Value (2023)

**\$6B**  
Indian Edtech Market Value

**\$12.4B**  
Global AR & VR Market Value



# TIMELINE

## OUR MILESTONES

Ideation and problem statement.



Developing web platform for subscriptions and content delivery



Upping the social media game



July 2023

Nov 2023

June 2024

August 2024

Nov 2024

July 2025

Working with subject experts on curriculum



Building a prototype kit



Build our own AR content



Building our own AR kit



MILESTONE

#1

# THE ELECTRIFYING MYSTERY OF THE MANGOES

an electrifying adventure through  
the world of electricity

Physics

Age 6-12



The image shows a stack of colorful cards and a booklet titled "ELECTR-CITY playbook".  
The booklet cover features a cartoon bear holding a wrench, with the text "ELECTR-CITY playbook" and "STEM QUEST".  
The cards include:

- A blue card with a cartoon frog and a green background.
- An orange card with the title "THE ELECTR⚡FYING MYSTERY OF THE MANGOES" and a cartoon fox.
- A purple card featuring a portrait of Georg Simon Ohm.
- A pink card with the text "OHMS LAW (1827)" and a battery icon.
- A yellow card showing a circuit diagram with the text "10W; I = 5A" and "P=UW; I = 5A".

# THE TEAM

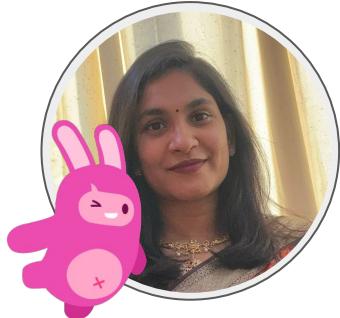
Meet Stem Quest's unbeatable team, where our technical prowess meets creative brilliance and together our aim is to make learning very enjoyable for students.



Monica Sree Goudu

Venture Coach

a results-oriented MBA graduate with 3 years of experience in mentoring startups, focusing under pressure; delegating tasks; a leader; lifelong learner



Sarala Bhavani Kallepalli

Venture Coach

Molecular biologist/startup ecosystem enabler



Rina Chotalia

Educator

An educator for the last 17 years, for children of the age group 4-8, enabling modern learning technologies

# THE TEAM

Meet Stem Quest's unbeatable team, where our technical prowess meets creative brilliance and together our aim is to make learning very enjoyable for students.



Manas Malla

Founder

**Student, designer, and developer** with experience in 45+ languages-frameworks over 6+ years including Google and **3 years of STEM education experience** in the US. Built over 10+ sustainable solutions, 35+ apps and 56+ UI designs. **Organizer at Google Developer Groups**. Experienced in handling a team of 75+ members, organizing 500+ attendee events, giving tech talks and writing blogs.



Lochan Mathukumilli

Co-Founder

**Visionary leader and student** with expertise in external partnerships, business development, and brand strategy. A creative ideator and a coordinator with a year of experience in E-Club. A dedicated Google event logistics volunteer.



Sree Teja Dusi

Co-Founder

**Developer and designer.** Core contributor at Google Developer Groups. I'm a Flutter developer and hold one year of experience with it. **Machine learning fanatic**, part time blogger, and a full-time student.