# Transforming Your Teaching to an Online Classroom

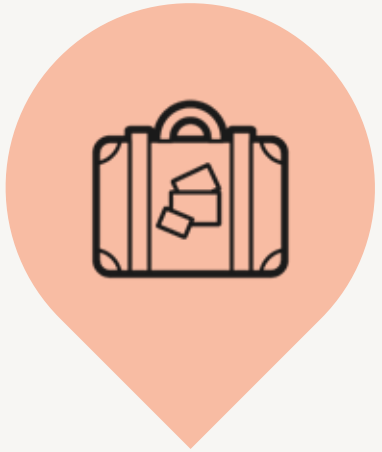
Keystone Academy

KOGNITY

# Introduction

# International & Local Regulations

Education



Travel advisory

Health

News

# Communication

- Faculty, Parents, Students
- Regular
- Assuring
- Honest & Transparent

# Online Learning Plan

- Quality of learning
- Consistency
- Flexibility
- Simplicity
- Differentiating by division
- Technology & Equipment

Teachers, parents & students

Skills to Pedagogy

# Training & Technical Support

Time for training

Social Emotional

Resources

Curricular

Flexibility

Formats

# Assessment Considerations

Report cards

Communication

Engagement

Social Emotional

# The Learning Spirit

Morale

Creativity

Storytelling

# Rethinking the Classroom

# Platforms & Applications

Familiarity

Consistency

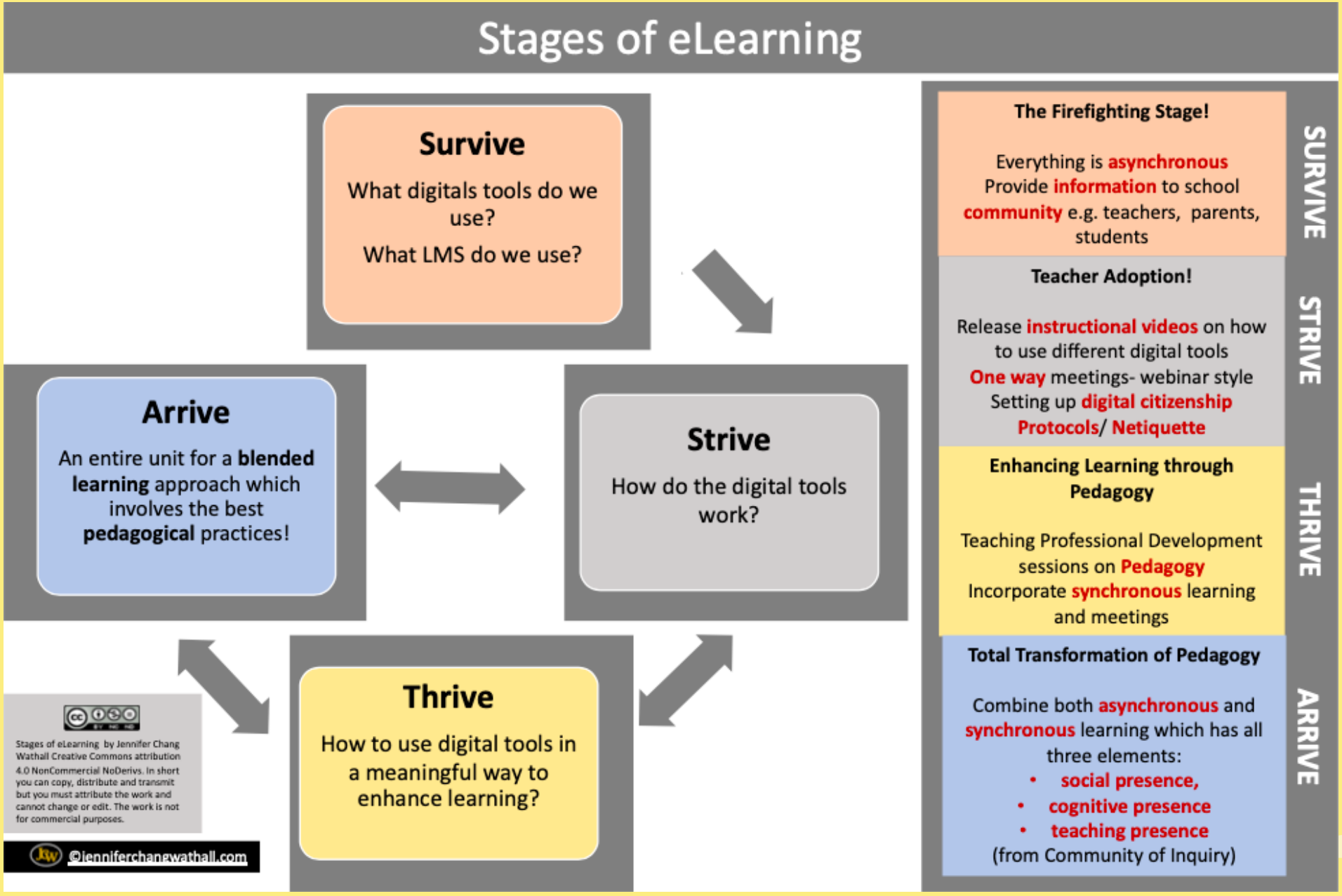
Primary vs. Secondary

Accessibility

Ease of Use


tinyurl.com/chinafriendlyapps

# Stages of eLearning



# Synchronous & Asynchronous

## Pros of synchronous learning

- More like a traditional classroom
- Faster paced
- More connections and interactions
- Immediate feedback
- Real-time work and discussions
- Easier to track participation

## Pros of asynchronous learning

- Better suited to separate locations
- Slower paced
- More resilient to technical trouble
- Less scheduling issues
- Less points of failure
- Easier to archive work and discussions

## Cons of synchronous learning

- More susceptible to technical trouble
- Faster paced
- More points of failure
- Requires more effort
- Harder to schedule

## Cons of asynchronous learning

- Feedback is delayed
- Slower paced
- Less connections, more isolated
- Lack of external motivation
- Students can get left behind

# Lesson Considerations

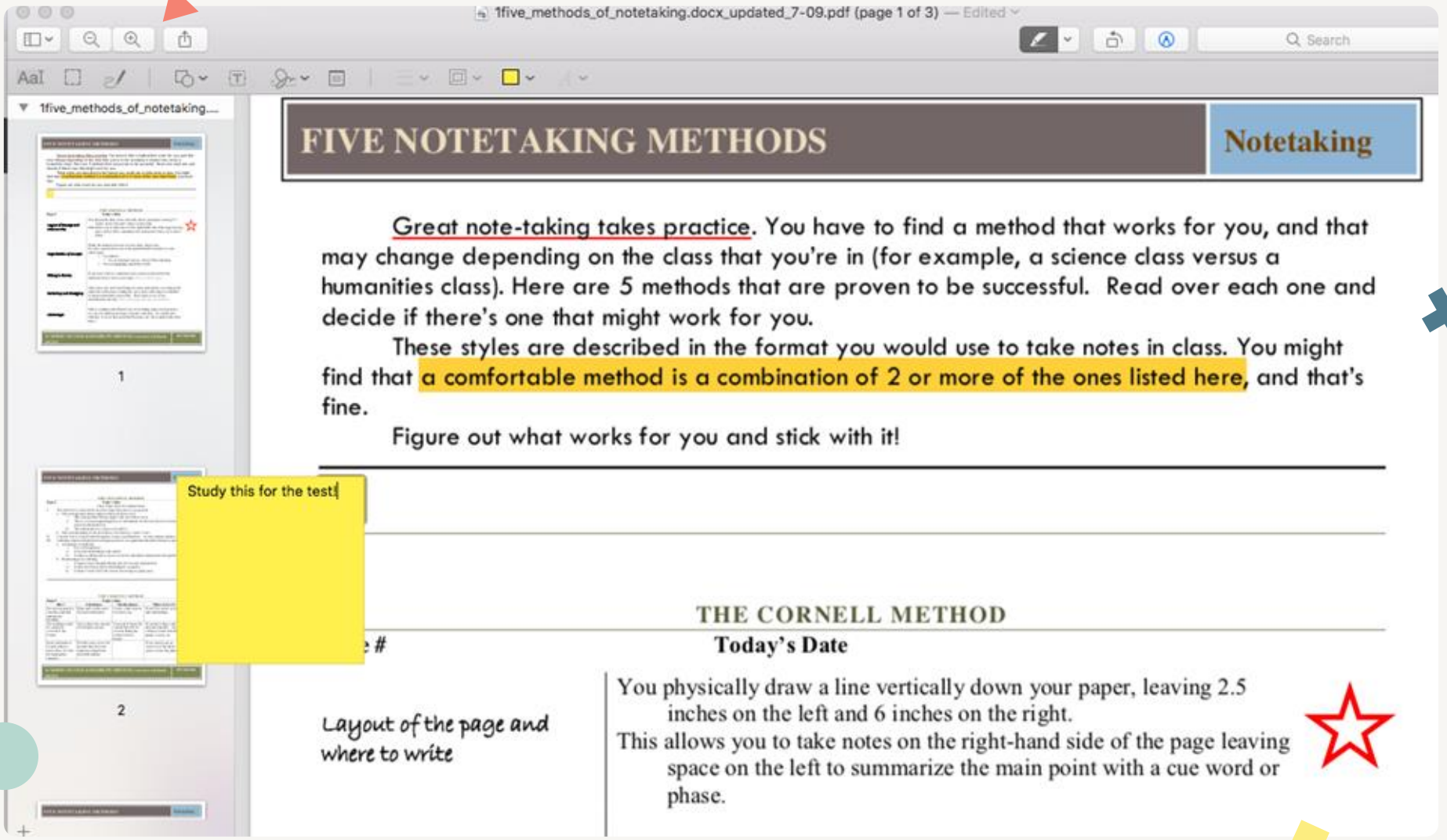
- What do your students need and what they are ready for?
- What tools do you have and what situations are they best suited for?
- Balancing innovation and anxiety
- Pacing – lessons and technology
- Scaffolding in an online environment
- Incorporating technology skills
- Differences between groups

# Strategies

- Teach digital note-taking skills
- Minimize ambiguity and anxiety
- Be publicly positive
- Stay flexible!
- Utilize your resources
- Communicate with your colleagues
- Take risks
- Give (limited) choice

# Stories from the Field

# (Re)Teaching digital note-taking

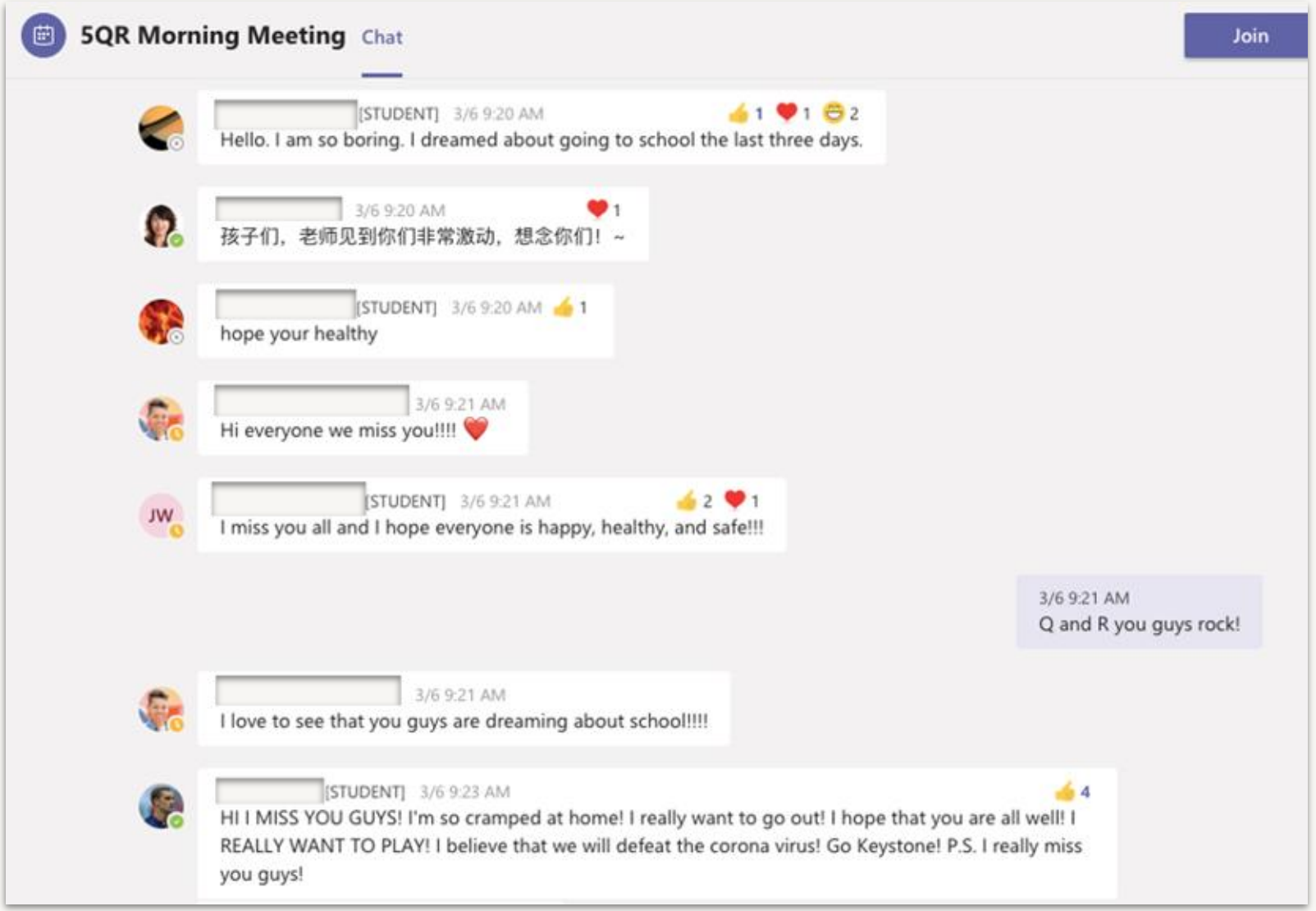


Reduce ambiguity and anxiety

# Respectful and good listening looks like:

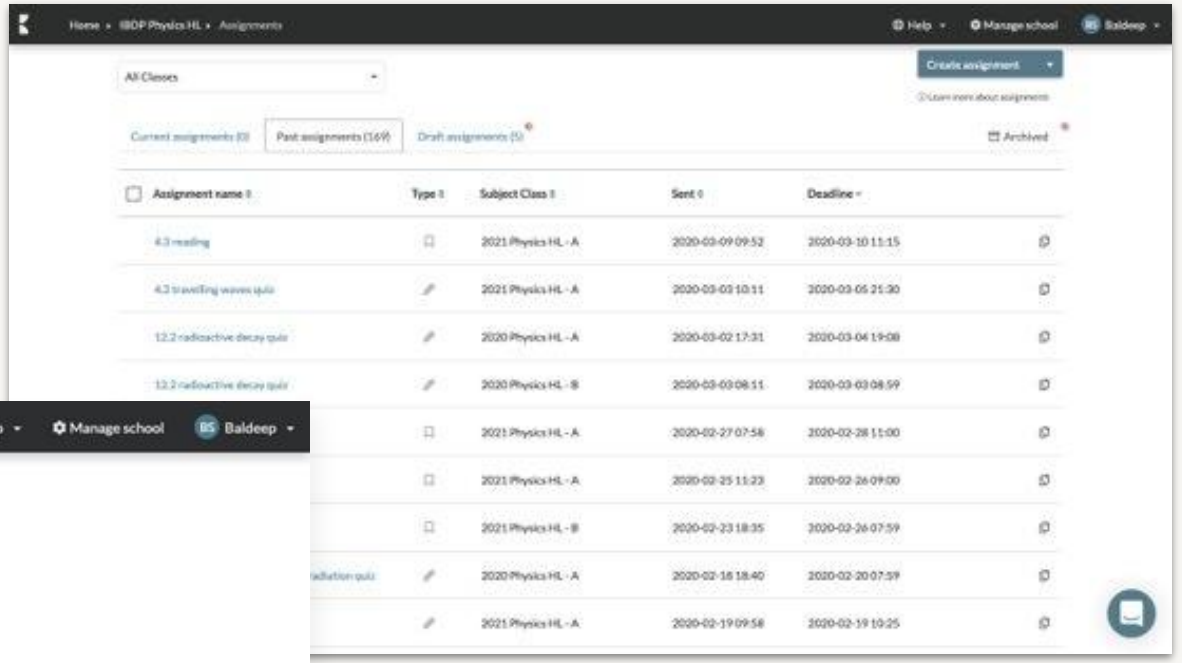
- Keeping your microphone off until a teacher says to turn it on
- Only typing if the teacher tells you to
- Using pictures ONLY when the teacher says it is ok
- Keeping your camera off until a teacher says to turn it on

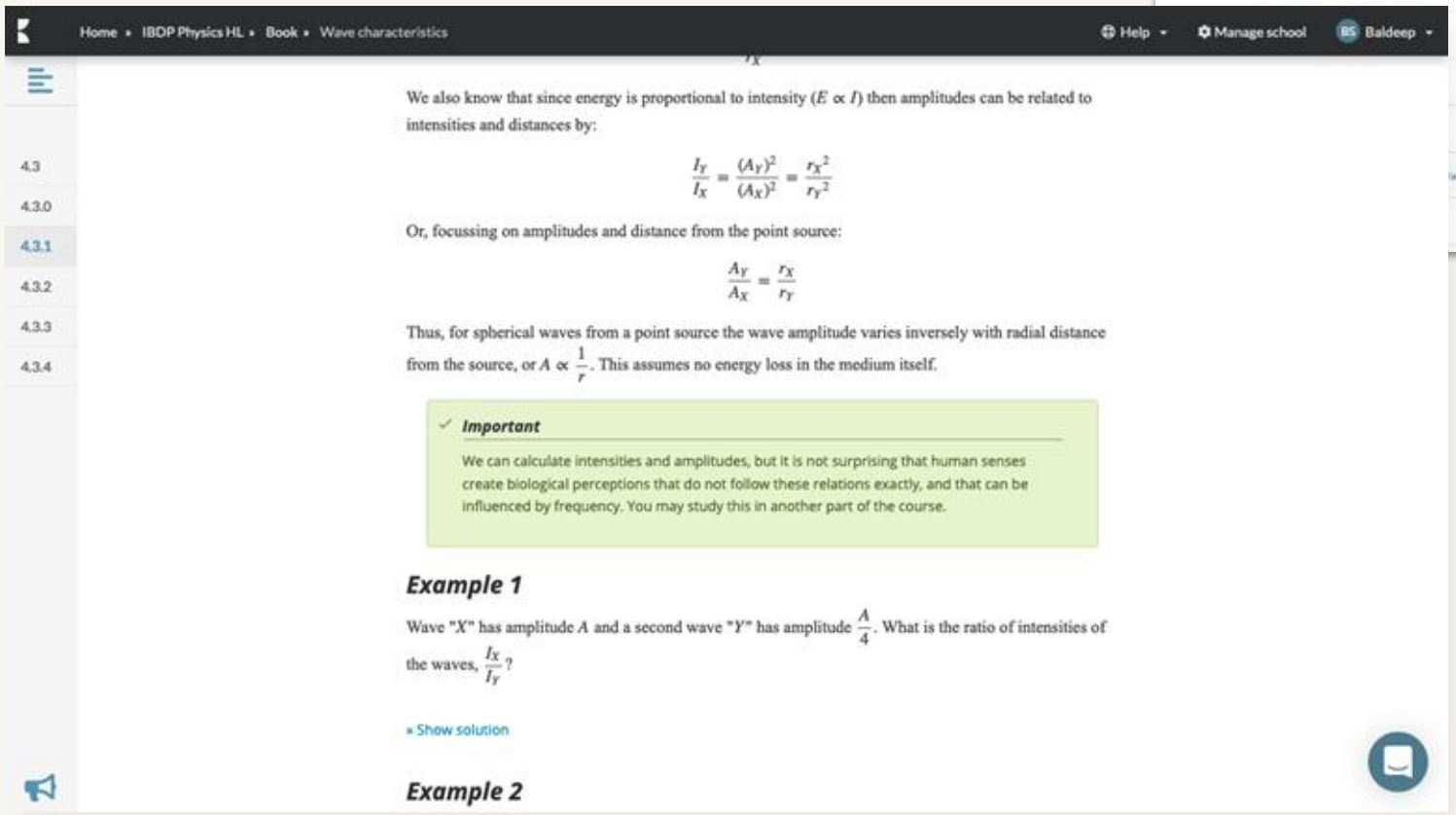
# Be publicly positive



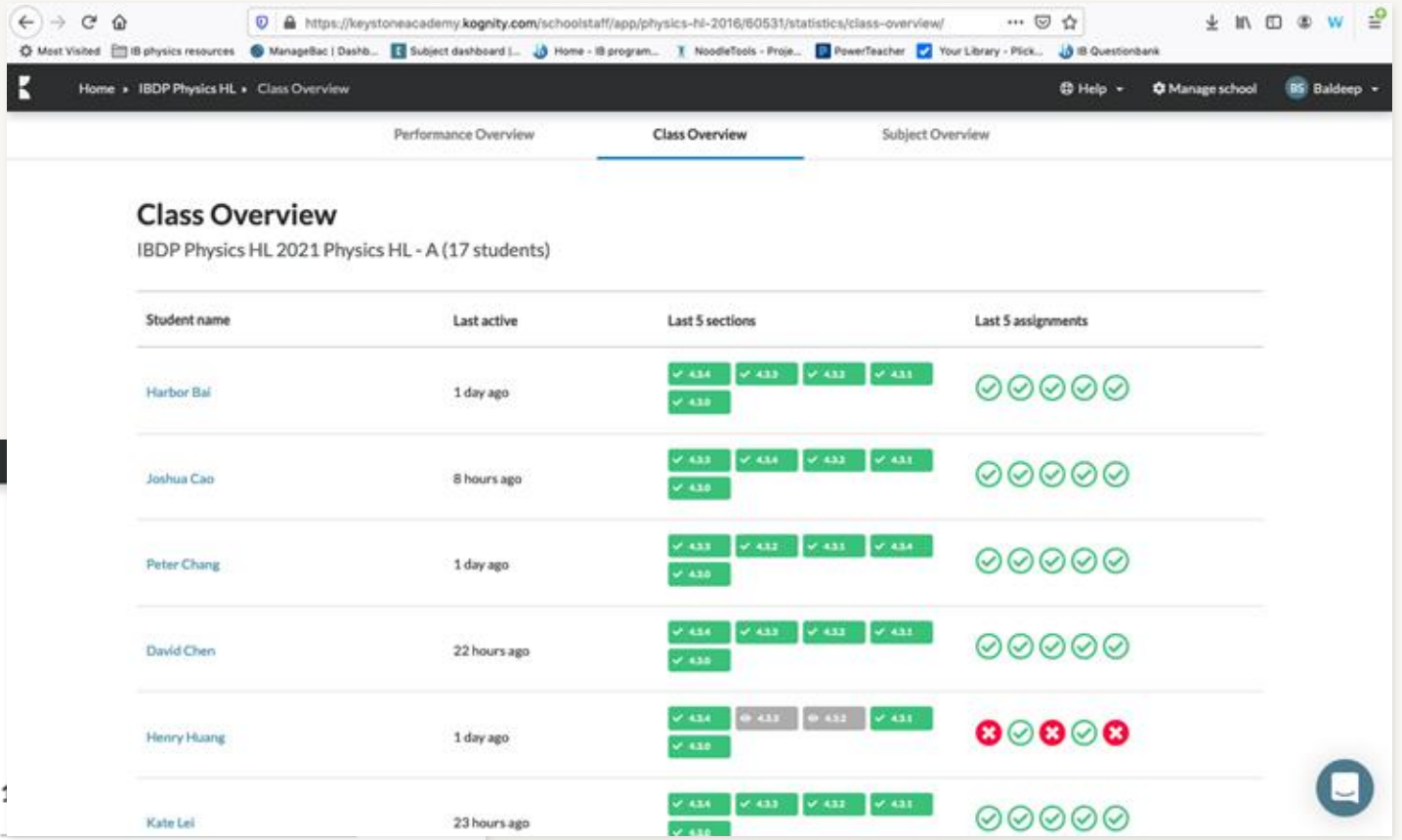
# Be flexible, take risks, give students a choice!

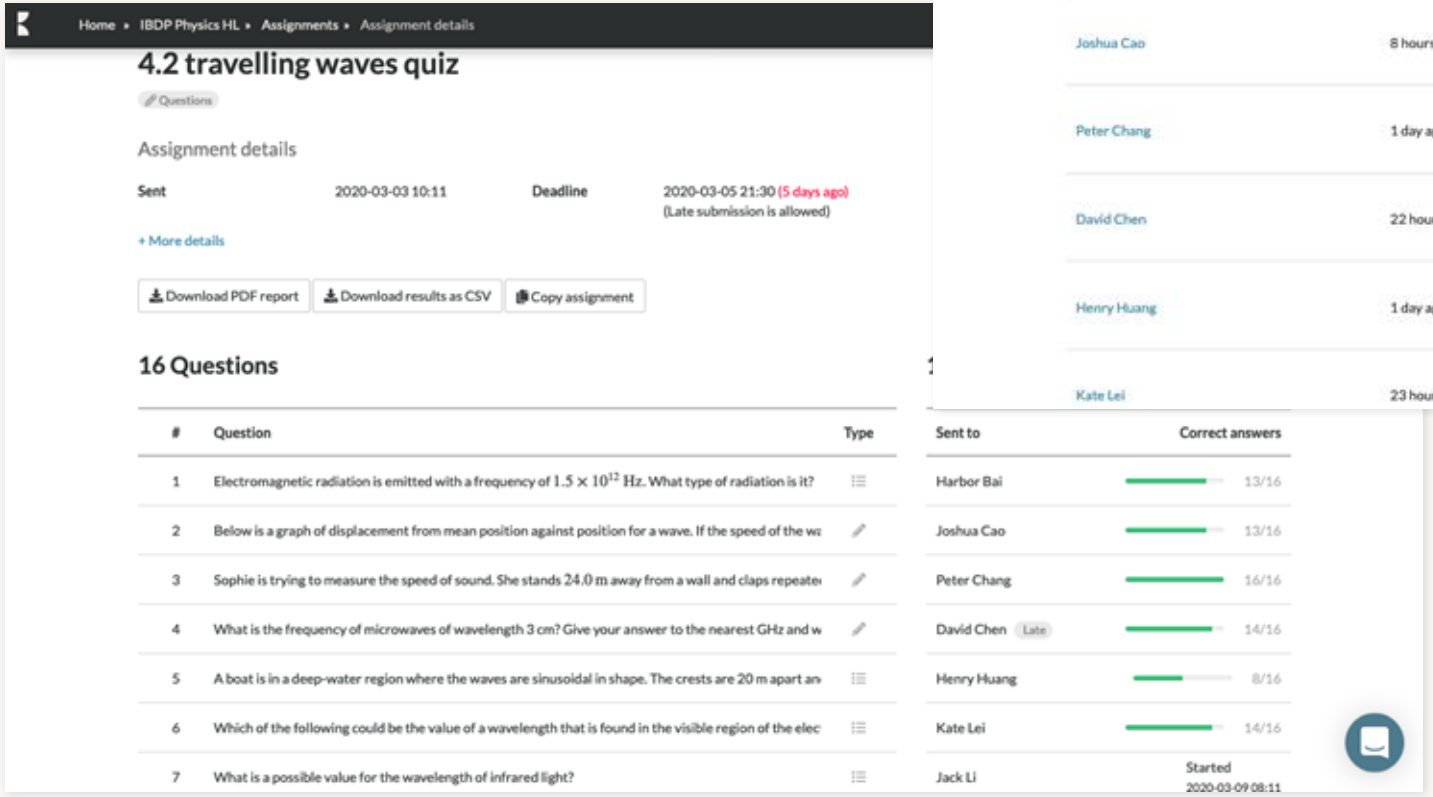
# Kognity


Home ▸ IBDP Physics HL ▸ Assignments
Help
Manage school
Baldeep
All Classes
Create assignment
Current assignments (0)
Past assignments (169)
Draft assignments (5)
Archived
Assignment name
Type
Subject Class
Sent
Deadline
4.3 reading
2021 Physics HL - A
2020-03-09 09:52
2020-03-10 11:15
4.3 travelling waves quiz
2021 Physics HL - A
2020-03-03 10:11
2020-03-05 21:30
12.2 radioactive decay quiz
2020 Physics HL - A
2020-03-02 17:31
2020-03-04 19:08
12.2 radioactive decay quiz
2020 Physics HL - B
2020-03-03 08:11
2020-03-03 08:59
2021 Physics HL - A
2020-02-27 07:58
2020-02-28 11:00
2021 Physics HL - A
2020-02-25 11:23
2020-02-26 09:00
2021 Physics HL - B
2020-02-23 18:35
2020-02-26 07:59
2020 Physics HL - A
2020-02-18 18:40
2020-02-20 07:59
2021 Physics HL - A
2020-02-19 09:58
2020-02-19 10:25


Home ▸ IBDP Physics HL ▸ Book ▸ Wave characteristics
Help
Manage school
BS Baldeep
4.3
4.3.0
4.3.1
4.3.2
4.3.3
4.3.4
We also know that since energy is proportional to intensity ($E \propto I$) then amplitudes can be related to intensities and distances by:
$$\frac{I_Y}{I_X} = \frac{(A_Y)^2}{(A_X)^2} = \frac{r_X^2}{r_Y^2}$$
Or, focussing on amplitudes and distance from the point source:
$$\frac{A_Y}{A_X} = \frac{r_X}{r_Y}$$
Thus, for spherical waves from a point source the wave amplitude varies inversely with radial distance from the source, or $A \propto \frac{1}{r}$. This assumes no energy loss in the medium itself.
Important
We can calculate intensities and amplitudes, but it is not surprising that human senses create biological perceptions that do not follow these relations exactly, and that can be influenced by frequency. You may study this in another part of the course.
Example 1
Wave "X" has amplitude $A$ and a second wave "Y" has amplitude $\frac{A}{4}$. What is the ratio of intensities of the waves, $\frac{I_X}{I_Y}$?
Show solution
Example 2

# Kognity


https://keystoneacademy.kognity.com/schoolstaff/app/physics-hl-2016/60531/statistics/class-overview/
Most Visited
IB physics resources
ManageBac | Dashb...
Subject dashboard |...
Home - IB program...
NoodleTools - Proje...
PowerTeacher
Your Library - Pick...
IB Questionbank
Home ▸ IBDP Physics HL ▸ Class Overview
Help
Manage school
BS Baldeep
Performance Overview
Class Overview
Subject Overview
Class Overview
IBDP Physics HL 2021 Physics HL - A (17 students)
Student name
Last active
Last 5 sections
Last 5 assignments
Harbor Bai
1 day ago
Joshua Cao
8 hours ago
Peter Chang
1 day ago
David Chen
22 hours ago
Henry Huang
1 day ago
Kate Lei
23 hours ago


Home ▸ IBDP Physics HL ▸ Assignments ▸ Assignment details
4.2 travelling waves quiz
Questions
Assignment details
Sent
2020-03-03 10:11
Deadline
2020-03-05 21:30 (5 days ago)
(Late submission is allowed)
+ More details
Download PDF report
Download results as CSV
Copy assignment
16 Questions
# Question Type
1 Electromagnetic radiation is emitted with a frequency of $1.5 \times 10^{12}$ Hz. What type of radiation is it?
2 Below is a graph of displacement from mean position against position for a wave. If the speed of the wa
3 Sophie is trying to measure the speed of sound. She stands 24.0 m away from a wall and claps repeate
4 What is the frequency of microwaves of wavelength 3 cm? Give your answer to the nearest GHz and w
5 A boat is in a deep-water region where the waves are sinusoidal in shape. The crests are 20 m apart an
6 Which of the following could be the value of a wavelength that is found in the visible region of the elec
7 What is a possible value for the wavelength of infrared light?
Sent to
Correct answers
Harbor Bai 13/16
Joshua Cao 13/16
Peter Chang 16/16
David Chen Late 14/16
Henry Huang 8/16
Kate Lei 14/16
Jack Li Started 2020-03-09 08:11

# Challenges & Barriers – Classroom

- Technical limitations
- Legal restrictions
- Communication
- Parent expectations
- Stress and anxiety
- Absent students

# Challenges & Barriers – Whole School

- The unknown
- Changing variables
- Balancing expectations faculty, parents, students
- Staff and students spread globally
- Technical support
- Social Emotional

# Q&A




# Thank You!

Lili Jia, Sandra Chow, Kirk McCullough