

**The Education and Youth Affairs Bureau (DSEJ)  
Social and Humanities Professional Development Workshop**

# **Implementation of Basic Academic Attainments (BAA) in Social and Humanities Curriculum**

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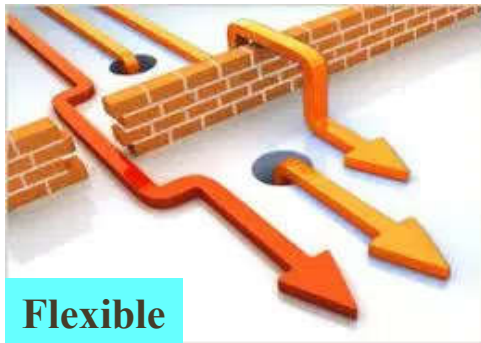
**26/5/2018**

# Agenda

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Time	Topic	Activity
14:30 – 15:00	<b>Design ideology of the Social and Humanities curriculum</b>	
15:00 – 17:15 (with a break)	<b>Teaching and learning of Social and Humanities</b>	<b>Challenge 1</b> <b>Challenge 2</b> <b>Challenge 3</b>
17:15 – 17:30	<b>Summary</b>	

# Contemporary pedagogical strategies



# Social and Humanities curriculum: Design Rationale

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**Critical thinking** is promoted when:

- Integrated **multiple disciplines** using a common theme
- Involved open-ended projects that required hypothesizing, **investigating issues**, and conducting research
- Empowered students' to be **responsible** for their **own learning**
- Provided opportunities for students to **reflect** on what they have done or learned, helping them make the **connection** to the real and local purpose of their efforts (Ernst & Monroe, 2006)

# Social and Humanities curriculum: Design ideology

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**Action Competence** (Jensen & Schnack 1997; Jensen 2000)

- **Abilities to act** responsibly to the **environment** and **society**
- Action: **purposeful** and involves a **decision**
- Versus intended behavioural change: affected by many variables

Adopting this ideology: Interdisciplinary teaching of tangible issues

- **Students**: independent problem solvers
- **Teachers**: provide a learning environment to facilitate students exercising problem-solving skills

# Social and Humanities

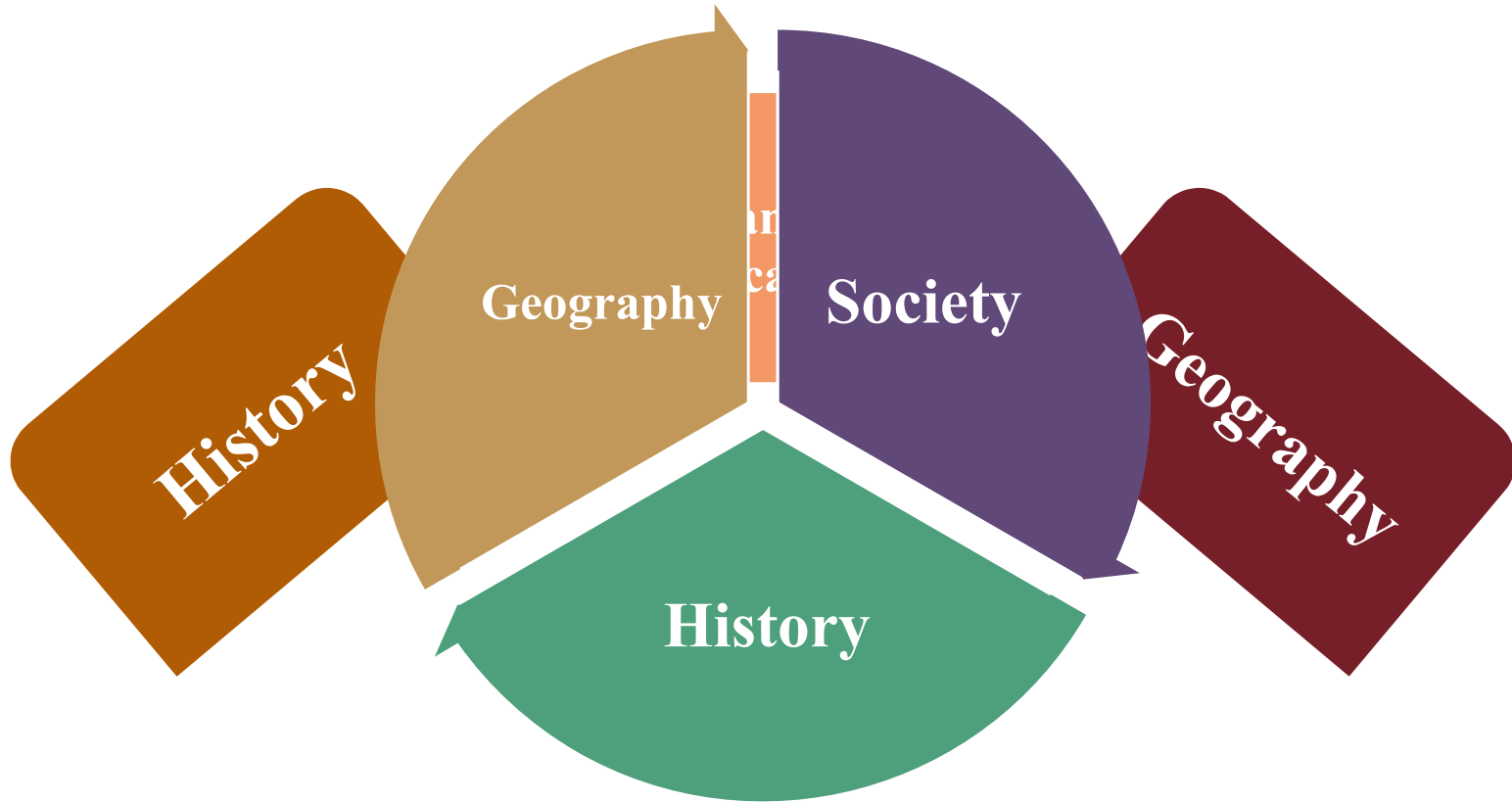


- **Trend and development**
- **Basic rationales**
- **The Requirements of BAA**
- **Curriculum structure**
- **Curriculum goals**

# Trend and development

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1999

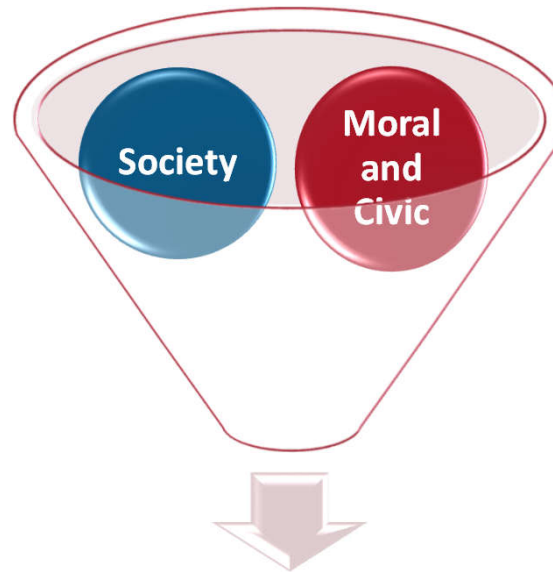


# Basic rationales

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## History

- ❖ Human and social environment
- ❖ Life and development needs
- ❖ Traditions and social culture
- ❖ Humanities



## Geography

- ❖ Human and natural environment
- ❖ Multiple perspective thinking and judgmental mindset
- ❖ Values of environmental protection
- ❖ International perspective

**Keep abreast of the times**



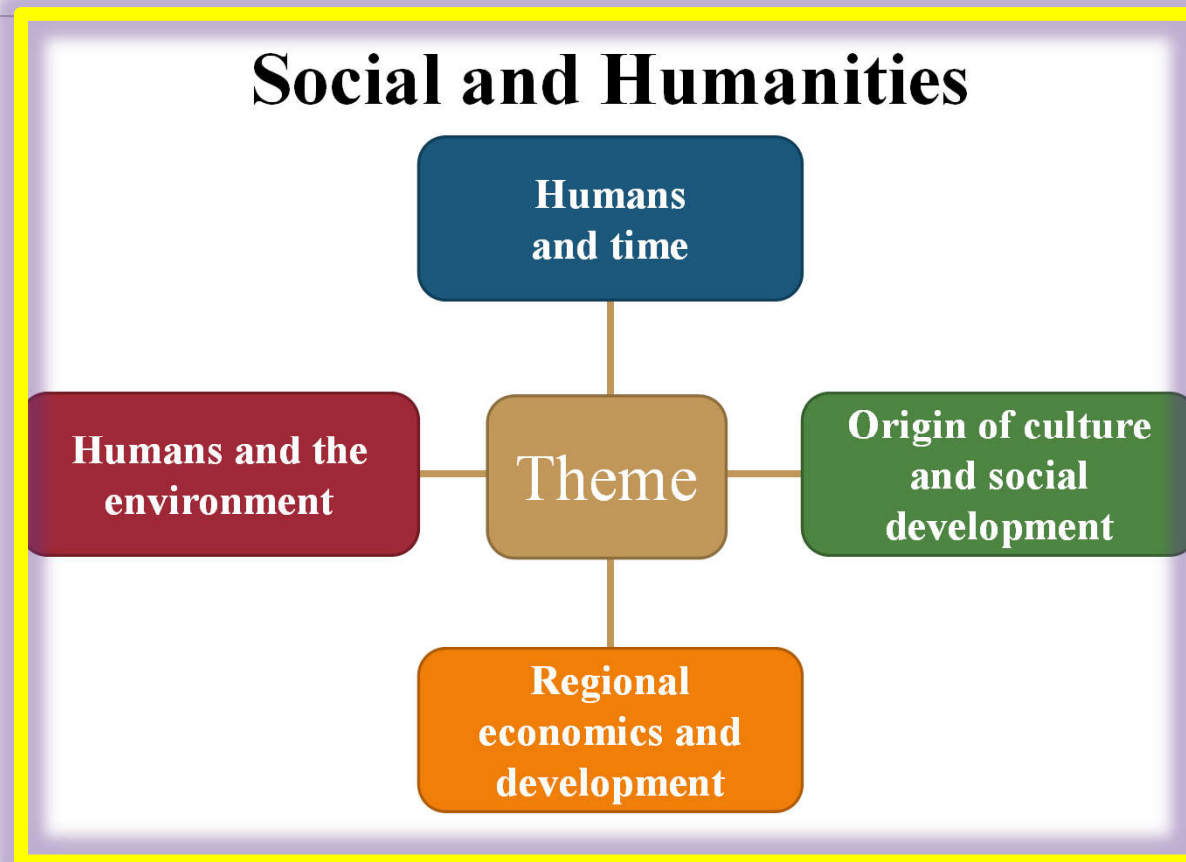
# The Requirements of Basic Academic Attainments

**What is BAA?**  
**How can we apply it?**



# Basic Academic Attainments

- ❑ Ensure the **holism** of public and private schools in Macau
- ❑ As basis of **school-based curricula**
- ❑ When completing all learning stages, students will acquire **basic competences** including:
  - “Knowledge”, “skills”, “ability”, “emotion”, “attitude” and “values”

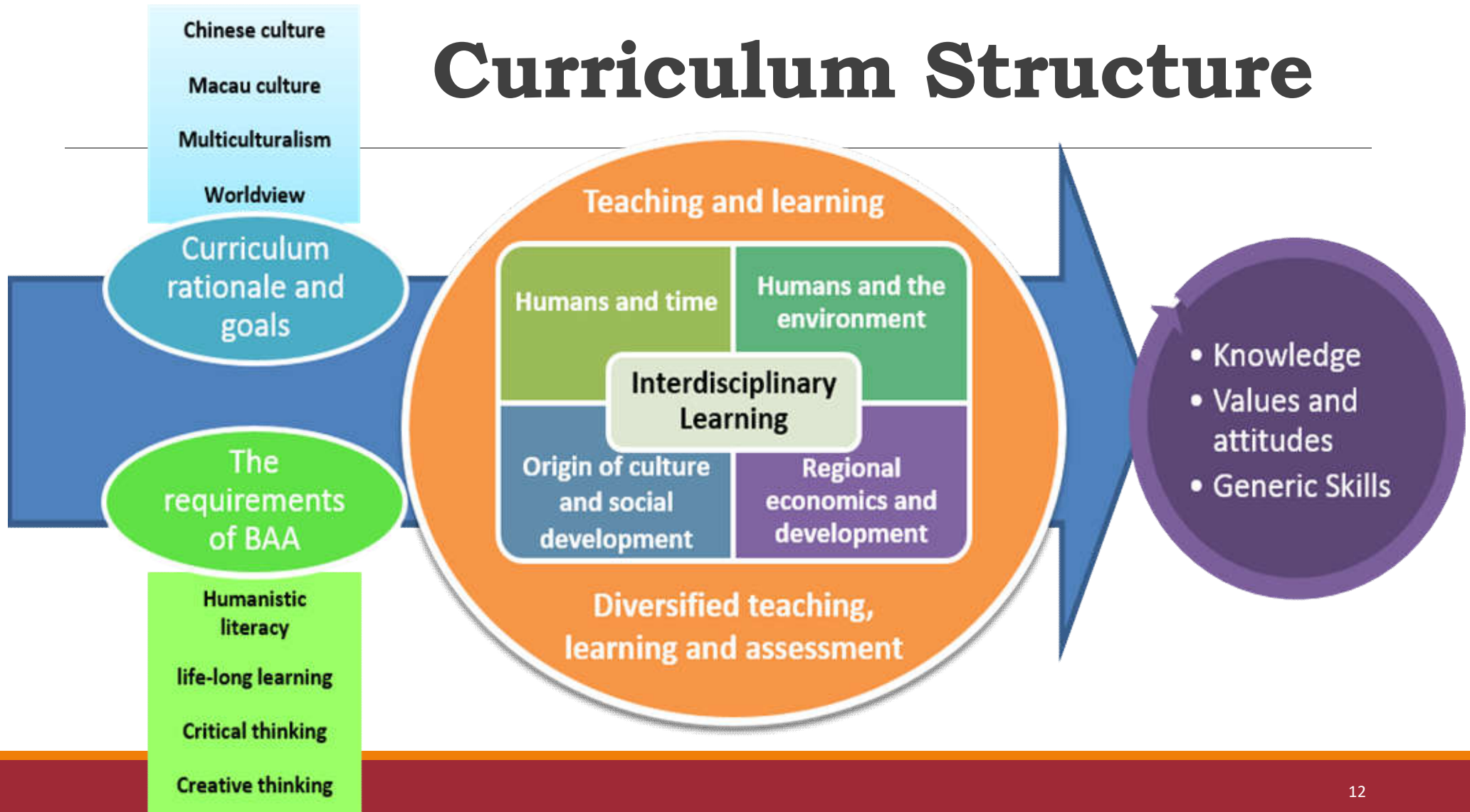


# The Requirements of Basic Academic Attainments



- **Foundational:** Achievable by majority of students (with effort)
- **Realistic:** Reflects the standard and traditions of Macau's education
- **Developmental:** Fulfills the development needs of individuals and society

# Curriculum Structure



# **Curriculum Goals under the Requirements of BAA**

**What are the focuses of the  
Social and Humanities curriculum?**

## **Humans and time**

- **Understand the basic knowledge of history, including the order of the times, important historical events, figures and phenomena; know about the clues of historical development and the basic concepts of history**

## **Humans and the environment**

- **Understand the basic knowledge of geography, including the basic situation of natural environment and humanistic environment; know the correlation between humans and environment**

## **Origin of culture and social development**

- **Understand the political, socio-cultural and economic evolution of different nations, countries and regions; guide students to respect the cultural differences and nurture their humanistic care**

## **Regional economics and development**

- **Understand the economic development of different countries and regions and its impacts on society and natural environment; know about the relationship between economic development, resources exploitation and environmental protection**

## **Method and ability**

- **Acquire the basic skills of reading, analyzing, comparing, summing up and processing data; particularly guide them to attach importance to the ways of learning history and geography**
- **Preliminarily grasp the essentials of critical thinking, experimental judgment, problem solving as well as action practice**
- **Develop communication, self-expression, sharing and cooperation skills**

## **Attitude and values**

- **Develop positive and zealous attitudes toward learning; nurture a healthy and positive outlook on life and innovative awareness**
- **Develop multicultural perspective; respect for the rights of others and care about social change and social issues**
- **Enhance sense of belonging to and responsibility for the homeland**

# Summary of the Requirements of BAA

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## Humans and the environment

Make reference to Junior Secondary curriculum:

**Subject-based**

- Geography (地中有史)
- History (史中有地)

**Interdisciplinary**

- Integrate history and geography curriculums

Humans  
and time

Origin of culture  
and social  
development

Regional economics and development



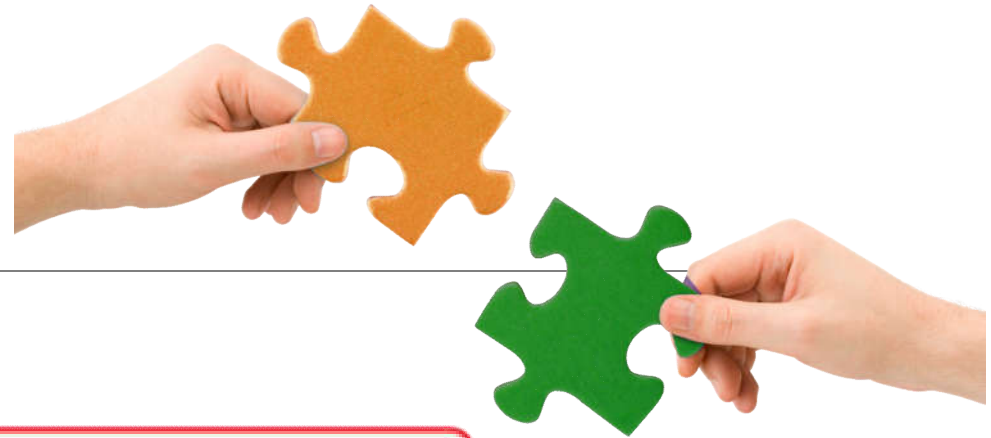
# Transport issues in Macau



Are you familiar with these phenomena?

# Challenge 1

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**TAKE THE  
CHALLENGE**

**The Traffic  
Puzzle**

# How to play?



1. Divide into groups
2. Each group will receive 40 cards with different labels
3. Organized the cards logically and present it under the categories:
  - Effects
  - Causes and problems
  - Changes
  - Visions



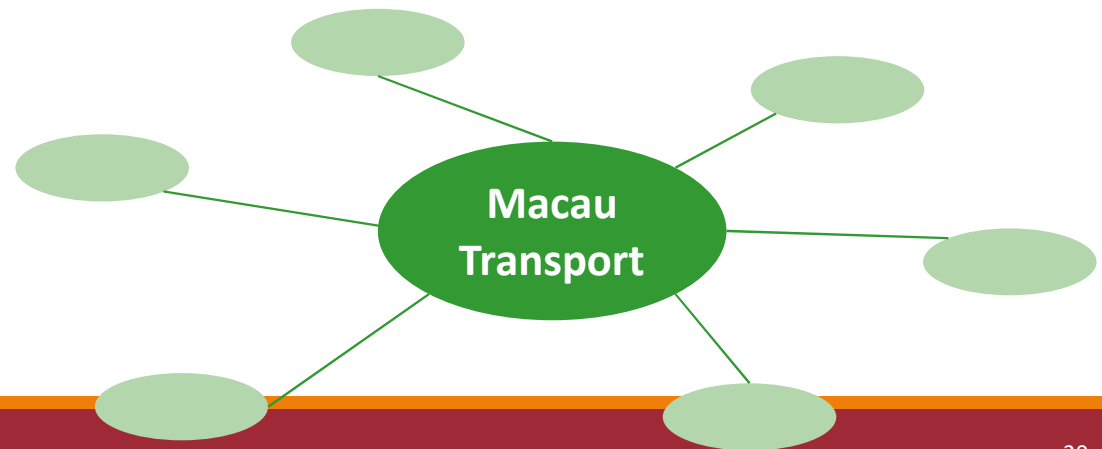
# Challenge 1

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## Concept-map (Interdisciplinary characteristic)

### Theme: Transport issues in Macau

Components: **Causes** (e.g. traffic density/ road design in old district/ cultural conservation); **effects** (e.g. air pollution/ tourism); **changes** (e.g. Light Rail system/ traffic control); **visions** (e.g. green transport?)



# How to design?

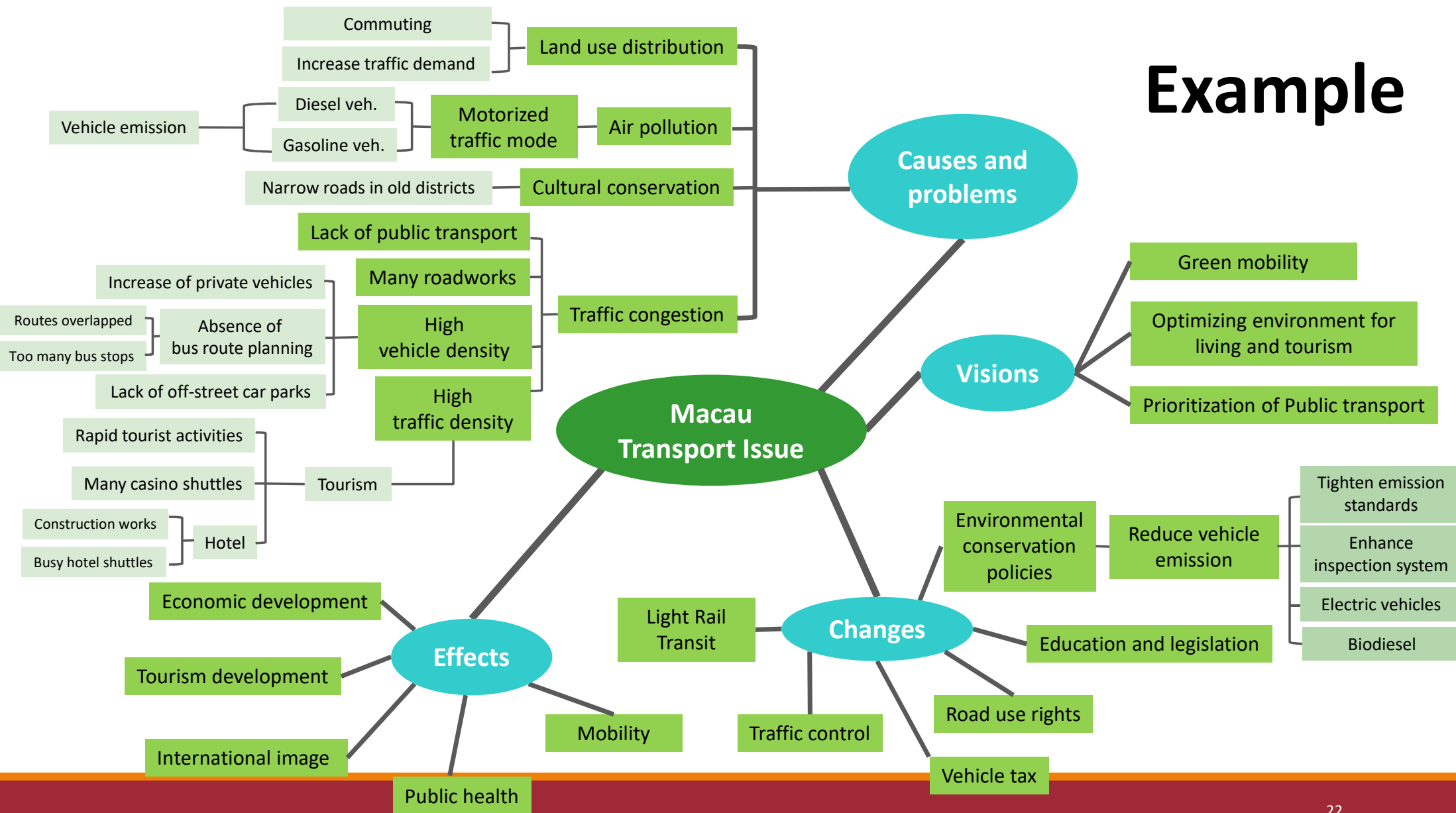
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TAKE THE  
CHALLENGE

1. What does your concept-map look like? How it shows the characteristics of interdisciplinary issue-based teaching of **History** and **Geography**?
2. Analyze your group work, and find out the knowledge framework behind your design.

# Example



# Society and Humanities: 4 dimensions of knowledge

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## 1. Knowledge of Effects

- **What** kind of problem is it?
- About the impacts to social/ historical/ geographical/ environmental realms
- No connection with why we have these problems
- No suggestion for how we can contribute to solving them
- As starting point to act

## 2. Knowledge of Causes

- **Why** do we have the problems we have?
- Mainly related to the social, cultural, geographical and economic aspects

# Society and Humanities: 4 dimensions of knowledge

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Framework to examine, analyze and handle issues (Jensen, 2000)

## 3. Knowledge of the Processes of Change

- **How** do we change things?
- About the **change strategies**, including the method of solving a problem collaboratively

## 4. Knowledge of Vision of future possibilities

- **Where** do we want to go?
- Make reference to solutions of other places or culture to tackle the problem
- For a better future, people utilize this dimension in relation to one's own life, work, family and society to find alternatives and achieve visions



# Evaluate your performances in designing theme-based teaching

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Multiple perspective?  
Inquiry-based?

What makes theme-based  
teaching special? What are  
the differences in students'  
learning?

Teachers'  
Roles? How to guide?  
How to assess?



# How to design an interdisciplinary theme?

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## 1. Selection of theme

- What are your beliefs and opinion towards a particular theme?

## 2. Collection of information and content

- How useful is the information?

## 3. Student participation

## 4. Grouping

} Why is this important?

## 5. Extension of theme

- Focus / Spatial / Time

## 6. Assessment

- What kind of assessment should be used?

# How to evaluate the effectiveness of the theme design?

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1. Why you choose this theme/ issue for teaching?  
What are the opinion and belief behind the selection of theme/ issue?

Belief

2. What is the most important factor in designing the theme? (Who cares? So what?)

Learning outcome

3. To present the theme in class, what are the content/ ideas need to be included?

Learning experience

4. Is it an end after the class? Any follow-up work should be done?

Assessment

# Implementation of curriculum - Basic Principles

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1. Student-centered
  - Arouse **interest** in learning and guide students to **inquire** and **reflect**
  - Design diversified learning situations and guide students to use different learning resources and learning methods
2. Remove **duplicated content** across subjects
3. Emphasize on the cultivation of **generic skills**
4. Collaboration between teachers for the implementation of integrated/ **interdisciplinary** teaching
5. Enrich student's learning experience
  - Guide students to learn from **everyday life**
  - Promote **diversified** and **holistic** learning experience
  - Enhance student's ability to **integrate** knowledge through different learning experience
6. Develop student's ability and attitude for **life-long learning**

# Flexible application of curriculum model

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Whole school participation strategy: to integrate different discipline subjects into an independent interdisciplinary curriculum

- Parallel and complementary use of formal curriculum, informal curriculum and hidden curriculum in learning and teaching

Teaching strategies and assessment methods

- School-based learning
- Take student's learning characteristics into consideration
- To prepare student becoming a socially participatory, inclusive and globally aware citizen

# Pedagogical strategies for curriculum development

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Design and implementation of **inquiry teaching**

Boost student-teacher interaction and peer **collaboration**

- to foster interdisciplinary knowledge and master diversify abilities

Student experience

- Report **current issues**, **Civic Ambassador**, **voluntary work** etc.

Encourage students to raise **questions**, **discussion** and **self-reflection**

# Summary: Design rationale

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- Construction of knowledge (Impacts / Causes/ Change strategies/ Visions)
- Inquiry-based
- Development of critical thinking mindset
- Multi-perspective & value analysis





# **Challenge 2 “Congestion” board game**

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# What are the transport issues in Macau?

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Could you point out some transport issues that you encounter in everyday life?



# Rules

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1. 3 to 5 people in a group
2. Each group has 1 D6 dice and 1 “NESW” compass dice
3. Play the game in 15 minutes
4. Throw the dice to start the game, the one who get the highest number of dice start first
5. Consider the value of each box is either positive or negative

**Who is going to win?**  
**How to be a good environmental manager in Macau?**

# Rules

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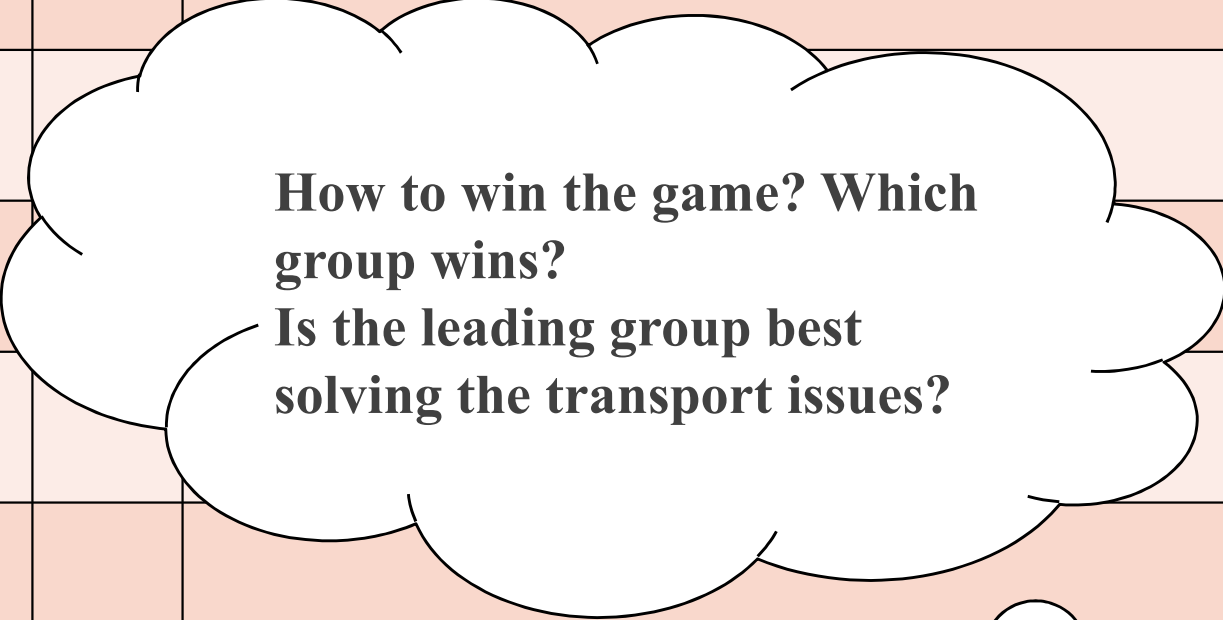
7. First, throw the D6 dice to obtain a space count, then throw the compass dice to obtain a direction
8. If the number of space of a direction go beyond the frame of the game, move in the opposite direction with the remaining space count
9. Diagonal moves are not allowed
10. Please complete the activity record during the game time

**Complete p.1 of the worksheet**

	① <b>Influx of tourists</b> (5 points)		② <b>Air pollution</b> (10 points)		③ <b>Traffic control</b> (5 points)		④ <b>Increasing tourist activities</b> (7 points)
⑤ <b>Overcrowded tourist destinations</b> (6 points)		⑥ <b>Remote cultural centers</b> (2 points)		⑦ <b>Lack of parking space</b> (2 points)		⑧ <b>Busy hotel/casino shuttle traffic</b> (10 points)	⑨ <b>Fixed bus fare</b> (5 points)
	⑩ <b>Traffic bottlenecks</b> (10 points)		①① <b>Redevelopment projects in old districts</b> (5 points)		①② <b>High density of hotels</b> (8 points)		①③ <b>Establishment of road tax</b> (8 points)
①④ <b>Mechanised pedestrian system</b> (5 points)			①⑤ <b>Lack of traffic management</b> (10 points)	<b>Start</b>		①⑥ <b>Reclamation works</b> (5 points)	①⑦ <b>Establishment of Light Rail Transit</b> (6 points)
	①⑧ <b>Increase automobile registration tax</b> (8 points)	①⑨ <b>Completion of HK-Macau bridge</b> (5 points)		②⑩ <b>Severe traffic congestion</b> (10 points)		②① <b>Completion of 4<sup>th</sup> Macau-Taipa link bridge</b> (8 points)	
②② <b>Bus jam</b> (6 points)			②③ <b>Rearrangement of bus routes</b> (10 points)		②④ <b>Busy construction traffic</b> (6 points)		
	②⑤ <b>Narrow roads in Historic Centre</b> (8 points)		②⑥ <b>Improve walkability</b> (8 points)			②⑦ <b>Remote airport location</b> (5 points)	②⑧ <b>Remote industrial areas</b> (2 points)

## “Congestion” board game

# Challenge 2 Group Result

Points Group	Average points	High Low	Range	Rank	Related concepts and questions
1					 <p>How to win the game? Which group wins? Is the leading group best solving the transport issues?</p>
2					
3					
4					
5					

# Major causes and problems of Macau Transport

Problems	Causes
<b>Traffic jam: Dense traffic</b>	<ul style="list-style-type: none"><li>• Soaring number of private vehicle, inefficient bus service (overlapping routes/ too many stops), narrow roads in Historic Centre of Macau, lack of traffic management,</li><li>• <b>Economic development:</b> reclamation works, busy construction traffic for hotel development</li></ul>
<b>Traffic jam: Dense population</b>	<ul style="list-style-type: none"><li>• <b>Tourist development:</b> influx of tourist visits, busy hotel/ casino shuttles, high transport demand in city center</li></ul>
<b>Traffic bottleneck</b>	<ul style="list-style-type: none"><li>• Redevelopment projects in old districts, industrial areas located faraway city center, many roadworks</li></ul>
<b>Vehicle fuel efficiency</b>	<ul style="list-style-type: none"><li>• Motorized mode, especially diesel vehicle, causing high vehicular emission</li></ul>

Complete p.2 of the worksheet

# Learning Domains



## Humans and time

Learning category	Examples
<b>A-1 Historical evolution</b>	<p>A-1-3 Briefly describe the rise and fall of each dynasty from the Qin Dynasty to the early stage of the Qing Dynasty; specify the characteristics of each historical period of ancient China.</p> <p>A-1-8 Briefly describe the development and complications after the establishment of New China; understand how China moved towards prosperity through reforms and opening-up.</p>
<b>A-2 Changes of systems</b>	<p>A-2-2 Be able to briefly describe the measure of the centralization of authority established in the Qin Dynasty; discuss the significance of the unification of China by the Qin Empire.</p> <p>A-2-5 Briefly describe the political system development in modern China and know the sacrifices made by the ancestors for promoting the development of democracy.</p>
<b>A-3 Commentary on historical figures</b>	<p>A-3-1 Comment on political figures who played important roles in the development of China and the world history from various perspectives.</p> <p>A-3-2 Briefly describe the lives of important philosophers, scientists or artists in Chinese and world history; know their contribution to social development.</p>
<b>A-4 Key historical facts</b>	<p>A-4-2 Tell about the Pax Sinica and chaotic periods of ancient China; briefly analyse the reasons for the rise and fall of these empires.</p> <p>A-4-9 Be able to illustrate the achievements of China's Economic Reform and Opening-up policy; know about the rise of comprehensive national power and the international status of modern China.</p>



# Learning Domains



## Humans and the environment

Learning category	Examples
<b>B-1 Space and regions</b>	<p><b>B-1-1</b> Be able to use maps to identify the distribution of continents and oceans; find out the locations of countries on different continents.</p> <p><b>B-1-6</b> Be able to describe the relationship between the marine and terrestrial ecological environment and human activities, as well as suggest protective measures.</p>
<b>B-2 Natural Environment</b>	<p><b>B-2-6</b> Be able to identify the climatic characteristics of Macao and summarise the causes of their formation.</p> <p><b>B-2-7</b> By observing practical examples, be able to compare the differences in the life and culture of the residents of different regions under different climatic conditions.</p>
<b>B-3 Natural Disaster</b>	<p><b>B-3-2</b> Describe the causes of natural disasters such as typhoons and saline water intrusion in Macao and suggest the contingency measures; pay attention to and care about people in disaster area.</p>
<b>B-4 Environmental issues</b>	<p><b>B-4-4</b> Be able to tell the basic situation of handling exhaust gas, wastewater and solid waste in Macao; know about the related policies.</p>

# Learning Domains



**Origin of culture and social development**

Learning category	Examples
<b>C-1 Origin of civilization</b>	<b>C-1-1 Be able to understand the origin of Chinese civilisation through reading ancient Chinese legends, myths and archaeological findings.</b>
<b>C-2 Nations and religions</b>	<b>C-2-1 Be able to understand the spread and development of the major religions of the world; be able to respect and accept different religious beliefs. C-2-4 Be able to briefly describe the development of Catholicism in Macao and understand the role of the Catholic Church in Macao.</b>
<b>C-3 Ideology and arts</b>	<b>C-3-3 Be able to describe how modern Chinese intellectuals, under the influence of new thought, strived to save the country; know about the process of the transformation of modern Chinese thought.</b>
<b>C-4 Science and technology</b>	<b>C-4-9 Through reading materials, describe the characteristics of the world heritage site in Macao; provide suggestions for preserving the historic centre of Macao and take civic responsibility for protecting historical relics.</b>

# Learning Domains



## Regional economics and development

Learning category	Examples
<b>D-1 Population, resources and economy</b>	<b>D-1-10 Be able to give examples to explain the impacts of resource exploitation on eco-environment; know to care for the environment.</b>
<b>D-2 Settlements and urbanization</b>	<b>D-2-3 Be able to take Macao as an example to discuss the problems arising from urbanization.</b> <b>D-2-4 Be able to describe the development status of traffic, economy, and tourism in Macao and know about Macao's locational advantages.</b>
<b>D-3 Sustainable development</b>	<b>D-3-2 Be able to describe the conditions for sustainable development in Macao and care about the sustainable development of Macao.</b>
<b>D-4 Global contact</b>	<b>D-4-3 Be able to describe the development trend of economic globalization in contemporary world and express views on the opportunities and challenges brought by economic globalization to the Chinese economy.</b>

# Inquiry

# [Society X History X Geography]

Junior

## Start with “Macau Transport”...

**A-4-14 Know about the course of the transfer of Macao’s sovereignty through reading historical documents; enhance the sense of “Loving the country and loving Macao”.**

**B-2-12 Be able to use maps to find the location, direction and distribution of things.**

**B-4-3 Be able to give examples to illustrate the impacts of pollution from urbanization and industrialization on human survival and life; formulate an action plan to reduce pollution at home or in school.**

**B-4-4 Be able to tell the basic situation of handling exhaust gas, wastewater and solid waste in Macao; know about the related policies.**

**C-4-9 Through reading materials, describe the characteristics of the world heritage site in Macao; provide suggestions for preserving the historic centre of Macao and take civic responsibility for protecting historical relics.**

**D-1-5 Be able to take a certain region as an example to explain the impact of tourism resource development on economy and environment.**

**D-1-8 Be able to take a certain region as an example to illustrate how transportation affects the economic development.**

**D-1-10 Be able to give examples to explain the impacts of resource exploitation on eco-environment; know to care for the environment.**

**D-2-3 Be able to take Macao as an example to discuss the problems arising from urbanization.**

**D-3-2 Be able to describe the conditions for sustainable development in Macao and care about the sustainable development of Macao.**

# Inquiry

## [Society X History X Geography]

Senior

Start with “Macau Transport”...

**C-4 Know the limited nature of natural resources; investigate how the excessive use of resources affect the sustainable development of economy, society and environment; understand the importance of the rational use and conservation of resources.**

**C-7 Suggest strategies for sustainable development in accordance with Macao’s social, economic and environmental development under the influence of globalization.**

**D-7 In the context of globalization, explore the main factors affecting the regional or urban development.**

**D-9 Illustrate the change of urban-rural relations during the process of urbanization; know the causes of problems brought by urbanization and their solutions.**

**E-1 Raise questions about the past development or current situation of Macao; write an outline for a research.**

**E-3 Realize the diversity of natural and humanistic environment in Macao; concern about the development of Macao from a global perspective; develop attitudes of appreciation, tolerance, conservation and serving Macao’s society; provide plans or suggestions for issues related the development of Macao.**

How to alleviate transport issues?  
How to prioritize different solutions?



# Challenge 3 “Diamond 9”

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# “Diamond 9” Rules

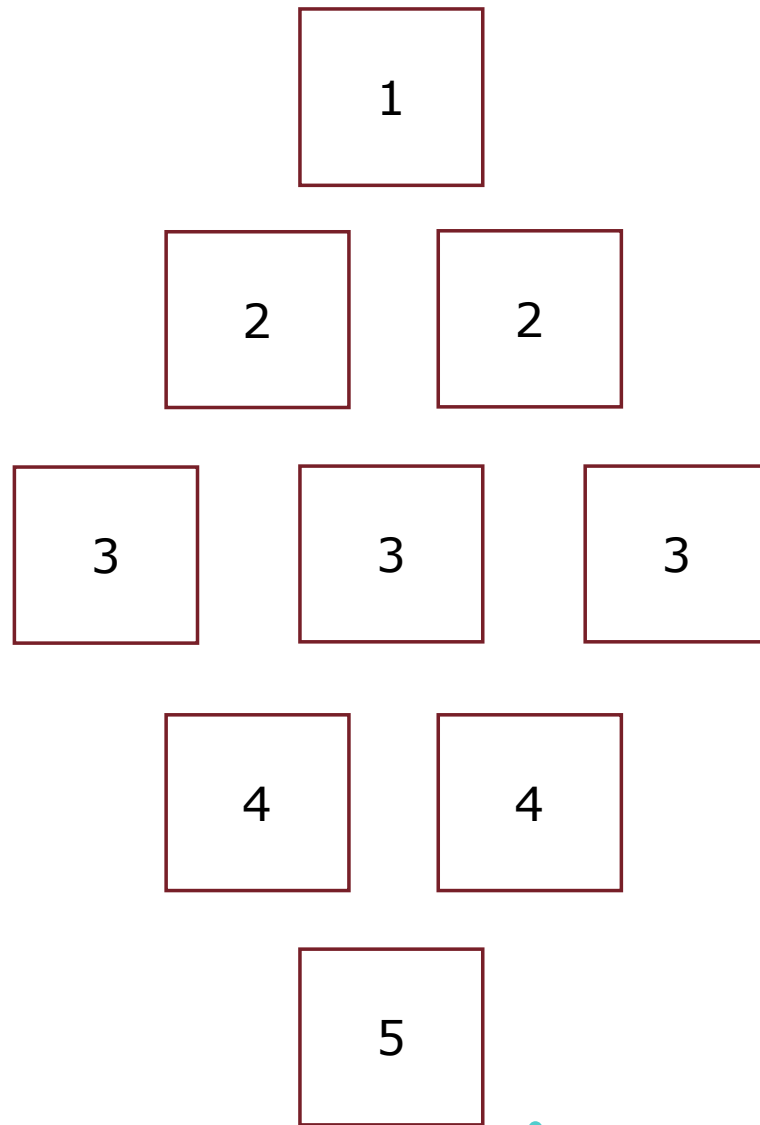
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To alleviate Macau transport problems...

1. Sequence each solution by its **feasibility/ importance**, 1 is the most feasible/ important, 5 is the least feasible/ important
2. Discuss in groups, compare and discuss your sequence with your groupmates until a **consensus** is reached



Sequence



Complete the worksheet

## Solutions

- a) Fixed bus fare
- b) Increase vehicle tax
- c) Increase parking fee
- d) Reorganize bus routes
- e) Introduce electric vehicle
- f) Offer discounts for bus taking
- g) Tighten vehicle examination system
- h) Build more elevated passageways
- i) Manage hotel/ casino shuttle services
- j) Accelerate the construction of Light Rail Transit
- k) Accelerate the construction of Macau-Taipa fourth link
- l) Expanding the network of mechanized pedestrian system

## Innovations (technology)

- e) Introduce electric vehicle
- j) Accelerate the construction of Light Rail Transit
- k) Accelerate the construction of Macau-Taipa fourth link
- l) Expanding the application of mechanized pedestrian system

## Incentives to use public transport

- a) Fixed bus fare
- f) Offer discounts for bus taking
- h) Build more elevated passageways

## Traffic management

- d) Reorganize bus routes
- i) Manage hotel/ casino shuttle services

## Discouragement to use private transport

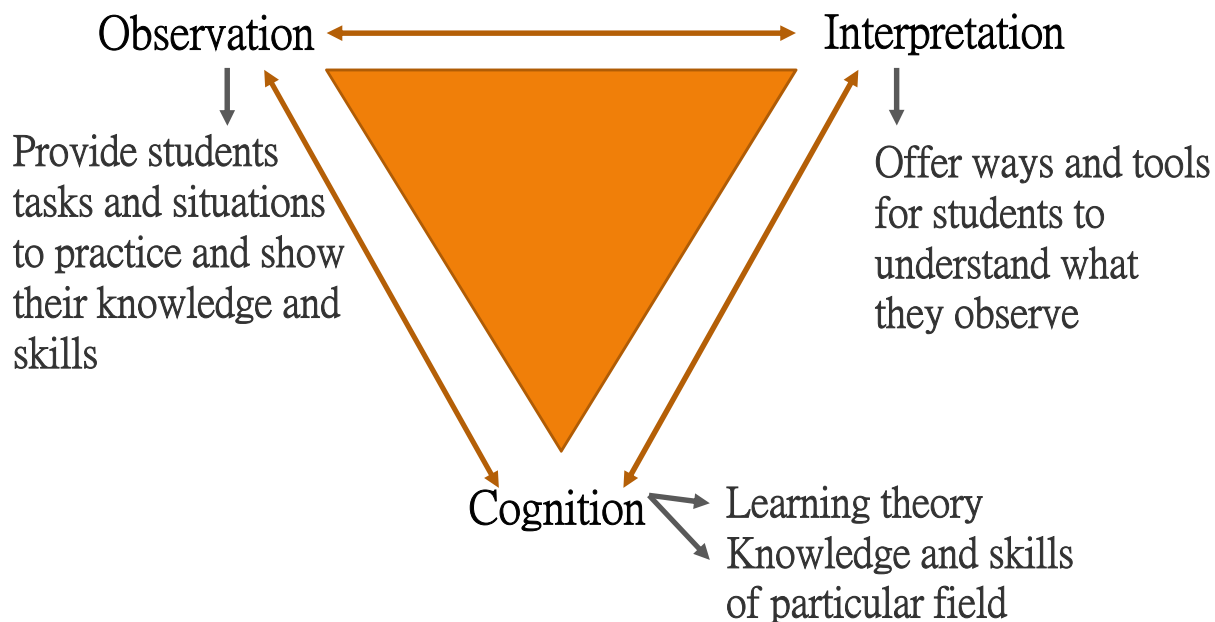
- b) Increase vehicle tax
- c) Increase parking fee
- g) Tighten vehicle examination system

**What are in common  
among the solutions?**



# How to assess student learning performance?

## Assessment triangle



## Summative Assessment

- Assessment of Learning (AoL)

## Formative Assessment

- Assessment for Learning (AfL)

1. Teaching feedback
2. Effective tool to promote student learning
3. Combine with everyday teaching practice and learning activities

# Formative Assessment

## Strategies

- Self evaluation (Learner personal perspective)
- Peer evaluation (Peer/ group perspective)
- Direct assessment (Instructor perspective, objective perspective)

Create more opportunities for participation

Improve students' ownership of learning outcomes

Enhance students' sense of responsibility in learning

Learning activity		Purpose
Challenge 1	Puzzle the theme	→ Interdisciplinary knowledge integration
Challenge 2	Board game	→ Inquiry learning from life experience
Challenge 3	Diamond 9	→ Value clarification

# Education for future

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1. **Find solutions: Critical thinking** and problem solving skills
2. Participatory: adopt different pedagogies to engage **students**
  - Experiential learning
  - Problem-; issue-; field-based learning
3. **Locally relevant**: local issues and resolutions

# Summary

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## Design rationale of Social and Humanities curriculum

### 1. Cognition (**Geography/ History**)

- In any academic field, ideas and methods can be obtained from other fields to increase the level of the domain itself.

### 2. Real world (**Society**)

- Knowledge is interconnected, it is possible to find new ideas and linkage in between

### 3. Pedagogy

- The current divisional teaching method limits the effectiveness of learning