



Module 1 - THE WHOLE- SCHOOL/ SYSTEM APPROACH IN PROMOTING HEALTH ENHANCING PHYSICAL ACTIVITY (HEPA)



1 - This session has been developed by the team from Cardiff Metropolitan University, Wales, UK.

*Welcome to **Module 1***

Module 1 is an introduction to the whole-school/system approach in promoting Health Enhancing Physical Activity (HEPA) in school settings.

By the end of the module, you should be able to:

-
- ***Understand** what is meant by the terms 'HEPA' and a 'whole-school approaches'.*

- *Appreciate* why HEPA and whole-school approaches are useful in school settings.
 - *Identify* how HEPA can be implemented within a school setting through a whole school approach.
 - *Review* examples of case studies
 - *Reflect* on how HEPA within your school can be informed by whole-school approaches.
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Module 1 is structured into four sections:

1. **WHAT** is HEPA and **WHY** is it important?
 2. **HOW** do we deliver HEPA in schools: theory and practice
 3. Case studies
 4. Summary and reflective task
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But before we begin...



As outlined in the information and consent form (which you should have completed, if not please [click here](#)) as part of the HEPA educational modules we are running an evaluation of the modules to see their impact and to improve them in the future. As such we are asking participants to take part in a quick online survey before they start the modules.

[Quick survey](#) - Please click your preferred language
[English](#)

Finish (all links will be added once the survey has been translated)

Greek

Italian

Welsh



2 - Click the language you'd like to complete the survey in

Thank you for completing the survey!

1. WHAT is HEPA and **WHY** is it important?

a. What is HEPA?

Definition: HEPA stands for 'Health Enhancing Physical Activity' and simply refers to any physical activity that aims to promote lifelong engagement with different practices that develop health.

Physical activity can be described as, any bodily movement produced by skeletal muscles that requires energy expenditure (WHO, 2017). As such, physical activity incorporates both exercise and sport. Therefore, examples of HEPA range from gardening to playing table tennis, from hiking to open water swimming, and from a brisk walk to running 5K.

Health can generally be described as, a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1948).



Reflective TASK: There are many ways in which health and physical activity can be defined. Based on your experience, what do you define as health and physical activity?

--> [Click here to take part in the reflective task](#) <--

b. HEPA in children and adolescents

Recommendations from the World Health Organisation (WHO, 2020) state that children and adolescents aged 5-17 years should:

- **Participate** in at least an average of 60 minutes per day of moderate-to-vigorous intensity, mostly aerobic, physical activity, across the week.
- **Incorporate** vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, at least 3 days a week.
- **Limit** the amount of time spent being sedentary, particularly the amount of recreational screen time.





c. What are the benefits of HEPA for young people?

There are numerous benefits to attaining the recommended level of physical activity for children and adolescents. Some of these benefits have been described as:

- Mental health benefits, such as boosted self-esteem and mood
- Enjoyment and social interaction
- Academic achievements and life skills
- Reduced risk of stress and depressions
- Improved sleep quality and energy levels
- Improved physical fitness (cardiorespiratory and muscular fitness)
- Weight maintenance
- Support bone health
- Reduced risk of major illnesses such as coronary heart disease, diabetes, and cancers

[\(National Health Service, 2021\)](#); [\(Mayo Clinic, 2021\)](#)





3 - 3 minute video clip to be added which discusses the importance of encouraging HEPA within contexts of schools

General summary of video content:

The video clip highlights the benefits of encouraging HEPA within a school context and introduces a **strengths-based approach** to HEPA and the use of **physical literacy** concepts.

Overall the promotion of HEPA in a school context enables learners the opportunity to:

1. **Experience** activities that promote the sustainable lifelong engagement with physical activity
2. **Acquire** values that promote spiritual, cultural, mental and physical development.
3. **Understand** socio-cultural and environmental influences on engagement with different forms of physical activity.
4. **Reflect** on the choices we make in approaching lifelong physical activity.

Reflective Task: Based on the video, in what ways do you feel your school currently encourages HEPA?

d. Physical activity levels across Europe

While the recommended levels of physical activity and the associated benefits are apparent, a high percentage of children and adolescents do not reach the recommended levels of physical activity.

WHO (2020) have stated that **more than 80%** of the world's adolescent population is **insufficiently** physically active. Furthermore, it is estimated that **globally 50% of children do not** meet the international recommendations of 60 minutes of moderate to vigorous physical activity per day ([Hallal et al, 2012](#); [Tremblay et al., 2016](#)).

The low rate rate of physical activity across the globe is also reflected in Europe. For example, across EU countries, physical activity levels of moderate -to-vigorous exercise for at least one hour daily was only completed by approximately **one in four 11- year- olds** and **one in seven 15- year- olds** ([OECD, 2020](#)).

Strategic approaches to the promotion of physical activity in countries and settings can contribute to achieving the [United Nations Sustainable Development Goals \(SDGs\)](#). A more physically active school can contribute to achieving these goals, particularly:

- Good Health and Wellbeing (Goal 3)
- Quality Education (Goal 4)
- Gender Equality (Goal 5)
- Reduced Inequalities (Goal 10)
- Sustainable Cities and Communities (Goal 11)
- Climate Action (Goal 13)



Across Europe these levels are highlighted:



4 - **Belgium:** 6% of children aged 6-9 years, 23% of children aged 10-12 years in French and German communities and 17% of children aged 10-12 years in Flemish community are engaged in sufficient physical activity levels.



5 - **Cyprus**: between 3 and 4% of children aged 15 or younger were estimated to be sufficiently physically active.



6 - **Finland**: approximately 40% of children aged 7-15 years undertake sufficient physical activity



7 - **Greece**: approximately 20% of children under the age of 11 years undertake sufficient physical activity. This number drops to less than 15% for those aged between 12 and 15.



8 - **Italy**: approximately 32% of children aged 8-9 years and 12% of children aged 11 years undertake sufficient physical activity. This number continues to drop with age, with approximately 9% of children aged 13 and 7% aged 15 years undertaking sufficient physical activity.



9 - **Wales:** 62% of children aged 3-7 years are sufficiently active, with a drop to 39% for young people aged 13-17 years.

The above statistics are taken from [WHO 2021 physical activity factsheets](#). For further information about physical activity from across the EU please see:

- [Belgium physical activity factsheet \(2018\) & \(2021\)](#)
- [Cyprus physical activity factsheet \(2018\) & \(2021\)](#)
- [Finland physical activity factsheet \(2018\) & \(2021\)](#)
- [Greece physical activity factsheet \(2018\) & \(2021\)](#)
- [Italy physical activity factsheet \(2018\) & \(2021\)](#)
- [United Kingdom physical activity factsheet \(2018\)](#)

You can also review the recent OECD (2021) European Health at a Glance Report [here](#)

QUIZ



Section 1 quiz

Please click the link below to take part in a quick quiz which will look at what we have discussed so far today

[Click here --> HEPA QUIZ <-- Click here](#)

2. **HOW** could we deliver HEPA in schools? theory and practice



We know the importance of HEPA for children and adolescents, and the benefits this can bring for their engagement with lifelong physical activity.

Next we will be exploring at developing HEPA in school settings and introducing the 'whole system approach' to schools settings. We will do this by looking at:

- a. Why use the school as a setting for HEPA?
- b. What is a 'whole system' approach to HEPA?
- c. Why is using a whole system approach important?

a. Why use the school as a setting for HEPA?



10 - [ISPAH's Eight Investments That Work for Physical Activity](#). One of which is a whole-of-school-programme

- Many children do not meet internationally recognised levels of physical activity (Hallal et al., 2012; Tremblay et al., 2016). It is not surprising therefore that as children are required to attend schools that there has been a focus on them as a setting for HEPA ([Daly-Smith et al., 2020](#)).
- School settings are environments where many children and adolescents can be reached at one time, thus schools can be a setting in which a large majority of children and adolescents' physical activity levels can be positively influenced.
- In addition to promoting physical activity levels, school is an environment in which children and adolescents can learn about health enhancing physical activity. Therefore, schools can support positive perceptions and understanding of HEPA.
- The International Society for Physical Activity and Health (ISPAH) have recently (2020) identified 8 areas which if invested in can enhance physical activity - one of which is investment in whole school programmes

b. What is a 'whole system' approach to HEPA?

- A whole system approach, as the title suggests, ensures that there is a combination of strategies and actions that are co-ordinated to promote health enhancing physical activity. **Throughout the modules we may refer to a 'whole system' approach as a 'whole school' approach as schools are the environments and therefore the 'system' which we are exploring during the modules.*

- Therefore, a whole school approach to HEPA would include all areas of the school aiming to facilitate health enhancing physical activity.
- For example, when using a whole school approach for HEPA, schools should:
 - Consider and facilitate health enhancing physical activity during play-time/recess/break time, rather than only during physical education or sports based lessons.
 - Promote HEPA via the means of children traveling to and from school.
 - Include HEPA as part of the wider curriculum which is integrated into, for example science, physics, mathematics, language, comprehension, etc, with activity being actively encouraged as part of the learning process.
 - Engineer the school environment to be facilitative of a more physical activity day for the people that study and work there. Approaches can include, creating places and spaces to walk to, or be active in, where physical activity is positively encouraged to be the obvious choice.

Whole system approaches - simple, complicated, complex



<https://sway.office.com/WEYqM8qAv0PSrSTB#content=ylbiFxSS1wPtYv>

11 - Jack Walklett, final year PhD student studying systems-approaches to physical activity promotion

@JHWalklett

Please click the video clip to hear a 2 minute clip about system based approaches

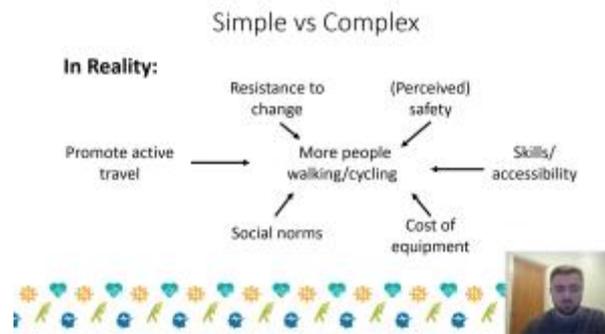
As the video explains there are three levels of a systems based approach

1. Simple
2. Complicated
3. Complex

For further information into these areas please see:

- [Rutter et al. \(2017\)](#) - provides a general call for complex systems approaches in public health
- [Egan et al. \(2019\)](#) - includes information about simple vs complicated vs complex.

Systems approach - Example of promoting active travel to school



<https://sway.office.com/WEYqM8gAv0PSrSTB#content=PGhXBnJcGixYSU>

12 - Jack Walklett, final year PhD student studying systems-approaches to physical activity promotion

@JHWalklett

Please click the video for a 2 minute clip from Jack discussing a practical example of a whole systems approach to promoting active travel to school

An example of how much can be involved in a whole system approach comes from CwmTaf Morgannwg University Health Board and Public health Wales who worked with Scarlet Design to create an image of a 'whole system approach to childhood obesity'. - this may be too much but thought it may be nice to show



13 - [A Whole System Approach to Preventing Childhood Obesity - Scarlet Design - click for more information](#)

The GAPP

- Whole systems approaches are now **recommended globally as the appropriate and most effective method to address physical inactivity**, and in 2018 the World Health Organisation produced an evidenced based Global Action Plan for Physical Activity (GAPPA).
- **GAPPA** outlines what a systems based approach is for health enhancing physical activity promotion, and identifies that to increase physical activity 'a systems based approach is required' (page 8). GAPPA identifies four objectives (policy action areas) to achieve this, including creating active societies, creating active environments, creating active people, and

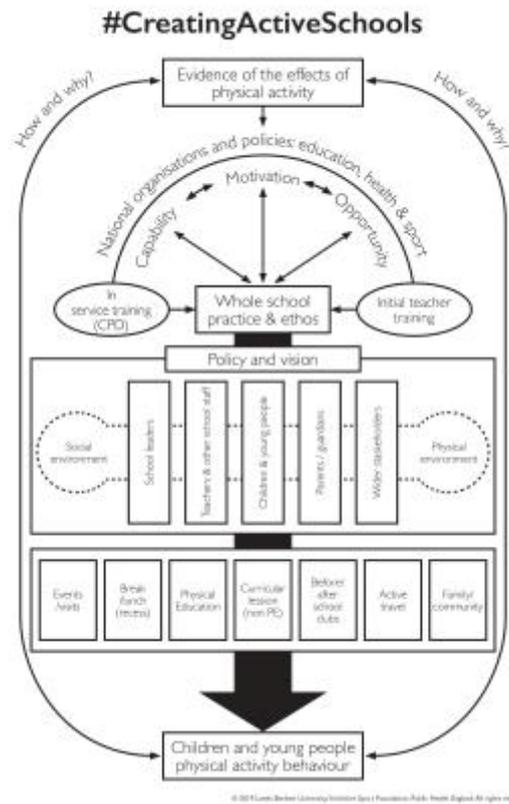
creating active systems. These four objectives will be discussed in subsequent modules to help you to understand how GAPPA can be used to create a whole school approach to HEPA.



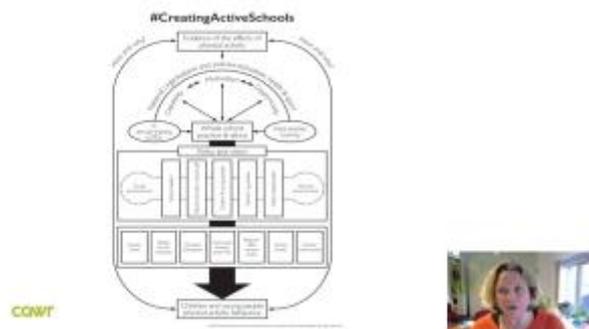
c. Why using a whole system approach is important

- As we have discussed, a whole systems approaches has been recommended globally as the appropriate and most effective method to address physical inactivity.
- However, the role of the school in promoting HEPA has often previously been seen as the sole role of Physical Education or Sports related teachers. But a whole systems approach accepts that the school itself, and the various facets that make up a school, such as playtime breaks, lessons across the curriculum, getting to and from school, and all those who work within it including teachers, support staff, managers, etc) can all play a role in HEPA for the children and the adults that attend and work in schools.
- Additionally, [Daly-Smith and colleagues](#) present a compelling case that because there is little evidence to date on specific, often independent interventions in schools to promote physical activity, to consider the school as a complex system, where there are multiple parts that can play a role, then the likely effect to increasing physical activity is greater because of the emergent effect.
- Daly-Smith and colleagues have also co-produced a useful framework in which to view the school setting and enable us to identify elements of it that can be used to promote HEPA. The framework is presented below and is explained in the video.

Creating Active Schools (CAS) Framework, Daly-Smith et al., 2020.



14 - Creating Active Schools (CAS) Framework (Daly-Smith et al., 2020)



<https://sway.office.com/WEYqM8qAv0PSrSTB#content=WBQLpBG3kBSiyW>

Please click the video clip to view an explanation of the the Creating Active Schools (CAS) Framework (Daly-Smith et al., 2020) from Professor Diane Crone, Director of the Centre for Health, Activity and Wellbeing Research, Cardiff Metropolitan University.

General summary of the video content:

- The framework is centred around the 'Whole school practice and ethos' box, which dictates the values, beliefs and practices around creating and facilitating HEPA in a school setting.
- Adopting a whole school approach is not just the role of the senior management team, but also all other staff, parents and children.

- Each person, in every position in the school has a role to play and therefore needs to understand the vision and subsequent practice (plans) to achieve the aim of HEPA and an active school.
- Framework identifies these key people as playing a part in creating an active school - school leaders, teachers, all other school staff, parents, the children and young people, other stakeholders connected to the school.
- Importance of the physical and social environment within a school setting.
- Physical environment is the playground, green space, school hall, classrooms, etc;
- Social environment is the social norms or what people typically think, feel or do, which should be reflective of the overall vision to create and promote a HEPA in the school setting.
- Aim - to create a school where being physically active in a class setting or in the playground is the norm and not the exception.
- Other key aspects identified in the framework: (i) range of opportunities where physical activity can take place; (ii) importance of the wider policy context which the school operates within which includes both education, health and social policies of the country it is situated within; and (iii) importance of education and an understanding of the benefits of being physically active, but also of the need to understand behaviour change theory.
- In conclusion, the framework provides a useful tool to understand the differing parts of the school to then see how each one plays their part in a whole schools approach to HEPA.

3. Case study examples of whole systems approaches

Please click on the links below to take you to different examples from around the UK of whole systems approaches

[JU:MP - Bradford, UK](#)



JU:MP - Bradford

- The JU:MP programme uses a system-based approach, specifically focusing upon the strong community engagement and co-production.

- The program aims to support all children and young people through increasing their capabilities, opportunities and motivation, to be physically active, and through increasing families' capabilities, opportunities and motivation to support their children to be physically active.
- JU:MP Bradford specify that they do not expect interventions to create effective behaviour change working in **isolation**, and that there is no one single solution to create sustained behaviour change for children and young people at a population level.
- As such, they believe that policy and strategy, community engagement, and activities need to be implemented across different settings and sectors concurrently.
- Overall, the JU:MP programme uses a whole systems approach in an aim to increase children's physical activity levels by working with families, communities, organisations (including schools, faith settings and the voluntary sector), improving the local environment and influencing city-wide policy and strategy.

*Bradford is one of 12 Local Delivery Pilots across the England for the JU:MP programme.

To see a presentation about the project please [click here](#)

To see more about the JU:MP project please [click here](#)



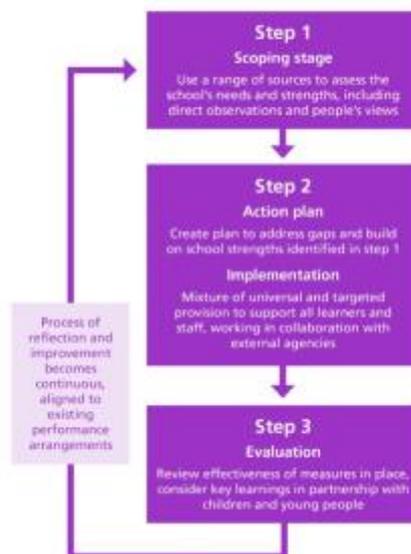
15 - Image of the JU:MP Bradford programme map, which demonstrates how 15 different workstreams interact with one another. [Click here for more](#)

Framework on embedding a whole-school approach to emotional and mental well-being - Wales



- The proposed framework aims at the needs of school-age learners and the workforce supporting their learning and well-being needs.
- The framework recognises that the school alone cannot meet all the needs of a complex population of children and young people.
- Therefore, the framework identifies the role of regional bodies, the NHS and others organisations in working collaboratively with schools.
- Within the document are a number of different case studies relevant to different aspects of the proposed framework.
- To view the full 'Framework on embedding a whole-school approach to emotional and mental well-being' document please [click here](#)

Flow diagram illustrating process for embedding a whole-school approach to mental health and emotional well-being



16 - Flow diagram illustrating process for embedding a whole-school approach to mental health and emotional well-being. Take from Framework on embedding a whole-school approach to emotional and mental well-being [available here](#)



- Obesity Action Scotland is working with the Government, NHS and other national agencies to support local services to test a 'whole system approach' to diet and healthy weight.
- They currently support a number of local teams to collaboratively understand the issue and the system in which it lives.
- To view a webinar and find out more about Obesity Action Scotland and how they are using whole systems approaches to diet and healthy weight in a digital world [click here](#)

Now you've had a look at a few examples from around the UK why not take a few minutes to try to find some examples of whole system approaches from your own country, city, and/or town.

4. Reflective task and Summary



After learning about whole systems approaches and seeing examples from around the UK we would like you to reflect upon the school you work in. Click the below link to answer you responses to the two tasks:

Task 1: Tick the ways in which you think your school currently supports HEPA using a whole school approach

Task 2: Take a moment to reflect upon your school and write down any ways in which you feel your school currently uses a whole school approach to promote HEPA?

[Click here --> REFLECTIVE TASK <-- Click here](#)

Summary

We have covered quite a bit today including:

- HEPA stands for health enhancing physical activity
- Children and adolescents physical activity recommendations
- Benefits of HEPA
- HEPA in school settings
- What a whole system approach is and what it looks like in a school setting
- Examples of whole system approaches to HEPA
- The GAPP

Hopefully you now have a better understanding of:

1. What is HEPA and a whole school approach
2. Why do we care about HEPA
3. How do we influence HEPA using a whole school approach

That concludes module 1 but please scroll down to see what is coming up next and for further resources and information

What's next?



After you have completed your reflections and are ready to continue with the HEPA online education modules please go to module 2 which concerns creating active societies informed by the GAPPA.

Remaining modules:

- Module 2- Creating active societies
- Module 3 - Creating active environments
- Module 4 – Creating active people
- Module 5 – Creating active systems
- Module 6 - Interdisciplinary teaching and physical activity

Resources

Links to external recourses and further reading:

- [OECD \(2020\). Health at a Glance: Europe 2020. State of Health in the EU Cycle](#)
- [Global action plan on physical activity 2018–2030: more active people for a healthier world](#)
- [Using a multi-stakeholder experience-based design process to co-develop the Creating Active Schools Framework](#)
- [2021 physical activity factsheets for the European Union Member States in the WHO European Region](#)
- [Rutter, H., Savona, N., Glonti, K., Bibby, J., Cummins, S., Finegood, D.T., Greaves, F., Harper, L., Hawe, P., Moore, L. and Petticrew, M., 2017. The need for a complex systems model of evidence for public health. The lancet, 390\(10112\), pp.2602-2604.](#)
- [Egan, M., Penney, T., Anderson de Cuevas, R., Er, V., Orton, L., White, M., Lock, K., Cummins, S., Savona, N., Whitehead, M. and Popay, J., 2019. NIHR SPHR Guidance on Systems Approaches to Local Public Health Evaluation. Part 2: What to consider when planning a systems evaluation.](#)

Thank you

