

CAS and IB Diploma Programme Subject Groups

The list below contains suggestions for CAS experiences associated with each of the subject groups of the IB Diploma Programme. The list can be used to provide ideas to students designing their individual CAS programmes. Many of these could also be incorporated into a CAS Project. Please note that the list is not complete and students will find CAS experiences not listed below.

[Production: insert programme model here]

There are six subject groups in the IB Diploma programme:

- Studies in Language and Literature
- Language Acquisition
- Individuals and Societies
- Sciences
- Mathematics
- The Arts

The following identifies types of CAS experiences available for each subject group.

Studies in Language and Literature

CAS experiences that could be derived from this subject group:

- Creative writing
- Produce audio books for an organization serving people who are blind
- Write articles about CAS or CAS Projects for school and local newspapers
- Raise awareness about issues treated in literature
- Teach younger students how to debate
- Write a movie/play script and make a movie/play

Language Acquisition

CAS experiences that could be derived from this subject group:

- Develop pen pals networks
- Provide language lessons to those in need
- Develop language guides using technology
- Creative writing in the language being studied
- Write articles on the culture of the language studied
- Produce materials explaining CAS in the language being studied

- Raise awareness of the culture of the language being studied through articles, a website or other forms of communication

Individuals and Society

CAS experiences that could be derived from this subject group:

- Create displays and plan an assembly on history, particularly of the area around the school
- Record the oral histories of people living in old people's home and create family memoirs
- Raise awareness of recycling within the school
- Map resources in the local area, such as recycling centres, youth organizations or social enterprises, and initiate CAS experiences that extend and support these resources
- Research development projects in the community and support initiatives such as the construction of a community centre or a school
- Work with local initiatives that support the UN Sustainable Development Goals
- Arrange a simulation, a game or a school debate addressing local or global political issues for other students
- Investigate ways of contributing to strengthening peace and peaceful behaviours in and outside of school
- Raise awareness of human rights issues through international and local organisations
- Support asylum seekers and migrants in integration in the culture and community of the new home country
- Create a social enterprise addressing a community need
- Research the philosophy of CAS
- Discuss and investigate ways of supporting the role of active citizenship in the local community
- Initiate a campaign that replaces bullying with respect for all within the school
- Build a garden for those in need

Sciences

CAS experiences that could be derived from this subject group:

- Form an astronomy club for an elementary school to encourage younger students to be more aware of the universe
- Raise awareness after testing local water quality
- Raise awareness by monitoring air quality around the school
- Raise awareness by monitoring traffic close to playgrounds
- Create and maintain a nature reserve on campus
- Help remove invasive species of plants from the local environment
- Help to clean the beach or river foreshore and develop a plan to keep the trash from returning to the area
- Advocate healthy eating habits with younger students

- Engage with school canteen to promote healthy school meals and develop initiatives for healthy eating and drinking
- Help maintain a local nature reserve
- Raise awareness of local nature reserves through a blog or website
- Form a recycling club in school
- Collect data on school waste to inform future policy
- Form an environment club to investigate local issues such as domestic waste disposal, sourcing of food in supermarkets, and reducing energy use at school
- Promote environmental initiatives such as eliminating the use of disposable plastic bottles on campus
- Form a club to promote awareness of global environmental issues
- Form a collaborative project with another school to share ideas on tackling environmental issues
- Help measure fitness of athletes in school sports teams
- Promote participation in physical exercise, for example, "walk to school" groups

Mathematics

CAS experiences that could be derived from this subject group:

- Teach younger children to overcome math challenges
- Maintain financial accounts for a local charity
- Assist students with special needs in mathematics
- Assist a sports' club or team with pre and post fitness assessment statistic analysis
- Host a series of math events for parents and the community to build an appreciation for math
- Create a video series of 'math adventures' for younger children
- Assist a local organization develop a business plan
- Learn how to do tax preparation and offer free services for elders or low income populations
- Design and paint a mural celebrating math through the ages
- Plan a 'math scavenger hunt' at school to reveal all the places math is part of everyday life

The Arts

CAS experiences that could be derived from this subject group:

- Attend and perform at an International Schools Theatre Association festival
- Create artworks to donate to hospitals, aged-care facilities, refugee centers
- Create community projects, such as performances or photo exhibits for hospitals, aged-care facilities, refugee centers
- Create performance for local schools with an educational message, for example, how to better protect the environment
- Compete in external theatre competitions
- Organize a flash mob
- Create a mural or public sculpture for a children's hospital, local childcare or community centers

- Create a social blog with a public purpose for other students
- Create performances for local theatre, community and cultural festivals
- Collaborate with charities and organizations to design posters for their causes and special events
- Create posters for not-for-profit organizations with an educational message
- Design of theatre spaces for local communities
- Do the lighting and/or set creation for theatre productions
- Establish an exhibition for exhibiting the work of local school children
- Establish a production company/festival for staging performances for the school and/or community
- Establish a virtual, online exhibition to exchange student artwork with other schools around the world
- Establish an inter-school festival staging pieces of theatre or a series of events which includes both training and performance elements
- Establish and run ongoing art classes in a particular media, style or technique for the benefit of the school and/or community
- Establish and run ongoing training in a particular style for the benefit of the school and/or community
- Film theatre performances and sports events
- Form a band and perform at a function
- Offer design and promotional services to support school productions or community productions
- Offer services in technical theatre, back stage and front of house, to support existing productions or curriculum productions
- Ongoing training in a physical performance style or training methodology
- Ongoing training in art-making media, styles and/or techniques with external visual artists or providers
- Ongoing training in theatrical styles and training methodologies with external theatre companies or providers
- Organize a photo exhibition
- Participate in external visual arts exhibitions or competitions
- Perform to raise funds for charity
- Performance and technical production opportunities with amateur and professional–amateur theatre companies or groups in any production role
- Produce a film on working with a charity/group in need
- Production design or set/costume/properties construction for school or local theatre, musical or dance productions
- Take dance lessons that lead to theatrical performance

The Integration of Service Learning with the Diploma Subject groups

One aspect of service learning is that engagement in service evolves from exposure to and developing an understanding of issues and subject matter studied in the academic curriculum. Here are some examples that outline possible links between each of the Diploma subject areas and the Service strand of CAS.

Language and Literature

- Producing Diaries, Blogs and Wikis as a writing practice and a new form of communication about experiences.
- Producing mp3 books for the blind by reading some of the literary texts of the IB Course.
- Writing articles about CAS Projects for school and local newspapers.
- Raising awareness about issues treated in literature, for example, looking at the plight of women as discussed in the *Bookseller of Kabul*.
- Brochures and blogs for new students and parents about the city where the school is located.

Language Acquisition

- Personal experience of each student could be used for oral and written practice of the language.
- Articles about human rights from a class conversation could inspire involvement with a local or international organization.
- Language learning applied to assist immigrants new to the country.
- Essays could be written about Projects for local newspapers or other forms of media.

Individuals and Society

- Public displays and presentations on history, particularly of the area surrounding the school.
- Recording the oral histories of community elders.
- Raising awareness of recycling within the school and extending the programme to other schools, home or local community.
- Mapping of area resources; this may be mapping the location of water sources in the community or recycling centres.
- Development Projects that relate to geography or economics.
- Setting up a young enterprise-company for charitable purposes.
- Applying geography by identifying and working with migrant groups and asylum seekers.
- Philosophy content applied to improve the students' understanding of the "Philosophy of CAS".
- Sociology and anthropology discussions can lead to examining the role of active citizenship in the local community.

Sciences

- Physics applied to forming an astronomy club within the school and encouraging younger students to be more aware of the universe.
- Chemistry leads to a water quality Project including testing local water (or air) quality and implementing an awareness campaign.
- Helping to remove invasive species of plants from the local environment as a part of an environmental sustainability project referenced in a biology class.
- Carrying out a composting programme with food left over from the canteen, and producing fertilizer to assist in a vertical vegetable garden in the school.

Mathematics

- Teaching younger children who have difficulties with mathematics.
- Doing the accounts for non-government organisations or school clubs
- Assisting special needs pupils with their mathematics
- Assisting with the data of sports clubs pre and post fitness assessment
- Statistics and analyse for sports teams.

The Arts

- A fundraising concert for a charity.
- Producing promotional and marketing material for a non-government organisation.
- Doing lighting and set creation for Theatre productions
- Creating a band and performing at a function.
- Creating posters for charities and school events.
- Filming theatre performances and sports events.

Suggestions for Global Significance: Thinking Globally and Acting Locally

The approach 'think global, act local' has importance when planning a CAS programme. While students may be tempted to travel overseas as a way to engage with issues of global significance, the same or comparable issues are typically found in communities and environments closer to schools, often in their own locality. Local situations allow for more convenient and sustainable opportunities for students to engage in issues that have global significance over time and to see the longitudinal impact of their participation. This may also allow for developing purposeful relationships with community members and to see the evolution of reciprocal benefits for all involved.

The list below contains suggestions for issues of global significance. The list can be used to provide ideas to students designing their individual CAS programmes. Many of these may be applicable for CAS experiences and a CAS Project. Please note that the list is not complete and students will find issues of global significance not listed below, particularly to stay current with what is occurring in their own communities.

The United Nation's Millennium Development Goals also provides a list of issues of global concern:

Goal 1: Eradicate extreme poverty and hunger

Goal 2: Achieve universal primary education

Goal 3: Promote gender equality and empower women

Goal 4: Reduce child mortality

Goal 5: Improve maternal health

Goal 6: Combat HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability

Goal 8: Develop a global partnership for development

The full list of goals, targets and indicators found at

<http://mdgs.un.org/unsd/mdg/host.aspx?Content=indicators/officialist.htm> may provide more opportunities and ideas for potential CAS experiences or CAS Projects that would involve students in engaging with issues of global significance also on a local level.

Some examples of appropriate CAS experiences that provide scope for showing achievement in this Learning Outcome include:

- Raise awareness of a global issue through a focussed campaign
- Participate in organised global issue projects
- Support local programs engaged in specific educational campaigns
- Assist local communities in integrating the principles of sustainable development

- Develop sustainability projects at school or the local community such as recycling bins and saving energy
- Plan and implement a school waste management policy
- Lead awareness activities at school about air pollution
- Become involved in the delivery of a computer literacy project in a local community
- Develop an urban community garden
- Teach hand washing lessons at local kindergartens as a part of Unicef's hand washing campaign.
- Organise a 'Love Your Ocean' day at school
- Raise awareness about human trafficking
- Build a storm water garden to reduce storm water runoff
- Create a campaign to raise awareness among tourists about fragile local ecosystems
- Tutor refugees after learning about gender equity in education
- Lead resume workshops for people who are unemployed
- Distribute resources for emergency safety

The above are suggestions only and students will undoubtedly find their own way in which to achieve the learning outcome.

As with all CAS experiences, students reflect purposefully on their engagement with Service, and may be guided to look for moments of personal significance or inspiration as a call for reflection.

Extended Essay and CAS

Four categories are discussed in this document:

1. The Nature of the Extended Essay
2. The Relationship between CAS and the Extended Essay
3. World Studies Extended Essay and CAS
4. Reflection for the Extended Essay and CAS

The Nature of the Extended Essay

"The extended essay is an in-depth study of a focused topic chosen from the list of approved Diploma Programme subjects—normally one of the student's six chosen subjects for the IB diploma. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. It provides students with an opportunity to engage in personal research in a topic of their own choice, under the guidance of a supervisor (a teacher in the school). . . .

The extended essay is assessed against common criteria, interpreted in ways appropriate to each subject. The extended essay is:

- compulsory for all Diploma Programme students
- externally assessed and, in combination with the grade for theory of knowledge, contributes up to three points to the total score for the IB diploma
- a piece of independent research/investigation on a topic chosen by the student in cooperation with a supervisor in the school
- chosen from the list of approved Diploma Programme subjects, published in the Handbook of procedures for the Diploma Programme
- presented as a formal piece of scholarship containing no more than 4,000 words
- the result of approximately 40 hours of work by the student
- concluded with a short interview, or viva voce, with the supervising teacher (recommended).
- In the Diploma Programme, the extended essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice. In those countries where it is the norm for interviews to be required prior to acceptance for employment or for a place at university, the extended essay has often proved to be a valuable stimulus for discussion."

(IB Extended Essay Guide, IB Cardiff (2013) P5

The Relationship between CAS and the Extended Essay

CAS experiences can be the inspiration for a student's choice of a particular extended essay. While carrying out a particular CAS experience or Project the student may see the direct link with a theme or topic that they have covered in the academic part of their course.

The following outlines three examples of Extended Essay research questions, all taken from Group 3 subjects (Individuals and Societies), that have been inspired by a student's participation in CAS. The examples all derive from a CAS Service experience that a student had while carrying out a CAS Project. Each of these CAS experiences influenced the students to further explore the academic links evident. This is an example of the service learning approach to CAS being advocated in the CAS guide.

A. In the Economics course

What are the costs and benefits of the project that our school has embarked on to help Masai living in Tanzania?

This student was involved in a school sponsored CAS Project in Northern Tanzania where the school has been for years helping to build classrooms for the local Masai people. Local builders were employed to do the building work and students worked as builders labourers on site for two weeks. The students used a model to look at the benefits brought by the action (both social and economic) and compared this with the costs of travel to the site and the effectiveness of the work.

B. In the Geography course

What are the factors affecting the location of people who are homeless in Jakarta, Indonesia?

The student had been involved in a CAS Project working with street children in Jakarta, Indonesia. It was discovered most of the street children had moved into Jakarta from the surrounding countryside. The student was inspired to examine the cause of rural-urban migration. Questionnaires and interviews were carried out with street children and analysis of the push-pull factors carried out. The principle of distance-decay was also carried out. The location of the students was plotted on maps.

C. In the History course

What was the role of the Switzerland in providing a safe haven for refugees in World War Two?

The student had been working in an old people's home in a Swiss city. They met and befriended a man who had worked for the Swiss Customs Service in the Second World War and had talked about the war and refugees. This inspired the student to examine official Swiss attitudes to refugees and also the work of customs officials, particularly in St. Gallen, who helped refugees stay in the country.

World Studies Extended Essay and CAS

The World Studies extended essay is an in-depth interdisciplinary study of an issue of contemporary global significance. This aims to develop interdisciplinary inquiry, the ability to conduct an investigation whereby students integrate knowledge and modes of thinking from two or more disciplines. An additional aim is to

develop a global consciousness consisting of three capabilities: global sensitivity, global understanding and global self.

The Essential Points of an Extended Essay in World Studies:

- Address a topic of global significance
- Have a clearly framed research question that addresses a global issue through a local example(s)
- Draw on disciplinary expertise rigorously and selectively
- Integrate IB disciplines productively
- Show development of global consciousness in a researcher's reflection space

To framing a research question in a World Studies Extended Essay, students:

- Start with a global issue
- Consider and determine how this relates to a local context or contexts
- Explore which disciplinary concepts and approaches will need to be used to investigate the topic
- Narrow the study to develop a focused research question

The world studies extended essay provides many opportunities to link a student's CAS local experience to a global issue. For example, a student who is working in a soup kitchen is learning about poverty in a local context. This issue could be examined from a number of different disciplines; it could be examined from both a philosophy and psychology approach, examining the charity's motives by providing the soup kitchen and also looking at the application of altruism theories.

