



You should also bear in mind that certain Extended Essays have a minimum expectation when it comes to primary and secondary sourcing, while others may disallow the use one type (for example, primary research in Psychology).



Subject-specific source lists

Note

A tick (✓) indicates that the subject requires the use of that type of source, a cross (X) indicates that it should not be included while a circle (o) indicates that it is dependent on the nature of the question devised. In most cases, the nature of the question dictates the type of sources required and thus it may be the case that both primary and secondary sources are required. Notes have been added to provide additional clarity on the requirements either way.

Subjects	Primary	Secondary	Notes
Language A	✓	o	The analysis should largely be based on the primary sources (that is, the text(s) being written about) from which all supporting information can come. Secondary sources can be used provided they are treated critically rather than merely accepted as the definitive interpretation.
Language B			
Category 1: Language	✓	✓	With essays based on language or culture and society there is an expectation that reference to both primary and secondary sources should be made.
Category 2: Culture and Society	✓	✓	
Category 3: Literature	✓	o	
Biology			
a. Experiment-based essay	✓	✓	<p>a. The focus with experiment-based essays is the primary data produced as a result of the experiment(s) conducted by the student. Secondary sources in the form of scientific publications should be used to support a line of argument or indicate where the student has adapted their approach so as to produce different results. A consideration of the quality of the secondary source material should also be offered to identify limitations or weaknesses in approach, method and so forth. Note: There are restrictions placed on the use of animals and humans when it comes to experiment-based essays. For more, please check the IB's Animal Experimentation Policy with your supervisor.</p> <p>b. Non-experiment-based (literature) essays should effectively question the reliability of the secondary source material used, and offer some critical insight into the strengths and limitations of the methodological approaches taken by the secondary sources.</p>
b. Non-experiment-based essay	o	✓	

Business management	○	✓	Essays in business management can rest on secondary source material entirely. Where primary research is used, it must provide quantitative and qualitative analysis directly relevant to the question.
Chemistry a. Experiment-based essay b. Non-experiment-based essay	✓ ○	✓ ✓	See biology notes.
Classical Greek and Latin	✓	✓	Students should aim to reference both types of source material. The text(s) studied will act as the primary source, while articles, reviews or other publications will constitute the secondary source material.
Computer Science	○	✓	Essays in computer science can be based on secondary source material entirely. A large number of such sources should be used where possible with the proviso that the most up-to-date material is found in every instance. Primary source material, in the form of programme runs or statistical charts, can also be used provided they are reliably constructed and relevant to the question.
Dance	✓	✓	Dance essays lean heavily towards primary source material (for example, interviews of dance practitioners or student's own dance experiences). Secondary source material (for example, texts about dance) should be used only as evidential support of your own perspective or argument. Challenging the position of a secondary source is also encouraged.
Design technology	✓	○	Due to the practical nature of this subject, most essays will focus on the design, implementation, benefits and effectiveness of your chosen product(s). A common approach would be to include data in the form of statistical charts, diagrams or tables gathered from user surveys and/or interviews of the product in action. More commonly, the sources used will often include your own data gathered from the trialling of a material, product or specific design, its experimentation for effectiveness, resilience or user-friendliness and so on or the production of models. Primary experimentation, however, is not a mandatory requirement although it does tend to lead to significantly better essays in design technology.



<p>Economics</p> <p>a. Research-based</p> <p>b. Source-based</p>	<p>✓</p> <p>○</p>	<p>○</p> <p>✓</p>	<p>Source requirements for economics essays are highly dependent on the nature of the question. Questions that invite and are dependent upon you conducting primary research (for example, interviews, surveys or questionnaires) are highly advisable though not mandatory. Essays based purely on secondary source materials (for example, economic data from the International Monetary Fund (IMF) and World Trade Organization (WTO)) are perfectly feasible provided the question has a sufficiently narrow scope. Essays that combine primary and secondary sources are also fine, provided both sets of sources are shown to be directly relevant to the question.</p>
<p>Environmental systems and societies (ESS)</p> <p>a. Experiment/Fieldwork-based</p> <p>b. Non-experiment/Fieldwork-based</p>	<p>✓</p> <p>○</p>	<p>○</p> <p>✓</p>	<p>Data gathered from experiments or fieldwork can constitute the entire basis for a successful essay in ESS, provided that detailed descriptions of the procedures used are given so that the work can be repeated independently. Essays based solely on secondary source material are also feasible, provided that a wide range of sources are used and that consideration for the reliability (or lack thereof) of said sources is made in the body of the essay. Some indication of how the material was created or the experiments it rests upon must also be noted in the essay.</p>
<p>Film</p>	<p>✓</p>	<p>○</p>	<p>As with a language A essay (see above), the primary focus of a film essay should be the primary source itself (that is, the film). Secondary sources can be used to support your line of argument but should not replace it. Secondary sources may also be challenged in the essay, rather than simply accepted as the definitive interpretation.</p>
<p>Geography</p>	<p>○</p>	<p>✓</p>	<p>Successful geography essays can be based solely on published secondary source material, however, a wide range of such sources would be required in this instance. Primary source work (for example, fieldwork data and questionnaires), although not mandatory, is highly advisable as it tends to produce stronger essays in this subject and thus yield higher results. In both cases, a critical evaluation of the sources/ approach followed is required.</p>
<p>Global politics</p>	<p>○</p>	<p>✓</p>	<p>Essays in global politics require you to situate your question within existing theories or arguments related to the subject. As such, references to secondary source materials (for example, textbooks and books on ethics) are mandatory. The use of primary source material (for example, interviews and surveys), although not mandatory, is highly advised as it tends to result in a stronger essay and thus the potential for higher marks.</p>

History	0	✓	<p>Essays in history should aim to use both primary and secondary sources, although the IB recognizes that this may not always be possible with certain topics and thus is not mandatory. However, if primary source material is readily available, Extended Essays in history are expected to make reference to them. A primary source in history is deemed to be any artefact from the time in question, while a secondary source is anything written about that time but produced later. A critical analysis of the value and limitations of the sources used (both primary and secondary) by means of investigating their origin and purpose is also required. Factual data and historians' views should be used to support the students' own argument without replacing it.</p>
Information technology in a global society (ITGS)	✓	✓	<p>ITGS essays require the use of a wide range of both primary and secondary sources. What's more, an attempt should be made to support (or contest) findings in secondary source material with primary source work (for example, interviews and surveys). The selection of source material (that is, the approach the essay takes) should also be briefly and critically assessed in the body of the essay.</p>
Literature and performance	✓	✓	<p>Due to the interdisciplinary nature of the subject, any Extended Essay in literature and performance will require a thorough understanding of the primary text(s) studied and the context in which they have been "transformed" from one medium (text) to another (performance). This means that although the primary focus is the text itself (as with language A essays), the key difference here is that a comprehensive understanding of the pre-existing historical and cultural context is required in order to better evaluate the "transformation" (text to performance) aspect. As such, secondary source material (for example, literary critiques and critical evaluations) are required as part of any literature and performance essay. This can be supplemented with personal analyses of performances seen in galleries, cinemas, theatres and other performance spaces by the student.</p>
Mathematics	✓	0	<p>Essays in mathematics can rely solely on the analyses of the data produced by your own calculations or applications of the mathematical formulae associated with the differing mathematical disciplines. Secondary source material can be utilized if the focus of the question demands considerations of external proofs or approaches (for example, the application of a historical mathematical theorem on a contemporary school of mathematics).</p>



Music	✓	✓	Music essays must analyse the primary source first and foremost (for example, performances and scores), however, secondary sources should also be used to provide support to the points raised by the student in the body of their essay. Where secondary sources are used, they must be used to support your own line of argument and not act as a substitute for it. An awareness of the value and limitations of the primary source(s) used is also required.
Peace and conflict studies	0	✓	It is a mandatory requirement that essays in this subject refer to at least one text that describes theories underpinning peace and conflict. There is a list of texts contained within the subject guide for peace and conflict studies that will be very useful for this aspect (speak to your IB Coordinator). Primary source material can also be used (such as interviews and surveys) where appropriate. This will become mandatory when there is not much secondary source material in existence on the chosen topic (for example, a conflict within a local community or school).
Philosophy	✓	✓	Primary sources in philosophy include the works of the philosophers themselves (e.g. Michel Foucault's <i>The Order of Things</i>) whereas secondary sources would include all other texts written about these works (including textbooks, articles, books and encyclopedias). Essays in philosophy should always begin with the primary sources while making use of secondary source material to further support a line of argument or analysis. Reliance on textbooks alone will produce poor philosophy essays and should be avoided.
Physics a. Experiment-based essay b. Non-experiment-based essay	✓ 0	✓ ✓	See biology notes.
Politics	0	✓	Secondary sources (books about political theory) are a mandatory requirement for essays in politics. The student is expected to situate their question within relevant and existing theories of politics. Primary sources (for example, interviews and surveys) can be of use when the chosen topic is local in nature (for instance, an electoral process in a local community) but will still need to be grounded in established political theory (for instance, by showing an understanding of the democratic process).

Psychology	X	✓	Psychology Extended Essays are expected to be seen as analytical investigations into an area of interest rather than primary research to test a hypothesis. Under no circumstances are students to engage in their own experiments or case studies as this is deemed inappropriate for essays in psychology. Instead, students should reference secondary source material as a minimum expectation (such as journals and textbooks) while making reference to pre-existing research material (for example, case studies and experiment-based data by recognized psychologists or institutions) as appropriate.
Social and cultural anthropology	0	✓	There is an expectation that all essays in this subject are rooted in a good understanding of anthropological theories and/or concepts. As such, reference to works by accepted anthropologists is highly advised. Primary source material can be included but must not be the core focus of the essay. A consideration of the value and limitations of the methodological approach followed to generate the data is also expected if primary source material is used.
Sports, exercise and health science			See Biology notes.
a. Experiment-based essay b. Non-experiment-based essay	✓ 0	✓ ✓	
Theatre	✓	✓	Theatre Extended Essays require the use of both primary (the works themselves, artists, performances and so forth) and secondary sources (articles, books, journals and so on). You may also make use of their own primary data generated from interviews with theatre practitioners or visits to theatres and galleries or even the student's own experiences of performances.
Visual arts	✓	✓	Visual Arts Extended Essays must analyse the primary source(s) first and foremost (such as art and artists), however secondary sources should also be used to provide support to the points raised in the body of their essay. Where secondary sources are used, they must be used to support your own line of argument and not act as a substitute for it.
World religions	✓	✓	Essays in world religions work best when they evaluate the established approaches to religion as they appear in secondary sources (for example, works about religion) against the data collected from primary sources (for example, the sacred texts, interviews with religious figures or a community of believers). In both cases, sources should not automatically be treated as representative or authoritative.



World studies	✓	✓	World studies is unique in that it requires students to combine two subject methodologies (for example, history and visual arts). As such, the type of sources referenced will depend on the two chosen subjects. Refer to the specific subject information listed above for additional insight.
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Types of sources

Accepted primary and secondary sources differ slightly in each subject, however, the table below will give you some indication of these.

Subjects	Primary sources	Secondary sources
Language A	Novels (text or graphic), letters, anthologies, poems, interviews, plays	<ul style="list-style-type: none"> – Any journals, articles, critiques, documentaries, websites, literary reviews, newspapers or literary magazines concerned with the chosen essay topic or its background. – Autobiographies and biographies may also prove useful in terms of context and occasional insight into textual meaning, although students should avoid limiting their analysis of the text to the specifics of an author's life
Language B	Novels, letters, poems, non-fiction, interviews, newspapers (language), websites (language), idiolects and dialects (language or culture), advertisements	Journals, articles, critiques, documentaries, websites, literary reviews, newspapers, literary magazines or any text focusing on language-specific analysis
Biology	Observations, fieldwork, experiments and all data generated from them	<ul style="list-style-type: none"> – Journals, articles, reviews, documentaries, websites, textbooks, science magazines on theories, experiments, models, case studies, approaches, research or methodologies – Data charts or graphs from science institutes or government centres
Business management	Any data, graphs, charts, position maps, matrixes produced by the student from conducting surveys, questionnaires, strengths, weaknesses, opportunities and threats (SWOT) analyses and any other acceptable quantitative or qualitative method as outlined by the business management syllabus	<ul style="list-style-type: none"> – Books, textbooks, articles, journal publications and websites on business theory, management or practice – Company reports, statistical bulletins or corporate analyses

Chemistry	Observations and experiments and all data generated from them	<ul style="list-style-type: none"> – Journals, articles, reviews, documentaries, websites, textbooks, science magazines on theories, experiments, models, case studies, approaches, research or methodologies – Data charts or graphs from science institutes or government centres
Classical Greek and Latin	Classical Greek or Latin texts such as epic poems, histories, speeches, political treatise, law codes and inscriptions	<ul style="list-style-type: none"> – Any journals, articles, critiques, documentaries, websites, literary reviews, newspapers, literary magazines and similar about the Classical Greek or Latin texts chosen for the essay
Computer science	<ul style="list-style-type: none"> – Analyses of student-made source code, compiler or other computer programme can form the basis of a computer science Extended Essay – Interviews with computer science experts (interviews of a small number of the student's peers would not be sufficient and should be avoided) 	<ul style="list-style-type: none"> – Any specialist books, textbooks newspapers, magazines, journal articles and websites that reference the chosen computing system, programme, code, technology, hardware design and so forth
Dance	Dance productions (live or recorded), photos of dance performances, articles by dance practitioners or interviews with them, dance notations, student participation in performances or workshops related to their topic	<ul style="list-style-type: none"> – Any textbooks, journals, articles, critiques, documentaries, websites, dance reviews, dance magazines, promotional material or DVDs concerned with the chosen essay topic or its background
Design Technology	<ul style="list-style-type: none"> – Surveys, questionnaires, user observations and structured interviews with users and experts. – Any data in the form of graphs, tables, charts and so on that emerges out of practical experiment conducted by you (the user) could also feature although this is not mandatory. These experiments could take the form of performance and effectiveness tests, prototyping solutions, situation modelling, and design trialling. 	<ul style="list-style-type: none"> – Books, textbooks, newspaper and magazine articles, journal publications and websites on design theory, principles, trends, applications and approaches – The usage of websites and textbooks alone is not sufficient for the purposes of an Extended Essay in design technology



Economics	Any data, graphs, charts and similar produced by the student from conducting surveys, questionnaires or interviews with experts in the field of economics (journalists, university professors, business leaders, politicians and other policy makers)	<ul style="list-style-type: none"> – Books, textbooks, newspaper and magazine articles, journals, and governmental publications and websites on economic theory, research, trends or policy – Research conducted by think tanks such as the Institute of Economic Affairs (IEA), Centre for Economic Policy Research (CEPR), RAND Corporation or similar – Publications produced by international organizations such as the United Nations, World Bank, International Monetary Fund and Golf Cooperation Council
Environmental systems and societies (ESS)	Observations, fieldwork, experiments, surveys or interviews with experts in the field of environmental studies	<ul style="list-style-type: none"> – Journals, articles, reviews, documentaries, websites, textbooks, magazines on theories, experiments, models, case studies, approaches, research or methodologies related to the environment, geography and biology could form the basis of secondary source material in ESS – Data charts or graphs from science institutes, government centres or international agencies (such as the Centre for Science and Environment, European Environment Agency and United Nations Environment Programme)
Film	<ul style="list-style-type: none"> – The film(s) or TV show(s) would act as the main primary source material, which would also include any scripts, screenplays, storyboards, and scores – Interviews with people involved in the film's production (whether via email or face-to-face) could also be used 	<ul style="list-style-type: none"> – Any textbooks, journals, articles, critiques, documentaries, websites, film reviews, film magazines, promotional material or DVD special features/extras concerned with the chosen essay topic or its background

Geography	All data gathered from fieldwork investigations or studies (for example, sampling, questionnaires, interviews, surveys and mapping)	<ul style="list-style-type: none"> – Any books, textbooks, newspapers, magazines, journal articles and websites that reference geographical issues, approaches, research and methodologies – Aerial and satellite images – Digital landscape simulations and models – Diagrams, charts, reports and other statistical data obtained from reputable sources (for example, governmental agencies and independent environment organizations)
Global politics	Questionnaires, surveys and interviews with either experts in the topic under investigation (for example, university professors and government agencies) and/or stakeholders related to the political issues being investigated (such as policy makers, members of the community or family members)	<ul style="list-style-type: none"> – Any books, textbooks, newspapers, magazines, journal articles and websites that reference the chosen political issues, conceptual frameworks, research and approaches followed – Written or oral records of major stakeholders or participants
History	Texts or artifacts created at the time in question: such as histories, letters, images, objects, speeches, charters, laws, inscriptions, diaries, buildings, newspapers, posters and photos	<ul style="list-style-type: none"> – Texts concerning the time in question but created after it: histories, documentaries, websites, journals, history magazines and films
Information Technology in a Global Society (ITGS)	Any data gathered by the student through the application of ITGS theory, tools, and techniques (e.g. testing of a particular IT system's effectiveness, surveys on a system's usefulness or application, questionnaires relating to a system's usage, etc).	<ul style="list-style-type: none"> – Any specialist books, textbooks, newspapers, magazines, journal articles and websites that reference the chosen IT system(s) or overall IT-related concepts and applications in real-world scenarios. – IT think tanks such as the Information Technology and Innovation Foundation (ITIF) and similar



Literature and performance	<ul style="list-style-type: none"> – The focus here is on how a literary work (such as a novel, poem or short story) was adapted into a performance (dance, play, opera, video game or film) – As such, the main primary sources will be the literary texts chosen and their associated adaptation – See the sections on language A, theatre, music, dance and so on for a list of relevant sources 	<ul style="list-style-type: none"> – Any journals, articles, critiques, documentaries, websites, literary reviews, newspapers or literary magazines concerned with the chosen essay topic or its background – Autobiographies and biographies may also prove useful in terms of context and occasional insight into textual meaning, although students should avoid limiting their analysis of the text to the specifics of an author's life
Mathematics	<ul style="list-style-type: none"> – Axioms, proofs, equations, theorems, data, problems, conundrums, statistics and so on 	<ul style="list-style-type: none"> – Books, journal articles, mathematics magazines, essays, specialist websites and any publication that incorporates mathematical techniques
Music	<p>Music recordings, scores, performances, concerts, observations, workshops, interviews with performers, questionnaires and/or surveys</p>	<ul style="list-style-type: none"> – Any textbooks, journals, articles, critiques, documentaries, websites, music reviews, music magazines, evaluations concerned with the chosen essay topic or its background
Philosophy	<p>The original works of philosophers that outline their philosophical concepts or themes</p>	<ul style="list-style-type: none"> – Any philosophy-related compendiums, dictionaries, textbooks and encyclopaedias – Where non-philosophy sources are used (for example, newspaper articles or literature on specific issues) they must be examined from a philosophical perspective only
Physics	<p>Observations, experiments and all data generated from them</p>	<ul style="list-style-type: none"> – Journals, articles, reviews, documentaries, websites, textbooks, science magazines on theories, experiments, models, case studies, approaches, research or methodologies – Data charts or graphs from science institutes or government centres
Psychology	<p>Experiments, case studies, observations and similar would classify as primary sources in psychology, however, these are not permitted as part of the Extended Essay so students should not conduct primary research at all</p>	<ul style="list-style-type: none"> – Books, journals, articles, reviews, documentaries, websites, textbooks, psychology magazines on theories, experiments, models, case studies, approaches, research or methodologies

Social and cultural anthropology	Observation, ethnographies, questionnaires and interviews (for example, life histories)	<ul style="list-style-type: none"> – Ethnographical and anthropological publications/studies will form the core source materials. Considerations of the ethical issues that underpin these studies is also necessary – Texts referencing social, cultural, political and historical contexts can be used for establishing wider contexts – Anthropology research libraries and institutes (for example, the British Museum's Anthropology Library and Wesley Powell Library of Anthropology)
Sports, exercise and health science	Observations, fieldwork, experiments, surveys or questionnaires, and all data generated from them	<ul style="list-style-type: none"> – Sports, exercise and health related books, journals, articles, reviews, documentaries, websites, textbooks, magazines on theories, experiments, models, case studies, approaches, research or methodologies in this area – Data charts or graphs from sports science institutes or government centres
Theatre	<ul style="list-style-type: none"> – The play itself (script/text or recorded performance) – Stage sketches, drawings, pictures, plans or photographs – Reviews of major productions – Interviews with playwrights, directors, actors, set designers, producers and so forth – Drama workshops 	<ul style="list-style-type: none"> – Any textbooks, journals, articles, critiques, documentaries, websites, theatrical reviews, theatre magazines and evaluations concerned with the chosen essay topic or its background
Visual arts	<p>The artwork and/or artist will constitute the main primary source material for Visual Arts Extended Essays</p> <ul style="list-style-type: none"> – Exhibitions – Interviews with artists (via correspondence or face-to-face) 	<ul style="list-style-type: none"> – Any textbooks, journals, articles, critiques, documentaries, websites, art reviews, art magazines and evaluations concerned with the chosen essay topic or its background
World religions	<ul style="list-style-type: none"> – Observation of religious practices or spaces – Surveys, questionnaires and interviews of religious leaders, practitioners or community members 	<ul style="list-style-type: none"> – Religious/Sacred texts, images and artifacts – Any specialist books, treatises, newspapers, magazines, journal articles and websites that reference the chosen religious topic or theme – Written or oral records of major stakeholders or participants



World studies	<p>A world studies essays requires that you select two subject areas to base your investigation upon. As such, the list of acceptable primary sources would depend on the chosen subjects</p> <p>See relevant subject areas above for lists of relevant sources</p>	<p>– A world studies essays requires that you select two subject areas to base your investigation upon. As such, the list of acceptable secondary sources would depend on the chosen subjects</p> <p>See relevant subject areas above for lists of relevant sources</p>
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Locating relevant sources

Most students gravitate to one of the main general search engines on the internet (for example, Google or Yahoo) or a general website such as Wikipedia as a first port-of-call when it comes to locating relevant sources. However, these do not always produce results that would be suitable for an academic research paper such as the Extended Essay.

Below is a list of alternative suggestions for a variety of subject areas:



Type	Details
1. Libraries	<p>The school's library should be the first stop when it comes to locating relevant source material. Too often do students overlook their own facilities in preference of an electronic search engine much to the detriment of their final work.</p> <p>In addition to school libraries, many schools are within close proximity of public municipal libraries that often house significantly larger collections of materials.</p> <p>State or national libraries are also a great place to visit if they can be readily accessed.</p> <p>University libraries may also be available to you though borrowing restrictions may apply to non-university students.</p> <p>Virtual libraries: Many libraries of institutions (such as the Getty Research Institute) now make their resources available in a virtual (online) environment that is often freely accessible or requires normal membership as is the case with physical libraries.</p> <p>Many libraries have sharing agreements with larger (parent/associated) libraries, which means that resources can be shipped between them upon request. They also have paid subscriptions to online databases which members can freely access.</p> <p>Always bear in mind that librarians are best placed to support students with regards to the location of appropriate academic materials, be they print or electronic in nature.</p>

Tip



Always visit a library.

2. Electronic databases

There are many electronic databases (many of them free or requiring a small subscription fee) that you can make use of. These usually store hundreds to thousands of academic-grade journals and associated publications. Below is a list of some of the more popular ones (check whether your library already has a subscription to these):

International System for Agricultural Science and Technology (AGRIS) (<http://agris.fao.org/agris-search/index.do>)

A free database containing articles in multiple languages on issues pertaining to the environment, geography and natural sciences.

The arXiv (<http://arxiv.org/>)

A free online database with publications relating to physics, computer sciences, mathematics, finance and biology.

CQ Researcher (<http://library.cqpress.com/cqresearcher/>)

A subscription-based database of contemporary social and political issues written by professional journalists.

EconBiz (www.econbiz.de)

A free online database with full-text access to a multitude of economics-related publications.

EBSCOHost (www.ebscohost.com)

A vast subscription-based database of scholarly publications, magazines and articles on most subjects. Includes many of these as full texts.

ERIC Institute of Education Sciences (<http://eric.ed.gov/>)

Thousands of publications relevant to education, human and natural sciences, the arts, and many more, often with free access to full texts or links to host sites.

Google Scholar (<https://scholar.google.com/>)

A search engine with a specific focus on scholarly articles, often accessible as full-text versions.

JSTOR (www.jstor.org)

A large subscription-based database of scholarly publications, magazines and articles on most subjects. Includes many of these as full texts.

JURN (<http://www.jurn.org/>)

A search engine with a specific focus on free scholarly articles, accessible as full text versions.

US National Archives (www.archives.gov)

A huge database of primary and secondary sources mainly on US History. Includes links to other external databases such as Fold3.

National Bureau of Economic Research (www.nber.org)

An online database with full-text access to a multitude of economics-related publications.

POPLINE (www.popline.org)

An online database with links to articles (often free) relating to health and associated factors such as culture and society).

PubMed Central (www.ncbi.nlm.nih.gov/pmc)

Database with millions of full-text articles on a myriad of topics in the Natural Sciences.



	<p>Questia (www.questia.com) A vast, subscription-based database of scholarly publications, magazines and articles on most subjects. Includes many of these as full texts.</p> <p>Science Direct (www.sciencedirect.com) A subscription-based database of publications relevant to mathematics, the human and natural sciences.</p>
<p>3. Online encyclopedias</p>	<p>An online encyclopaedia such as Wikipedia is usually the first place a student will turn to when it comes to research. Due to the lack of peer review on such sites and their open editorial nature, these do not often work well as sources for academic research papers. Although students continue to include these as sources in their bibliographies, Extended Essays should also reference more scholarly material. Essays that rely solely, or heavily, on online summative encyclopaedias will not score well.</p> <p>However, these types of sites are useful for:</p> <ol style="list-style-type: none"> providing an initial overview and summary providing links to a range of relevant primary and secondary sources in their bibliography sections for further investigation.
<p>4. Books</p>	<p>When it comes to books, it does not matter if you have a digital or physical copy for use; more important is the quality of the book itself. For example, a history book written by an amateur historian (such as an ex-serviceman) or hobbyist may not be as scholarly as one written by a recognized professor of history. Likewise, if the history is written by an economist or anthropologist, the approach may not always be ideal for your essay. It is thus more crucial to evaluate your choice of books against your specific focus, rather than assume it is of use simply because it is a printed book.</p> <div data-bbox="454 1092 1364 1281" style="background-color: #f9e79f; padding: 10px; border: 1px solid #ccc;"> <p>Note</p> <p>Far too often students assume printed works are all of the same quality, which leads to missed marks when it comes to Criterion A: Focus and Method and Criterion C: Critical Thinking.</p> </div> <p>See <i>Chapter 4: Research (pages 49–61)</i> for strategies on how to maximize your evaluation of chosen sources.</p>
<p>5. Textbooks</p>	<p>Similar to online encyclopaedias, no Extended Essay should rely exclusively (or heavily) on school textbooks. They are great for initial ideas and overviews of content, however, you should seek more scholarly materials to supplement them.</p>
<p>6. Journals</p>	<p>You should always seek out information from acknowledged journals in your chosen subject. Online databases such as those listed above are excellent for this, however, physical copies may also be present in many local or school libraries. Alternatively, journals can be individually purchased directly from publishers.</p> <p>Major universities usually have publishing houses affiliated with them that publish academic journals covering a range of subjects (such as Oxford University Press, Cambridge University Press, Harvard University Press and University of Queensland Press). Their websites will list available publications for purchase.</p>

7. Magazines

There are numerous specialized magazines that cover a wide variety of topics across all subject areas. A school's (or local/regional) library is always a great source of these types of publications. Below is a brief list of some examples:

- *New Scientist*
- *History Today*
- *BBC History Magazine*
- *BBC Music*
- *Philosophy Now*
- *IB Review*
- *Biological Sciences*
- *Chemistry Review*
- *Physics Review*
- *Psychology Review*
- *Economic Review*
- *Business Review*
- *Geography Review*
- *Frieze Magazine (Art and Culture)*
- *Creative Review*
- *Artforum*
- *Chez Nous Magazine (French)*
- *JDE – Le Journal des enfants (French)*
- *The Economist*
- *National Geographic*
- *Asian Theatre Journal*

8. Audio-visual

Videos or sound recordings such as documentaries, interviews, sound clips, demonstrations, 3D models and the like are also a great source of information that can feature in an Extended Essay.

It is important to bear in mind that these must be audited for their reliability just as you would a website or book. Aim to source material from credible and acknowledged sources rather than using anything available on YouTube or similar channels.

Organizing source material

Once you have accumulated your resources, the next key step is to organize them so that you'll have an easier time referencing material when writing your essay.

Reading a pile of books, magazines and journals usually feels like a large part of the research work and once this is done, there is a tendency to simply jump straight into the writing of the essay. However, this approach is flawed as no matter how good one's memory, details and specific information will be lost or conflated with other bits of information when the time comes to write the essay simply because of the sheer number of sources used.

