

Subject-specific source lists

Adapted from: Lekanides, Kosta. "Chapter 3: Locating, organizing and evaluating." *Oxford IB Diploma Programme: Extended Essay Course Companion*, Oxford University Press, 2016, pp. 25-31.

A tick (✓) indicates that the subject requires the use of that type of source.

A cross (x) indicates that it should not be included.

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 provide additional clarity on requirements.

Subject	Primary	Secondary	Notes
Language & Literature All categories	✓	o	The analysis should largely be based on the primary sources (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 Acquisition Category 1: Language Category 2: Culture & Society Category 3: Literature	✓ ✓ ✓	✓ ✓ o	With essays based on language or culture and society there is an expectation that reference to both primary and secondary sources should be made. With literature-based essays, the analyses 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.
Biology a. Experiment-based essay b. Non-experiment –based essay	✓ o	✓ ✓	a. The focus with experiment-based essays is the primary data produced as a result of the experiment(s) conducted by students. 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 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. Check the IB Policy 'Guidelines for the use of animals in IB World Schools'. b. Non-experiment-based (literature) essays should effectively question the reliability of the secondary source material used, and offer some insight into the strengths and limitations of the methodological approaches taken by the secondary sources.
Chemistry a. Experiment-based essay b. Non-experiment –based essay	✓ o	✓ ✓	a. The focus with experiment-based essays is the primary data produced as a result of the experiment(s) conducted by students. 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 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. Check the IB Policy 'Guidelines for the use of animals in IB World Schools'.

			b. Non-experiment-based (literature) essays should effectively question the reliability of the secondary source material used, and offer some insight into the strengths and limitations of the methodological approaches taken by the secondary sources.
Design Technology	✓	o	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 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.
Economics a. Research-based b. Source-based	✓ o	o ✓	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, economics data from the IMF and 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.
Environmental systems and societies a. Experiment/Fieldwork-based b. Non-experiment/Fieldwork-based	✓ o	o ✓	Data gathered from experiments or fieldwork can constitute the entire basis for a successful essay in ESS, provided that detailed descriptions of the procedure 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 of reliability (or lack thereof) of said sources is made in the body of the essay. Some indication of how material was created or the experiments it rests upon must also be noted in the essay.
Geography	o	✓	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.
History	o	✓	Essays in history should aim to use both primary and secondary sources, although the IB recognises 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.
Literature and performance	✓	✓	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 the key difference 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.
Mathematics	✓	o	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 questions demands considerations of external proofs or approaches (for example, the application of a historical mathematical theorem on a contemporary school of mathematics).
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.
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	✓ o	✓ ✓	a. The focus with experiment-based essays is the primary data produced as a result of the experiment(s) conducted by students. 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 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. Check the IB Policy ‘Guidelines for the use of animals in IB World Schools’. b. Non-experiment-based (literature) essays should effectively question the reliability of the secondary source material used, and offer some insight into the strengths and limitations of the methodological approaches taken by the secondary sources.
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). Students 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 their own line of argument and not act as a substitute for it.
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 under those subjects for additional insight.