Sample Research Log

The extracts that follow are examples of how candidates should document their research process from start to finish. Centres are not required to send more evidence than the examples provided below, but are advised to send a range of extracts of the log which document the beginning, mid-point and end of the research process.

Our comments on the candidate's work are written in bold throughout this document.

Choice and development of question

The topic "Sustainable Futures" was chosen because it is my area of interest and I am influenced by the scale of work that is being dedicated towards sustainable options. I spent my summer 2014 in Scotland and London where I saw signboards emphasising the need for conservation and recycling. The products sold in stores too highlighted the sustainable sources that had been used in their production. Moreover, I was an Environmental Management student in O levels and studying the course over three years raised my awareness and inquiry about sustainability. The main reason I took Global Perspectives and Research in A levels is because I had the opportunity to explore in depth my particular field of concern and write a research report on it. My research question evolved throughout the research process from, "Can our vision for a sustainable future become a reality," to become a more specific one; "Is investment in renewable energy the best strategy for a sustainable future?" that was based on the feedback I received from Cambridge on my OPF form and the discussion I had with my tutor. The question is based on analysing and evaluating the different ways in working towards a greener world and contrasts it with the potential of investment in renewable energy. The question on its own might apparently seem simple but it compels us to define what sustainability really is and debate on the variety of options present to us in the form of conservation technology, changing energy policy, reducing population growth and embarking on GM technology. The perspectives will be about views of the best strategy and the relative importance of investment in renewable energy.

The candidate has proved an explanation for why they chose the topic and how the original question evolved in light of the feedback they received from the teacher, which demonstrates reflective thinking. It is helpful to see how the candidate arrived at the final research question and what they expect the various perspectives will be on the issue.

Date	Task	Sources	Evaluative comments
Date XX/XX/XX	Dismantle the meaning of sustainability and identify the reasons put forward to pursue the concept of sustainability	(From the Internet) Accessed: 2 times Website of International Institute for Sustainable Development	The source provided key definition of sustainable development in explicit language. I felt that it was important to retrieve the definition from an organisation that researched and worked on the idea of sustainability.
		Accessed: 3 times Article from the Center for Humans and Nature	The article focused on unravelling the different perspectives regarding sustainability. It also debated on the potential challenges that are obstacles to a sustainable future.
		Accessed: 2 times The Guardian: "New Oxfam report says half of global wealth held by the 1%"	After I read social injustice as one of the causes of unsustainability, I researched on the inequality that prevails and found that this statistic was a strong evidence to support the cause. The article highlighted the growing gap of income disparity and served as an alarming indicator of future global problems. I do need to look at other evidence to corroborate or challenge this idea as Oxfam is concerned more global poverty and the report does not define 'global wealth' or indicate the details of the scope and method of the research
Date XX/XX/XX	Gain in depth knowledge of how various people view sustainability and how it can be achieved and why is it crucial	(From the Internet) Accessed: 6 times TED talks by the following people:	The talks introduced me to new concepts of sustainability like Biomimicry by Michael Anderson. Ray Anderson was an inspirational example of how people wedded to unsustainable activities can switch to a greener future. Will Potter on the other hand presented shocking evidence of how multinationals are carrying out their own agenda and how laws are smartly being used to dismiss the voices speaking for sustainability. Alex Steffen focused on population growth and the need for city planning. The talks add great weightage to the research as they depict scenes from real life. However, it will be important to look at the

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			counterview. Even if I dismiss it, I will look at some evidence from multinational websites
Date XX/XX/XX	Analyse the significance of Paul Ehrlich's equation used by Ray Anderson in TEDtalks	(From the Internet) Accessed: 4 times Article of Yale Environment360	The article explained the equation in detail and is credible as it is published by Paul Ehrlich himself. It gave his perspective on sustainability and why he believes that it is necessary. It also verified the equation used by Sir Ray Anderson during the TED talk that was watched previously.
Date XX/XX/XX	Increasing knowledge about the efforts being dedicated towards sustainability and analysing how far have they been effective	(Discovered various sustainability measures already taken from 3-4 Reader's Digests I had at home) Accessed: 4 times Reading diverse success stories from Reader's Digest of sustainable development in themes of economics, science and technology	The data provided progress towards sustainable development in different years. The stories present vital breakthroughs and the perspectives of people regarding a cleaner future. The stories include success of the TerraCycle Company, discovery of resilient crops to fight climate change and determination of communities to tackle problems of garbage. The digests also raised concern for sustainability by using statistics and predictions of the IPCC on climate change. The data highlights optimism in sustainability. Target: check the original references of the articles summarized in Readers Digest.
Date XX/XX/XX	Gain access to information that organisations like UNESCO, World Bank have regarding sustainability and analyse them in respect to what still needs to be achieved. Other sources demonstrated role of the state in achieving sustainability	(From the Internet) Accessed:4 times Website of World Watch Institute Accessed: 2 times Website of UNESCO	The source highlighted how sustainability has its roots in elements of good governance, understanding of cultural biodiversity and resolving local issues. Case of Ethiopia benefiting from investment in renewable energy was valuable. Target: Research origin of the World Watch Institute to ensure that I evaluate this. Find corroboration. The source commented on key issues of malnutrition,

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		Accessed: 3 times Website of World Bank	poverty and the need to instill the concept of sustainability through education.
	Gain access to information that organisations like UNESCO, World Bank have regarding sustainability and analyse them in respect to what still needs to be achieved. Other sources demonstrated role of the state in achieving sustainability	Accessed: 6 times Pessimism of Intellect «or »Optimism of Will«? Sustainable Development and the Role of the State (Literature Review)	It provided an example to counter argue that although China's growth is a threat to sustainability, it is also changing course by highlighting its leadership in imposing carbon tax on businesses.
			The report was used to gain data about other measures that are taken by states to embark on sustainable development. Investment in nuclear power was selected as one of the strategies and evidence was used to support the increasing use of nuclear power by certain states. Other measures like ethanol production to be used as fuel is also being used by states like Brazil to reduce their carbon emissions.
Date XX/XX/XX		(O level Course Book at home) Accessed: 1 time	A counter argument for using nuclear energy was used by
(continued part of prior research)		ENVIRONMENTAL MANAGEMENT by John Pallister Endorsed by University of Cambridge International Examinations Chapter 1: The Lithosphere Are we the friends of the Earth?	extracting evidence of the dangers of nuclear power. The evidence of Chernobyl disaster in 1986 was selected.

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		From the Internet) Accessed: 6 times Planning for a Sustainable Future A Guide for Local Governments Transportation Case Study: Gadsden, Alabama (Literature Review)	The case study was used as a success story and used to indicate that collaboration of the public and the state could accelerate the path to sustainable development. The story of Alabama involved successful recycling of waste vegetable oil from restaurants and homes and minimised fuel expenditure. This should be made clear when using it as evidence
Date XX/XX/XX	Collecting further evidence that sustainability is a realistic possibility	(From the Internet) Accessed: 3 times Articles from website of ensia Accessed: 2 times Example of green architecture from	The articles contained the moving trend towards sustainability and firms are being questioned on their sources of products. One of the article also identified aviation is the key to reducing carbon emissions. The source provides a real life example of sustainable architecture in the form of the Beddington Zero Energy in London. It is evidence to the fact that more of such
Date XX/XX/XX	Measure the rate of developments in sustainability with the pace of unsustainable activities and analyse and evaluate whether their impacts can be reduced in time. The aim is also to assess whether	Inhabitat's website (From the Internet) Accessed: 3 times Website of Forbes	buildings can be built. The data highlight the threat to the world from China's economic growth. It indicates to the need to shift to sustainable growth is evidence to the fact that fossil fuels are still being burnt. It can be typically the case in developing countries that justify their use with the progress of developed countries at the expense of nature.
	steps taken for sustainability are completely reliable.	Accessed: 2 times Earth Island Journal Accessed: 2 times	The data indicates that carbon dioxide is not the sole concern but methane gas is far more damaging to the mechanism of the planet. The data about methane as a greenhouse gas served to suggest that the problem of global warming could also be tackled through removal of

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		LandLearn NSW Supporting environmental education Research: Managing methane emissions	other sources. However, it must not be forgotten that carbon emissions are the main driver of drastic changes like climate change.
		Accessed: 4 times Website of Vox	The source provided ways of reducing methane emissions through increasing livestock productivity, changing their diets and genetically improving cattle.
		Accessed: 2 times Website of Scientific American	The information highlights the energy crisis in the world and its impact on various countries of the world. The fact that there are still reserves remaining and there are countries whose interests are tied with oil, it is hard to see the vision of sustainability being turned into a reality.
Date XX/XX/XX	Gain a national perspective regarding sustainability that demonstrates Pakistan's achievements and also reflect upon the obstacles we still face.	Accessed: 3 times The World Post Article (From the Internet)	The data provides evidence that the planet is becoming increasingly unstable with impacts of climate change. The source also mentions the geopolitical race for oil as countries seek to exploit the situation of climate change. All of information lends increasing support to the view that sustainability might not be achieved.
		Accessed: 2 times Website of China.org.cn	It illustrates the impact of using GM crops in India. It lends support to the view that they may not be the right choice despite claims about their higher yields. Moreover, it can also be seen as a way multinationals are developing monopolies rather than any real concern for sustainability of such states. The data paints an alarming picture of what the future can

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		(From the Internet) Accessed: 2 times Article from THE NATION	be like if China and India continue their dependence on oil. Their huge consumption capacities serve to highlight how vital it is for these developing countries to lead the change towards sustainability.
		Accessed: 2 times Website of Triple Bottom Line	The data indicates the impacts of climate change in Pakistan that is specific to my country. It is hard to see countries like Pakistan that are economically and politically unstable will be able to fight for sustainability.
			The example of Engro Chemical Limited winning the best sustainability award is evidence to the fact that even in Pakistan much work can be dedicated towards sustainability.
Date XX/XX/XX	Contacting any expert in sustainability to gain his perspectives and evaluate them as part of my primary research .I realised that would be using Professor Paul R. Ehrlich equation in my report as it combined the components of technology, population growth and affluence. Hence, I emailed him using his contact from the internet. However, as he was busy at the time he directed me to contact his	(Emails through Hotmail) Accessed: 15 times Joan M. Diamond Executive Director Millennium Alliance for Humanity and the Biosphere (MAHB)	His solution to sustainability was preventing over population. His argument led me to view the solution from a different perspective. His view was that birth control should not be imposed but instead implemented through provision of incentives to those who were willing to participate. His response also changed my perspective of viewing population control as a negative measure and gave me the opportunity to view measures from a positive perspective.

It is useful to see how the candidate's evaluative thinking develops throughout the research process. Even the early stages of the research log show an awareness that evidence will have to be assessed and evaluated in relation to other sources of evidence, for example comparing how various countries contribute to sustainability and their differing approaches. There is a strong and varied range of sources consulted and there is clear continuity between the original idea and the development of this initial idea throughout the research process through garnering further evidence, challenging the perspectives and reflecting consistently on the issues that arise. The use of various types of evidence is also impressive, including email correspondence with experts from the field, case studies, articles and literature.

The assessment of the research log does not assess the information and evaluation of evidence in the log, or the quality of the sources mentioned or arguments referred to, but whether the log has been maintained consistently through the research and has helped the candidate to develop their thinking. In this case, the research log has clearly be maintained throughout the research process, it contains evidence of an iterative process of evaluating various forms of evidence and it is a helpful working document demonstrates the development of the candidates ideas.