1) InWork is a company incorporated in Britain, but Philip O’Connor (CEO, InWork Education Group), is an Irish citizen and works from Dublin, Ireland.

2) Philip previously worked for 4 years in education sector in China. Philip has project managed team of 20 people to create three prototype digital education platforms, designed to serve range of both UK and Global education needs, which needs are currently under served by other education providers.

3) InWork is a digital education business and our objective is to encourage students to learn broad range of 21st century Work Skills and Life Skills, which skills are not typically not taught in most schools worldwide.

4) Many countries lack the exam systems capable of assessing level of attainment in subjects such as Big Data, Cyber Security or Financial Literacy. There is a need for **NEW CURRICULA** and **NEW CREDENTIALS** to educate students and life long learners with the range of 21st Century Skills required for the Jobs of the Future.

5) InWork believes that Systemic Problems can only be addressed by a Systemic Solution. Thus InWork is developing new curricula and new credentials, and creating digital platforms to deliver Mass Personalised Learning together with an Individualised Learner Record.

InWork believes there are multiple inter-connected issues within existing education systems, such as:

6) UK Government estimates that within next nine years, by 2023, the number of UK school children will exceed eight million students. It is projected by 2023, there will be an estimated 4.6 million pupils in state primary schools, 9% higher than in 2014. By 2023, UK Secondary pupil numbers are expected to increase from 2.7 million to 3.2 million.

7) Many Employers say there is a disconnect between the academic subjects taught in schools and the skills needed in the Workplace. Most Schools do NOT teach subjects of Financial Literacy, Entrepreneurship, Software Engineering, Hardware Engineering, Big Data or Cyber Security.

8) Massive Online Open Courses (MOOC’s) are a useful resource and there are already an estimated 15,000 free university courses available online from MOOC platforms such as [www.EdX.org](http://www.EdX.org), [www.coursera.org](http://www.coursera.org), [www.futurelearn.com](http://www.futurelearn.com) and The Open University [http://www.open.ac.uk/](http://www.open.ac.uk/). But problem with MOOC’s is that unless a student has had some basic education about a topic at school level and has developed some basic skills in that subject while at school, the Student is unlikely to seek to attempt to study a MOOC level course, in a subject about which they have no previous experience of studying.

9) There is global Skills Gap shortage of 7.90 million people to fill high skill jobs, namely
   - 750,000 European IT Professionals,
   - 1.75 Million American IT Professionals,
   - 2 Million Big Data staff,
   - 2 Million Engineers,
   - 1 Million Cyber Security staff,
   - 400,000 Insurance staff.

10) Future of Work Report, by Carl Benedikt Frey of University of Oxford, estimates that Automation could replace an average of 50% of all Job Functions currently carried out Human Workers in Europe. Dr Frey estimates that Automation could replace 47% of Job Functions in America, which equates to 60 Million Americans losing their jobs.
11) Andy Haldane, Chief Economist at Bank of England said in a speech to a TUC Conference, that over the next 20 years, Automated Technology Systems may be able do 40% of all Job Functions currently carried out by Human Workers in Britain. This equates to the jobs of 15 million British Workers being replaced by automated technology systems.

12) While Automation may threaten the jobs of many Workers, it is also an Opportunity. McKinsey estimate that Automation could generate additional growth of 10% in the global economy, which equates to an additional US$10 TRILLION per year of additional wealth. But Automation will create Winners and Losers. The UK education system and UK Students need be aware of need to be prepared to work in the Jobs of the Future.

13) On top of the problem of Automation replacing Human Workers, the World Population is growing at rate of 80 Million people arriving on Planet Earth each year. The NEXT ONE BILLION people will be on Earth within next 15 years by 2030, and Governments in many countries are unlikely to be able to afford to keep building new Schools and Universities.

14) United Nations, Sustainable Development Goal 4 is to ensure inclusive and quality education for all and promote Life Long Learning. InWork platforms can help deliver education programs to meet SDG4.

15) Currently 71 million youths worldwide are Unemployed and every year an additional 40 Million young people worldwide seek to join the labour force, including:
   - China – 8 Million new workers every year
   - Africa – 11 Million new workers every year
   - India – 13 Million new workers every year
   - Middle East region population is circa 300 Million, but 50% are aged under 30.

16) On a typical school day in Africa, at least 25% of Teachers will not turn up to teach class. Africa faces a projected shortage of 4 Million Teachers.

17) In relation to the UK Education system, InWork points out the following:

18) In 2014, the UK Government made it compulsory for GCSE level students aged 14 to 16 to study subject of Financial Literacy at School as part of the National Curriculum. UK organisations such as Personal Financial Education Group www.pfeg.org and its associate, Young Enterprise www.young-enterprise.org.uk are seeking to promote Financial Literacy and Entrepreneurship education.

19) House of Lords Select Committee Report on Financial Exclusion, Chaired by Baroness Tyler. Published a Report in March 2017, which said that subject of Financial Literacy in only compulsory in schools run by Local Authorities and that many Academies, Free Schools and Independent Schools in UK, provide no Financial Literacy education for their students.

The Study of Financial Maths is relevant to improving the level of financial ability among students.

20) The Good Things Foundation www.goodthingsfoundation.org says 13.2 Million people in Britain have low Financial capability and 3.2 million of these people have low digital skills.

21) A 2017 Report published by German Government as part of the G20 Working Group on Financial Inclusion states there are an estimated 2 BILLION people worldwide who lack adequate
Financial Literacy Skills, and there are an estimated 300 million Small Businesses, who lack adequate Financial Literacy skills.

22) UK Cabinet Office issued a Report which said Cyber Crime is costing the UK Economy an estimated GB£27 Billion per annum. Symantec Corporation say that Cyber Crime costs the world economy an estimated US$250 Billion per annum.

23) It is hard to get exact numbers, but InWork believes that around 35,000 UK School students are currently studying for the new Computer Science “A” Level, which is a low number, based on the total secondary school student population of 2.7 million.

24) The American organisation www.Code.org has reported that just 2% of American High School Students take an exam in a Computer related subject while at High School. This implies that the other 98% of American High School students, take no exam in an IT related subject.

25) Another American organisation called Education Design Lab www.EdDesignLab.org says that over the next 4 years by 2020, 50% of all Job Vacancies in America which require a Job Applicant to have Technical Skills, are forecast to go unfilled, because US Employers cannot find enough staff with the required level of Skills.

26) In March 2017 Department of Culture Media and Sport announced a Tender to spend GB£20m to fund an education provider to deliver the “Cyber First” education program to 5,000 UK School Students within next four years by 2020.

27) https://cybersecuritychallenge.org.uk/ is seeking to promote Cyber Security education to UK Students, and they have created a Cyber Education Course, aimed at 14 to 18 year olds. This cyber course has been accredited as an “Extended Project Qualification” (EPQ) and students who complete the Cyber EPQ can earn 28 UCAS Points, which equates to half an “A” Level.

28) There are an estimated 5.4 Million SME’s in Britain, and GCHQ launched the “Cyber Essentials” program designed to help SME’s adopt good Cyber Security practices, but according to the Cyber Essentials website, only 1,200 UK Organisations have signed up for the Cyber Essentials program, which is a low take up rate, given there are 5.4 million SME’s.

29) A 2014 Study by the Nuffield Foundation reported that as compared with other Countries in Europe and worldwide, England, Wales and Northern Ireland are among the regions with the lowest percentage of Students studying Maths after age 16.

30) https://www.yourlife.org.uk/ was set up by UK Government to address the problem that around 80% of all UK Students stop studying Maths after age 16.

31) Your Life together with AT Kearney published a Report called “Tough Choices” which examines why UK Students choose to avoid studying STEM Subjects. This is an excellent Report and it highlights the reasons why many UK students feel STEM subjects have no relevance for their future careers.

32) The Institute of Physics says that despite rise in student population, the number of UK Students studying Physics has declined by 50% over past 20 years. Some industrialists complain that the course content of the Physics curriculum in many countries, has not been updated for 50 years.
33) As a response to the inter related problems of:

a) Automation threatening Jobs  
b) Skills Gap Shortages  
c) Increasing Population  
d) Lack of Teachers  
e) Need for new Curricula  
f) Need for new Exam Credentials  
g) Need for regular Re-Education  

InWork has devised a range of three digital education platforms, to teach information about Work Skills and Life Skills which are required for Future Jobs.

34) Over time, InWork plans to create a menu of 50 Education Courses, but to speed up launch of first education course, to attract some Users and generate Revenues quickly, InWork has deliberately divided our education content into three digital platforms, which we call Small, Medium and Large.

35) Within the short scope of this submission, InWork is just seeking to show the Select Committee a short sample page of each of our three digital platforms. InWork can show the Select Committee a Demonstration of our Digital Platform and Sample Education Content.

36) First Platform is called InWork.org, see sample page at www.inwork.org/educators and is our small platform as it is focused on delivering content about Financial Literacy, Insurance Literacy and Entrepreneurship, for the 2 Billion people worldwide who lack Financial Literacy Skills to help them fully participate and benefit from financial products such as Banking, Credit, Insurance and Pensions.

37) Workers need life long Financial Literacy information at point of action as they make key financial decisions about Savings, Credit and Pensions, throughout their 40 year career from age 25 to 65.


39) Second Platform is called Alien Military, see page www.inwork.org/cyber and is focused on delivering content about Data Governance and Cyber Security. Because cyber security is rapidly evolving subject, there is need to keep updating the education content, so hence we call this our Medium size platform.

40) Symantec estimate that only 3% of all websites bother to install any basic security features, so target audience is to educate both Students and also Businesses about Cyber Risks.

41) By way of comparison www.cybrary.it has attracted a global audience of 700,000 users interested in learning about Cyber Security.

42) Third Platform is called InTraining.com and is focused on delivering content about Science, Technology, Engineering and Maths (STEM). Because of the wide range of education subject matter, we call this our large platform
43) Please see sample page at [www.inwork.org/intraining](http://www.inwork.org/intraining) as this page explains the “Job Ready Scorecard” which is a “Skills Passport”. InTraining.com will operate is a similar way to the “Vendor Certificate” credential as issued by Microsoft Certified Programmer, or Cisco Academy or credential from European Computer Driving Licence [www.ECDL.org](http://www.ECDL.org) or [www.Udacity.com](http://www.Udacity.com) but InTraining offers wider range of Skills content.

44) Students and Life Long Learners can study a range of subjects at InTraining and earn a range of Credentials by sitting exams at the 8,000 Pearson VUE or Prometric Test Centers worldwide.

45) The three InWork digital platforms collectively can provide Mass Personalised Learning to a global audience. The Job Ready Scorecard provides an Individualised Learner Record which will improve international recognition of Qualifications and improve international Labour Mobility. The Student or Worker can give permission to an Employer seeking to hire staff in Britain or in any country, to view the Job Ready Scorecard online, so the Employer can quickly understand the Range of Subjects and Level of Skills which the Job Seeker has.

46) InWork platforms use freemium education model, so InWork allows all users access education content for free, but InWork seeks to generate revenues by Advertising to our user base and by selling premium merchandise to a small percentage of users. It should be noted that even the UK Government is generating money by advertising to UK Students. UK Government owns [www.ucas.com](http://www.ucas.com) the University Application portal and UCAS operates [www.ucasmedia.com](http://www.ucasmedia.com) which generates revenues of circa GB£12 million per year from advertisers seeking to get their products noticed by a student audience.

47) InWork has two target customer categories. First category are individual Retail Customers who make personal choice to access content direct by Website, App, E-book or Video. Example of Retail business model is [www.ECDL.org](http://www.ECDL.org) who have delivered education to 14 million students and [www.lumosity.com](http://www.lumosity.com) which has 60 million users worldwide.

48) Second category is “Education as a Service” for Institutional Customers such as Governments, Education Authorities and Sponsors who pay InWork to deliver education and exams to a target audience chosen by the Education Authority or chosen by the Sponsor. Examples of “Education as a Service”, institutional business model are Houghton Mifflin Harcourt [www.hmhpub.com](http://www.hmhpub.com) who are paid by Goverments across 120 countries to deliver K12 education content to 63 million students and [www.k12.com](http://www.k12.com), and [www.everfi.com](http://www.everfi.com) who are paid by Sponsors to deliver education to 12 million students in America.

49) InWork education platforms have deliberately been designed using a loud brand style. While our brand style may not appeal to Select Committee, we do point out that the average UK Student is already sending 3 hours per viewing digital content. Each day an estimated 8 Billion Videos are viewed on Facebook and a 6 Billion Videos are viewed on Snapchat. The digital content and brand style of InWork platforms is designed to engage with the youth audience who are looking at those videos.

50) The information contained in this document is just a short summary introduction. InWork has vast amounts of additional information and we would welcome an opportunity to meet the Select Committee to discuss our education model, business model and how it could be applied to benefit UK Students and UK Workers.

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