

- 1 (c) Provide all learners with the opportunity to enhance individual capabilities and knowledge
2 through information and communications technology (ICT);
3 (d) Create a system that shall promote and regulate the use of digital technology in public
4 education;
5 (e) Enhance the learning experience of students by providing them access to digitized
6 copies of necessary reference materials and digital and online content through the use
7 of ICT and other related technologies for the advancement of education in the country;
8 (f) Provide an accessible complementary mode of learning to allow students to
9 continue their education during national health emergencies;
10 (g) Encourage the wider participation of private groups, local government units (LGUs), and
11 community-based organizations in content generation and the utilization of the broader
12 spheres of science and technology; and
13 (h) Promote public and private partnership in improving access to quality education and
14 lifelong learning.

15
16 **SEC. 3. Objectives.** – This Act shall pursue the following objectives:
17

- 18 (a) Establish an Interagency Taskforce to craft and implement the road map for the PSOFT;
19 (b) Institutionalize a program for the integration of digital technology and innovation in
20 public basic education through the PSOFT Road Map;
21 (c) Identify key components of the PSOFT Road Map; and
22 (d) Provide a public-private partnership (PPP) mechanism to facilitate the attainment of the
23 objectives of the PSOFT Road Map.
24

25 **ARTICLE II**
26 **DEFINITION OF TERMS**
27

28 **SEC. 4. Definition of Terms.** – As used in this Act:
29

- 30 (a) *Fourth Industrial Revolution* – refers to the ongoing automation of traditional
31 manufacturing and industrial practices using modern smart technology by integrating
32 advances in large-scale machine-to-machine communication, artificial intelligence,
33 genetic engineering, the Internet of Things, and other technologies for increased
34 automation, improved communication and self-monitoring, and production of smart
35 machines that can analyze and diagnose issues without the need for human intervention;
36 (b) *High Touch, High Tech Framework* – refers to a policy framework supported by the
37 United Nations Education Commission that espouses the need for educators to find a
38 balance between the more modern electronically-delivered and digitally-supported
39 method of teaching and the traditional face-to-face mode, the latter being teaching
40 methods that are founded on a teacher's capability to identify, develop, and improve an
41 individual student's academic weakness;
42 (c) *Internet safety policy* – refers to an age-appropriate, research-based policy that regulates
43 the safe, ethical, and responsible use of the Internet in public education, promotes an
44 informed and critical understanding of the Internet, and the education of children and
45 communities about how to prevent or respond to problems or dangers related to the
46 Internet and new media; and
47 (d) *New media* – refers to emerging digital, computerized, or network information and
48 communication technologies that often have interactive capacities, which includes e-mail,
49 instant messaging, text messaging, web sites, blogs, interactive gaming, social media,
50 cellphones, and mobile devices.

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ARTICLE III
PUBLIC SCHOOLS OF THE FUTURE IN TECHNOLOGY

SEC. 5. *Public Schools of the Future in Technology (PSOFT) Program.* – There is hereby instituted a PSOFT Program in all public elementary and secondary schools.

The PSOFT Program shall adopt the following principles upon administering basic education in the public school system:

- (a) Establish a system of upgrading and replacing outdated technology;
- (b) Broaden and maximize the use of ICT to aid learning;
- (c) Provide technical support to maintain ICT and other technology;
- (d) Train and support teachers and students on ICT and other technology;
- (e) Develop educators to use ICT effectively in the classroom; and
- (f) Ensure that the balance between modern and traditional methods of teaching are equally utilized to obtain optimum learning outcomes.

SEC. 6. *Creation of the PSOFT Inter-Agency Task Force (PSOFT-IATF).* – There is hereby created the PSOFT-IATF.

The PSOFT-IATF shall, in consultation with concerned non-government entities, including private companies, non-profit organizations, and private education institutions, develop the PSOFT Road Map, a consolidation of development plans, programs, and projects to be implemented by various departments and agencies of the national government for the purpose of advancing digital technology and innovation in public basic education.

The PSOFT-IATF shall be composed of the Secretary of the Department of Education (DepEd) as Chairperson and the following as members: (1) Secretary of the Department of Information and Communications Technology (DICT); (2) Secretary of the Department of Science and Technology (DOST); (3) Secretary of the National Economic and Development Authority (NEDA); (4) Secretary of the Department of Budget and Management (DBM); and (5) Director General of the Philippine Space Agency (PhilSA).

The PSOFT-IATF shall finalize the PSOFT Road Map within twelve (12) months from the effectivity of this Act, in accordance with national development goals. The PSOFT Road Map shall be incorporated in the Philippine Development Plan.

The Secretaries of the DepEd, DICT and the Director General of the PhilSA may recommend for the creation of positions as they deem necessary for the effective implementation of this Act, subject to the approval of the DBM, in accordance with civil service laws, rules and regulations.

The Department of Social Welfare and Development shall formulate a program extending assistance to marginalized and disadvantaged students to ensure that they may fully participate in the PSOFT Road Map.

SEC. 7. *PSOFT Road Map.* – The PSOFT Road Map shall serve as the basis for programs and projects aimed at improving the quality of education through the use of digital technology.

1 The PSOFT Road Map shall be subject to review and amendment, if necessary, every
2 three (3) years.

3
4 **SEC. 8. *Components of the Roadmap.*** – The PSOFT Road Map shall include the following:

5
6 (a) Physical and Technological Infrastructure

- 7
8 (1) Universal Access to Internet for Public Schools
9 (2) Annual Investment Program for ICT Devices, Tools, and Equipment

10
11 (b) Enhanced Digital Education Program

- 12
13 (1) National Human Resource Development
14 (2) Training and Development of DepEd personnel

15
16 (c) Digital Reforms in Public School Administration

- 17
18 (1) Internet Safety Policy
19 (2) Strengthening the Enhanced Basic Education Information System (EBEIS)
20 (3) Digital Alternative Learning System (ALS)

21
22 (d) Development of Online Learning Portals

- 23
24 (1) DepEd E-Learning Resources
25 (2) Public Online Library

26
27 **ARTICLE IV**
28 **PHYSICAL AND TECHNOLOGICAL INFRASTRUCTURE**

29
30 **SEC. 9. *Universal Access to the Internet in Public Schools.*** – All public basic education
31 schools shall be provided access to the Internet for the purpose of reducing the disparity in
32 computing and information technology knowledge among public school learners and raising the
33 standards of Philippine education.

34
35 In addition to traditional means of accessing the Internet, such as commercially available
36 connections or existing land-based initiatives of government programs to expand access to the
37 Internet, the PSOFT Road Map shall exhaust all options in ensuring internet connectivity for all
38 public schools.

39
40 In order to provide the remote areas with digital connectivity, the PSOFT Road Map shall
41 provide cost-effective options for establishing a telecommunication satellite or installing fiber
42 optic technology infrastructure as part of the National Government Program under the DICT,
43 DOST, and PhilSA.

44
45 The necessary funding for the conduct of studies to determine the feasibility of
46 implementing a Telecommunication Satellite Program, through building, purchasing, or leasing
47 of a satellite, shall be appropriated in accordance with the PSOFT Road Map.

48
49 **SEC. 10. *ICT Devices, Tools, and Equipment.*** – The DepEd shall provide the following
50 equipment and services in all public elementary and secondary schools: personal computers

1 (PCs), laptops, tablets, learning devices, digital classroom equipment, and internet and hybrid
2 intranet connectivity.

3
4 The PSOFT Road Map shall include a plan for the procurement of PCs, laptops or tablets
5 for the educational needs of all elementary and secondary public schools. All learners shall be
6 provided with the necessary learning devices as stipulated in the PSOFT Road Map. Should
7 budgetary constraints prevent the attainment of such target, the national government shall
8 endeavor to meet a ratio of one (1) device for every two (2) learners from Grades 4-6 to ensure
9 that learners can make use of productivity tools in the conduct of regular classes. The national
10 government shall also maintain one (1) device for every fifteen (15) learners from Grades 7-12
11 to ensure that learners can avail of weekly classes on ICT topics that require higher computing
12 power.

13
14 The PSOFT Road Map shall provide for the establishment of functional digital classrooms
15 in all public schools. Digital classrooms shall be equipped with digital boards, computers,
16 wireless router, multimedia projector, printer, and other necessary tools and devices.

17
18 The PSOFT Road Map shall likewise provide for stable and reliable internet and hybrid
19 intranet connectivity. Educators in public schools shall make use of ICT and hybrid intranet
20 connectivity as presentation tools to complement traditional teaching methods. The DepEd shall,
21 with the technical assistance of DICT, develop an administrative system in all public schools
22 utilizing hybrid intranet connectivity in order to enhance organizational management and
23 administration, and streamline front office procedures.

24
25 **SEC. 11. PSOFT Pilot Schools.** – The national government shall establish PSOFT pilot
26 schools in the academic year following the effectivity of this Act. The pilot schools shall be
27 located in Metro Manila, Luzon, Visayas, and Mindanao and shall fully comply with the
28 requirements of Article IV in this Act, as follows:

- 29
30 (a) The pilot school shall have full, unrestricted access to the internet and for this purpose
31 shall be equipped with wireless technology or such other modes of connectivity that may
32 be developed: *Provided*, That school administrators shall closely supervise the access of
33 learners to content in order to protect them from inappropriate, violent, or immoral
34 material;
- 35 (b) Teachers shall be adequately trained in all technologies that the pilot schools shall adopt
36 for the use of learners;
- 37 (c) All pilot schools shall employ trained information technology specialists to assist faculty
38 and learners; and
- 39 (d) All pilot schools shall provide each teacher and learner with the appropriate ICT devices,
40 tools, and equipment to ensure optimum satisfaction in both the teaching and learning
41 experiences.

42
43 The DepEd shall, in coordination with NEDA, conduct an impact study of the pilot
44 schools to determine its potential in improving the quality of education. Additional pilot schools
45 may be established in the following years, subject to the availability of funds and through
46 cooperative arrangements with LGUs and the public sector.

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ARTICLE V
ENHANCED DIGITAL EDUCATION

3 **SEC. 12. National Human Resource Development.** – Students in public elementary and
4 secondary schools must be prepared for the disruptive technologies that come with the Fourth
5 Industrial Revolution and have a significant impact on skills requirements and on creating a range
6 of opportunities for them in the future.
7

8 To better equip students to overcome the challenges enabled by ever-increasing
9 technological change and to improve student engagement and achievement, they shall be
10 provided with introductory courses on foundational technology that will enhance their future
11 competencies. The DepEd shall determine the content and mode of delivery of such foundational
12 technology courses and shall introduce them in the curriculum in the school year following the
13 effectivity of this Act.
14

15 To allow students to acquire the appropriate aptitudes and competencies on these courses,
16 the PSOFT Road Map shall provide for the establishment of innovation hubs in every school to
17 enable students to hone their skills and techniques using a wide variety of physical and digital
18 tools and equipment. The innovation hubs shall allow teachers and learners to carry out
19 technology-based projects that address local problems in the community.
20

21 In addition to the standard ICT curriculum taught for basic education in the public schools,
22 the DepEd shall endeavor to include the following subject matters in its curriculum:
23

- 24 (a) Respect for and protection of personal information on the Internet;
25 (b) Understanding computer security systems;
26 (c) Online gender sensitivity;
27 (d) Proper use of social media and social networking;
28 (e) Responsible and ethical use of the Internet, photographic equipment, smart phones, and
29 other equipment of similar nature;
30 (f) Insights of Republic Act No. 10175, or the “*Cybercrime Prevention Act of 2012*” and
31 other related legislation; and
32 (g) Respect for intellectual property rights.
33

34 The DepEd shall, in coordination with the DICT, enjoin the use of the latter’s ICT Literacy
35 Competency and Development Bureau and its relevant specialized ICT subjects to be utilized as
36 elective courses in Grades 11-12.
37

38 **SEC. 13. Training and Development of DepEd Personnel.** – The PSOFT Road Map shall
39 determine the training and development needs of school administrators, teachers, and personnel
40 with respect to ICT.
41

42 To ensure that teachers are technologically knowledgeable and well-equipped with the
43 right aptitudes and competencies, the DepEd shall establish an Education Technology Division
44 that shall implement teaching programs and utilize technology-based instruction aids for the
45 effective and efficient performance of teachers under the PSOFT Road Map. The DICT shall
46 extend its support in the implementation of training for teachers on ICT, through its ICT Literacy
47 Competency and Development Bureau.
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49 The National Educators Academy of the Philippines shall carry out training programs for
50 educators in public schools and integrate ICT in classroom learning and instruction to highlight
51 the professional and educational benefits that may be derived from personally investing in ICT.

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ARTICLE VI
DEVELOPMENT OF ONLINE LEARNING PORTALS

SEC. 14. *DepEd E-Learning Resources.* – The DepEd shall develop an online portal that provides access or links to Internet learning resources. The online portal shall include the following: e-books and videos, learning materials and teachers guides, materials for senior high school subjects ranging from math, disaster readiness, and science, materials on science, agriculture, creative industries, livelihood and information technology, interactive exercises on math, science, history, and economics.

The DepEd shall develop its own library to ensure the quality and safety of knowledge and information made available to learners.

SEC. 15. *Public Online Library.* – The PSOFT Road Map shall include the establishment of the Public Online Library.

The DepEd, DICT, DOST, the Commission on Higher Education (CHED), and the Technical Education and Skills Development Authority (TESDA) shall, in partnership with the National Library of the Philippines (NLP), the National Book Development Board (NBDB), and other concerned government agencies, develop and maintain the Public Online Library, a repository of educational materials and digitized copies of books and publications suitable for Filipino students and researchers that shall enrich the learning experience by complementing the textbooks and reference materials prescribed for the elementary and secondary levels. The Public Online Library shall be directly connected to the website of the Philippine Statistics Authority (PSA). The DepEd and the NLP shall have joint custody over the digitized copies of textbooks and references in the Public Online Library which shall be jointly managed by the DepEd and the DICT. In this regard, the DICT shall ensure the security of the online repository system to guarantee its integrity.

The DepEd may solicit additional reference materials and publications from the NLP, other agencies of the government, and the private sector to augment its resources.

The authors of the digitized books and publications shall be covered by the protection provided for in R. A. No. 8293, as amended, otherwise known as the “*Intellectual Property Code of the Philippines.*” The DepEd and all concerned agencies shall ensure that the authors of the digitized books and publications shall be properly remunerated in accordance with law.

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ARTICLE VII
DIGITAL REFORM IN PUBLIC SCHOOL ADMINISTRATION

SEC. 16. *Internet Safety Policy.* – To advance the objective of providing a safe and secured education program under the PSOFT Road Map, the DepEd shall, within six (6) months after the effectivity of this Act, formulate and enforce an internet safety policy in order to regulate students’ access to content especially against visual depictions that are obscene, pornographic, and harmful to minors. In this regard, the internet safety policy shall be implemented to accomplish the following objectives:

- (a) Development and implementation of Internet safety education, including safe access to educational technology, multimedia and interactive applications, and online resources;
- (b) Development of online risk interventions for learners and children;
- (c) Training and support to stakeholders on peer-driven Internet safety education initiatives;

- 1 (d) Undertaking of researches on online risks to form the bases for Internet safety education
2 syllabi and instructional material development;
3 (e) Development and implementation of a public education campaign to promote awareness
4 of online risks to learners and children;
5 (f) Education of parents to augment school initiatives on safe Internet use; and
6 (g) Protection against online sexual abuse and exploitation of children pursuant to Republic
7 Act No. 11930 or the “Anti-Online Sexual Abuse and Exploitation of Children Act”.

8
9 **SEC. 17. *Strengthening the Enhanced Basic Education Information System (EBEIS).*** – The
10 EBEIS shall be the central school database of the DepEd and it shall contain pertinent personal
11 data and school records of students. It shall be continually improved to ensure the efficient
12 management of school records.

13
14 School administrators and personnel shall be trained on the operation and access of the
15 EBEIS and be given access to student records and other related data in the EBEIS such as a
16 student’s school attendance record, records pertaining to the character of a student, the level of
17 the student’s digital literacy and proficiency, grade level, examination scores, school
18 performance, immunization and health records, among others, for purposes of recording student
19 biographical data, handling admissions and discharges, and transferring to other schools.

20
21 Any person who is caught illegally altering, falsifying, or misusing student information
22 in the EBEIS shall be sanctioned in accordance with R.A. No. 10173, otherwise known as the
23 “Data Privacy Act of 2012.”

24
25 **SEC. 18. *Digital Alternative Learning System.*** – The DepEd shall institute a digital format
26 of the ALS in the PSOFT Road Map. To attain this objective, the DepEd shall provide
27 professional training to teachers and non-teaching personnel involved in this program and
28 formulate the necessary guidelines for its implementation.

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30 **ARTICLE VIII**
31 **PARTNERSHIP MECHANISM AND ROLES OF PARTNERS**

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33 **SEC. 19. *Partnership Mechanism and Roles of Partners.*** – In the furtherance of the PSOFT
34 Road Map, the DepEd may coordinate and enter into an agreement or contract with other
35 government agencies, LGUs, private and non-profit agencies, institutions or organizations duly
36 accredited or recognized by the government, civil society, business and industrial sector, and
37 other concerned sectors.

38
39 The PSOFT Road Map shall define and delineate the areas of responsibility of government
40 agencies in conformity with their respective charters and mandates. For purposes of this Act,
41 these agencies shall have the following roles:

- 42
43 (a) The DepEd shall be the lead government agency responsible for the proper and effective
44 implementation of the various provisions of this Act and ensure coordination and
45 collaboration among agencies of the government.
46 (b) The DICT shall provide advice on matters relating to ICT and closely coordinate and
47 collaborate in the implementation of this Act. It shall undertake the installation,
48 maintenance, and operation of hybrid intranet connectivity in all public basic education
49 schools, provide an efficient and reliable broadband connection, assist in the
50 implementation of training and development for teachers concerning ICT and ICT-
51 assisted instructions, and coordinate and collaborate in the provision of digital
52 connectivity in public schools.

1 (c) The PhilSA shall advise and collaborate with the DepEd on matters concerning the use of
2 space technology and relevant space-enabled services to implement the provisions of this
3 Act.

4 (d) The DOST, CHED, TESDA, Department of the Interior and Local Government, NLP,
5 NBDB, PSA, Philippine Creative Industries Development Council, the LGUs, and other
6 concerned government agencies mentioned in this Act shall provide support and
7 assistance for the attainment of the purposes of the PSOFT.
8

9 **SEC. 20. Public-Private Partnerships (PPP) for PSOFT Program.** – The DepEd may
10 pursue PPPs from any of the modalities under R.A. No. 6957, as amended by R.A. No. 7718,
11 entitled, “*An Act Authorizing the Financing, Construction, Operation and Maintenance of*
12 *Infrastructure Projects by the Private Sector, and For the Other Purposes.*”
13

14 To this end, the DepEd shall, in consultation with the PPP Center of the Philippines
15 created under Executive Order No. 8, series of 2010, entitled, “*Reorganizing and Renaming the*
16 *Build-Operate and Transfer (BOT) Center to the Public-Private Partnership (PPP) Center of the*
17 *Philippines and Transferring its Attachment from the Department of Trade and Industry to the*
18 *National Economic and Development Authority and For Other Purposes,*” establish a PPP Unit
19 to coordinate all matters relating to PPP, in accordance with the PSOFT Road Map. It shall
20 likewise coordinate with the Project Development and Monitoring Facility of the PPP Center in
21 the conduct of feasibility studies and the preparation of tender documents for the PPP projects of
22 the DepEd.
23

24 **ARTICLE IX** 25 **AUTHORITY TO RECEIVE DONATIONS** 26

27 **SEC. 21. Authority to Receive Donations.** – The DepEd is authorized to accept grants,
28 contributions, donations, endowments, or bequests in cash or in kind from local and foreign
29 sources in support of the development and implementation of this Act, subject to the regular
30 auditing guidelines and procedures: *Provided*, That in case of donations from foreign sources,
31 acceptance thereof shall be subject to existing government rules and regulations. The proceeds of
32 such grants, contributions, donations, endowments, or bequests shall be used to finance the
33 following:
34

- 35 (a) Establishment of pilot schools as provided in Section 11 of this Act;
36 (b) Research, development, and utilization of emerging digital technologies;
37 (c) Provisions of computer laptop units and improvement of ICT infrastructure, including
38 hardware and Internet connectivity;
39 (d) Training and capacity building; and
40 (e) Conduct of other activities necessary to carry out the objectives of this Act.

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ARTICLE X
THE JOINT CONGRESSIONAL OVERSIGHT COMMITTEE AND
REPORTORIAL RESPONSIBILITIES

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SEC. 22. *Joint Congressional Oversight.* – Upon the effectivity of this Act, a joint congressional oversight committee to be known as the Joint Oversight Committee on the PSOFT Program or JOC-PSOFT, is hereby constituted. The JOC-PSOFT shall be composed of ten (10) members with the chairpersons of the Committee on Basic Education, Arts and Culture and the Committee on Finance of the Senate, and the Committee on Basic Education and Culture and the Committee on Appropriations of the House of Representatives as members and three (3) additional members from each House to be designated by the Senate President and the Speaker of the House of Representatives, respectively. The members of the Committee from each House shall have at least one (1) member from the minority party or coalition.

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SEC. 23. *Annual Report.* – The DepEd shall submit a report to both Houses of Congress, or upon the request by the JOC-PSOFT, providing a detailed account of the status of the implementation of this Act.

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ARTICLE XI
FINAL PROVISIONS

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SEC. 24. *Appropriations.* – The Secretaries of Education and Information and Communications Technology and the Director General of PHilSA shall immediately include in their respective programs the implementation of this Act, the funding of which shall be included in the annual General Appropriations Act.

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The funding for the implementation of PSOFT Pilot Schools under Section 11 hereof shall be charged against the current year's appropriation of the DepEd.

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SEC. 25. *Implementing Rules and Regulations.* – Within one hundred-twenty (120) days from the effectivity of this Act, the DepEd and DICT shall, in coordination with other concerned agencies of the government and the private stakeholders, promulgate the necessary rules and regulations for the effective implementation of this Act.

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SEC. 26. *Separability Clause.* – If any provision of this Act is declared unconstitutional, the remainder of this Act or any provision not affected thereby shall remain in full force and effect.

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SEC. 27. *Repealing Clause.* – All laws, executive orders, presidential decrees, proclamations, rules, regulations, issuances and enactments or parts thereof inconsistent with this Act are hereby repealed or modified accordingly.

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SEC. 28. *Effectivity.* – This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in a newspaper of general circulation.

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Approved,