# Chapter 7 Development of the Internet Literacy Indicator for Students (ILAS) and Longitudinal Analysis of Scores

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# ABSTRACT

Owing to the fact that ownership of telecommunication devices such as smartphones and tablets has spread among young people, the internet has become very familiar to them. On the other hand, they face the risks of encountering various internet problems. In this study, the authors analyzed and evaluated longitudinal survey data focusing on awareness education policies in order to periodically evaluate the internet environment for young people in line with the Youth Internet Environment Improvement Act Supplementary Provisions Article 3. From the results of the analysis and evaluation, the following were found: 1) although awareness education has spread through school education and family education, its presence in family education is not sufficient and 2) to learn internet literacy, school education plays a major role.

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# INTRODUCTION

In recent years, Internet use among young people has been associated with various social problems in many different countries. Examples of these include miscommunication by text, billing fraud, access to illegal content, and contact with ill-intentioned people. Especially in Japan, the use of smartphones has spread very rapidly among teenagers and young people since 2012, generating tremendous changes in their online environment. These changes have triggered the abovementioned problems.

To tackle these problems, "the Act on the Development of an Environment that Provides Safe and Secure Internet Use for Young People" (Act No. 79 of 2008) was enforced in April 2009 in Japan. Because Article 3 defines the skills needed to use the Internet efficiently, it is vital to empower teenagers and young people to develop risk management skills by using the Internet effectively.

Accordingly, it is crucial to optimize educational policy to meet the needs of young people. Doing so will require criteria on which to review the current policy. It is also important to evaluate the Internet literacy of teenagers and young people and to reform educational policy and its implementation to reflect the results of this assessment.

This study aims to develop ILAS, the Internet Literacy Assessment Indicator for Students, making it a more effective and visible tool for developing young people's coping skills, reducing their online risks, and enabling them to use the Internet more safely. This indicator will be evidence-based and designed to optimize educational policy; it can be a decision-making system for designing effective educational policy.

### BACKGROUND

### Review of Evidence-Based Policy Making

OECD (2012) advised all stakeholders to reduce online risks and provide a safer Internet environment. This recommendation obliges every stakeholder to provide a safer online environment for teenagers and young people. To provide effective protection, it is important to implement a youth protection policy at every level of government and in the private sector and educational organizations. Without clear role definitions, it will be challenging to implement a concrete protection policy.

The most effective way to solve these problems is to think about each problem separately, clarifying the political tasks each sector should deal with. One tactic that can help to achieve this is to adopt an Evidence-Based Policy (EBP).

An EBP is an approach derived from Evidence-Based Medicine proposed by Gordon Guyatt at Manchester University in Canada (Tsutani, 2000). EBP is used in areas such as social policy, educational policy, and welfare policy (Sowaki, 2010). The OECD (2007) has argued that EBP-based policy making enables people and organizations to choose clear and straightforward evidence from among many options. EBP has been widely adopted in various policy areas for evidence-based policymaking.

Nishimura (2005) indicated that evidence should be based on "objective and politically neutral statistical indicators." Such evidence would gain public understanding and help to establish trust between the government and society (OECD, 2004). Additionally, the OECD (2012) has emphasized the need to set indicators as metrics of the evidence, allowing people to visualize the actual condition of each political area. 13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/development-of-the-internet-literacy-indicator-for-

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