

Toward the Expansion of Recurrent Education



文部科学省

July 28, 2018

Ministry of Education, Culture, Sports, Science and Technology

Proposals, etc. Concerning Relearning by Adults (1)

◆ Basic Policy on Economic and Fiscal Management and Reform 2018 (Cabinet Decision of June 15, 2018)

* Same text as the Basic Design for the Human Development Revolution (Council for Designing 100-Year Life Society decision on June 13, 2018)

Realization and Expansion of the Human Development Revolution

Recurrent Education

(Expansion of education and training benefits)

Significantly expand the scope of lectures covered by specialized practical education and training **benefits** (70% subsidized)...such as the addition of professional undergraduate courses.

Also, expand the scope of benefits for general education and training, and **double the rate from 20% to 40%** for lectures that are highly effective for career advancement such as IT skills. In particular, **relax the minimum number of hours of lectures from 120 hours to 60 hours** to make it easier for adults to take lectures certified by the Minister of Education, Culture, Sports, Science and Technology. In addition, consider measures for significantly increasing the number of students.

Actively proceed with the **utilization of a structure recognized as qualification for graduating by accumulating credits** obtained at various schools (**credit accumulation system**)

(Recurrent education through industry-academia collaboration)

Provide intensive support for development of recurrent education programs that are both novel and practical, and effective and highly necessary as employment measures.

○ Development of programs in pioneering areas

Through industry-academia collaboration, by entrusting development to universities, vocational schools and private educational and training institutions, develop programs in around 20 areas precedingly (such as AI, sensors, robots, manufacturing using IoT, business administration, agricultural technology, nursing, childcare and support for the reinstatement of women utilizing company internships) and deploy them nationwide. Also, work with industry groups and academic societies, etc. **to significantly expand practical programs and actively provide archives online**, in addition to networking web pages providing information on lectures for recurrent education operated by private companies and **establishing portal sites providing comprehensive information.**

○ Recurrent education of engineers

In areas such as information processing, bio, fine chemicals, engineering and robots, newly establish recurrent education courses enabling researchers and engineers in companies to receive recurrent education on the latest technology in academic societies, etc. in collaboration with industry, and entrust them with their operation. When doing so, provide programs on academic society websites and online. Also work to notify companies to encourage researchers and engineers to receive recurrent education in the business community.

○ Training for the development of practitioner teachers

Develop and implement development programs of practitioner teachers, and create a mechanism for recommending graduates of the course to universities, etc. as candidates of practitioner teachers.

Also conduct matching of local universities and practitioner teachers, and consider support measures for actually working as teachers in local universities.

Proposals, etc. Concerning Relearning by Adults (2)

◆ Growth Strategy 2018 (Cabinet decision of June 15, 2018)

Creation of Foundation for Transformation of Economic Structure
Development and utilization of human resources required in the AI era

《KPI》 Increase the number of adult students in universities and vocational schools, etc. to 1 million by FY2022.
(2015: Approx. 490,000)

Specific measures to be taken

Expansion of base of AI human resources, etc. utilizing recurrent education and the like in universities, etc.

- Significantly expanding recurrent education such as short-term education programs for adult students in universities and specialized training colleges, etc., online lectures using the Open University of Japan and MOOCs, etc., and also **establishing systems for providing recurrent education in universities, etc.** such as establishing recurrent education centers, etc., securing high-quality practitioner teachers including teaching skills, and creating partnerships between professional graduate schools and the business community.
- Expand the scope of benefits for specialized practical education and training to courses in professional undergraduate schools and also work with the “business practice skill development programs” in universities and the “business practice specialized courses” in specialized training colleges to expand the lectures covered to provide the skills, etc. required in the AI era.

◆ 2018 Basic Policy on Revitalizing Towns, People and Work (Cabinet decision of June 15, 2018)

Exciting Regional Lifestyle Realization Policy Package

Development of new workers through the active participation of women and the elderly, etc. (240,000 people over six years)

◎ Fundamental enhancement of recurrent education for promoting the active participation of women and the elderly, etc.

- Promote remote classes using ICT and the efforts of local public organizations, regional universities and vocational schools to **fundamentally enhance recurrent education programs** from the perspective of promoting to start work, entrepreneurship and participation in regional activities by women and the elderly, etc. and from the perspective of aiming to secure human resources and improving productivity in small and medium businesses in regional areas,
- Support the establishment and renovation of recurrent education training facilities by utilizing grants for establishing regional revitalization sites contributing to the productivity revolution.

Current Number of Adult Students

- Many adult students learn in university undergraduate schools (correspondence course), graduate schools and specialized training colleges.
- The number of entrants into regular courses has been flat in recent years, but **the number of people taking extension courses that are often one-off or short-term is increasing.**

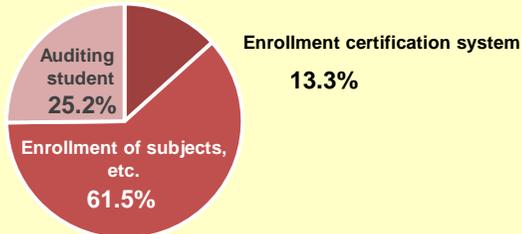
Number of adult students in universities and vocational schools, etc.

Approx. 490,000 (2015)

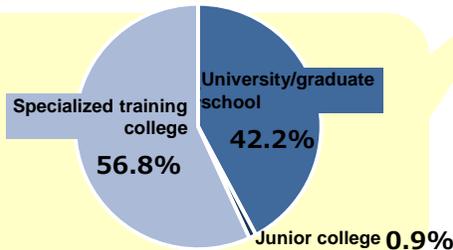
* Excluding universities' extension courses

Breakdown

By program (excluding correspondence and specialized training college)



By school type



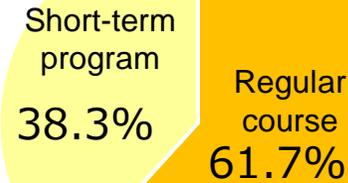
Short-term program

Regular course

Commuting or correspondence (excluding specialized training college)

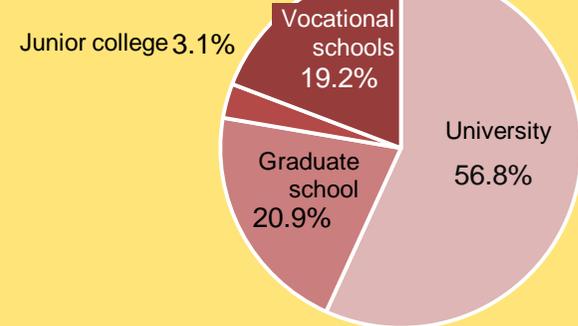
Commuting 37.3%

Correspondence 62.7%



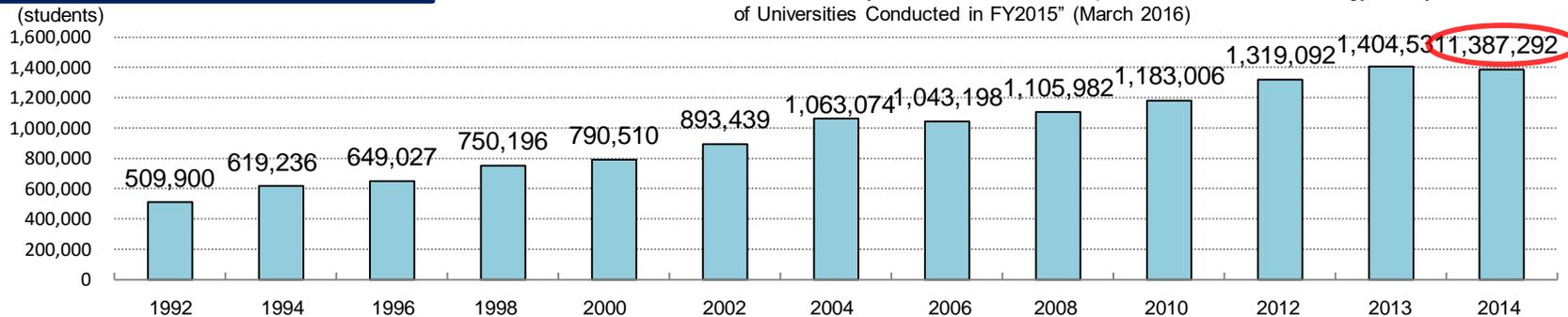
By school type

Junior college 3.1%



Number of students in universities' extension courses

Approx. 1.39 million
(2014)

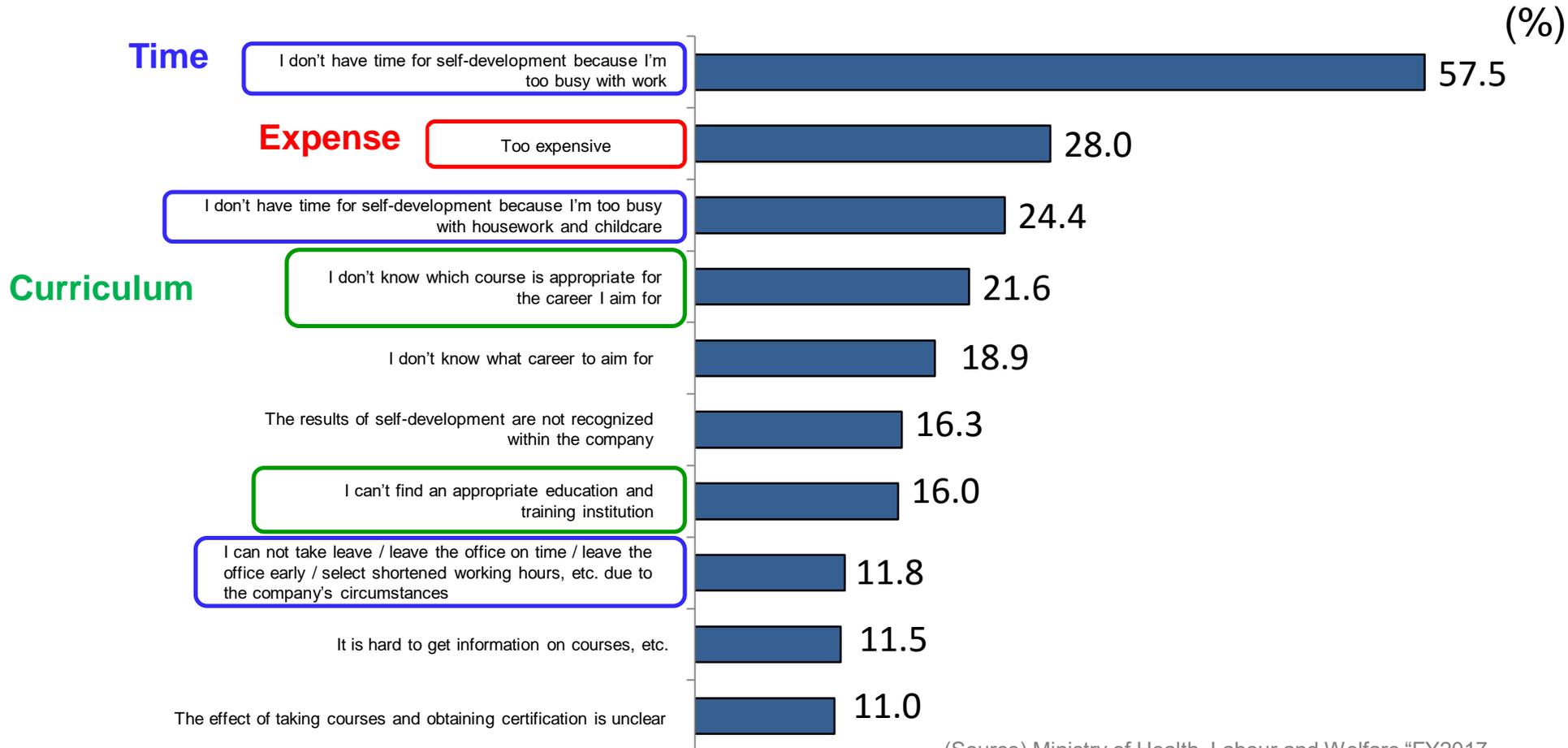


Source: Ministry of Education, Culture, Sports, Science and Technology "Study on the Creation of Universities Conducted in FY2015" (March 2016)

Issues in Learning by Adults (1)

○ Factors impeding learning by adults include problems with time, expense and curriculum.

Breakdown of problems in self-development perceived by workers (full-time employees)

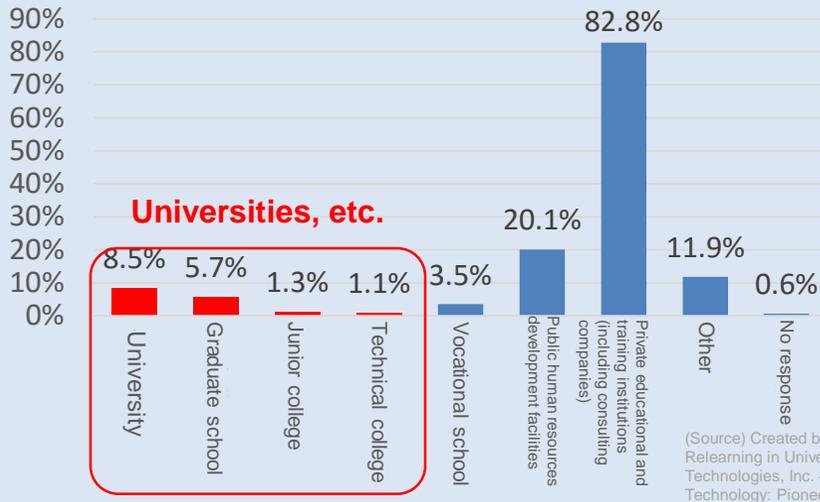


(Source) Ministry of Health, Labour and Welfare "FY2017 Basic Survey on Human Resources Development"

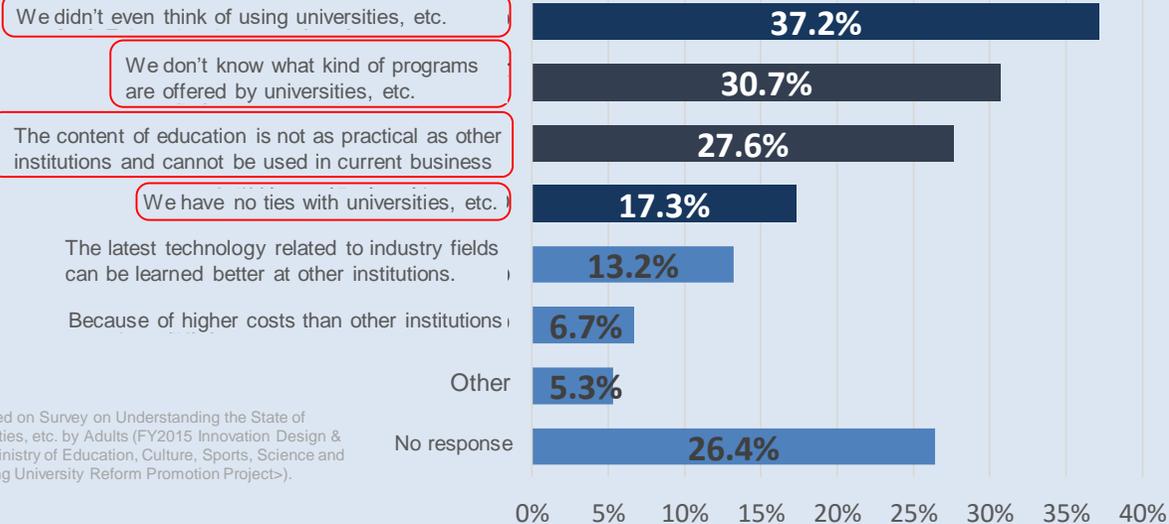
Issues in Learning by Adults (2)

- Approximately 80% of companies utilize private education and training institutions as external educational institutions Meanwhile, very few utilize universities, etc.
- The highest ranked reasons for not utilizing universities, etc. were “We didn’t even think of using universities, etc.” and “We don’t know what kind of programs are offered by universities, etc.”
- Meanwhile, companies with employees taking courses at universities, etc. evaluate them highly regarding points such as “improvement of expertise,” “obtaining a wide range of knowledge” and “increasing motivation.”

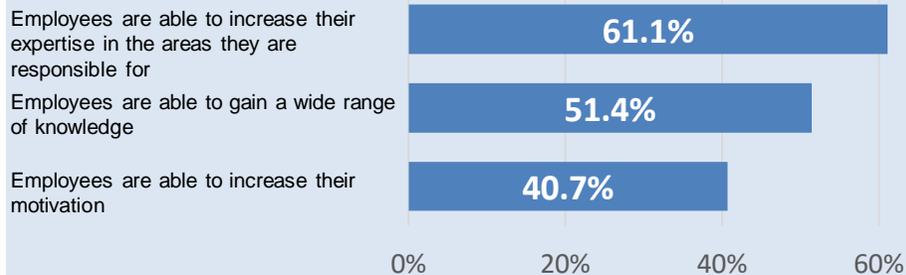
By type of external educational institution utilized



Reasons for not utilizing universities, etc.



Companies' evaluations of courses taken by employees in universities, etc.



Total number: 393 companies
(Companies with support for employees to take courses)

(Source) The Japan Institute for Labour Policy and Training "Survey on Utilization of Qualifications and Examinations in Companies and Support for Taking Courses at Graduate School and University, etc." (May 2015) Sample of 9,976 companies; 1,475 valid responses)

In response to these issues, following efforts will be made:

- Share awareness between industry and academia, and **develop practical education programs**
- **Reduce time costs** (expansion of short-term and online courses)
- **Reduce economic costs**

1. Expansion of Supply of Recurrent Education Programs

[Awareness of current state]

- The total number of programs is low.
- Many programs are held in major cities, and there is a regional bias.
- Few have practical content.

[Direction of consideration]

- **Nationwide deployment** through fundamental increase in the creation and implementation of **educational programs through collaboration between industry and academia**.
- **Improvement of systems** for the promotion of development of short-term and appealing programs
 - (1) **Quality assurance and expansion of scope** of practical short-term programs, etc.
<**Quality assurance** such as promotion of participation of the business community in creation of programs and **inclusion of short-term programs**, etc. for >
 - (2) Review of **enrollment certification systems**, promotion of the use of **credit accumulation systems**, etc.
- **Significant expansion of practical online courses** in the Open University of Japan and MOOCs, etc.

2. Securing Human Resources Able to Provide Practical Education

- Securing teachers able to plan and implement programs is an issue.
- “Practitioner teachers” have little experience in teaching students.
- It is difficult for current practitioners to find time.
- It is difficult to secure “practitioner teachers” in individual universities.

- Improvement of the teaching ability of practitioner teachers by mandating training for those without experience in teaching in universities, etc. (**quality assurance**). <**Development of training programs and promotion of taking programs**>
- Establishment of mechanisms enabling the practitioner teachers required for implementing programs to be secured smoothly and easily (**quantity assurance**). <**Creation of platform for sharing human resources**>
- Establishment of an environment facilitating teaching by practitioners working on the front line.

3. Establishment of an environment where it is easy to take courses

- Low recognition and a sense of urgency for recurrent education.
- It is difficult to find time and money to participate in recurrent education.
- The results of learning are difficult to see and are not recognized by companies, etc.

- **Visualization of the effect** of learning. <**Clarification of requirements for quality assurance** such as knowledge and skills that can be learned>
- Expansion of opportunities to come in contact with information related to recurrent education.
- Reduction of economic cost. <**Coordination with employment insurance systems and tax systems, etc.**>

4. Fostering of momentum supporting these

- (1) **Participation in the development and implementation of programs in the business community**
- (2) **Active support and evaluation of learning by adults**
- (3) **Fostering of awareness of career building among women who have left the workplace**



Reference Materials

Council for Designing 100-Year Life Society (6th Meeting: March 23, 2018)
Materials Submitted by Minister Hayashi of the Ministry of Education,
Culture, Sports, Science and Technology

1. Expansion of Supply of Programs on Recurrent Education

[Direction of consideration]

- **Nationwide deployment** through the fundamental increase in the creation and implementation of **educational programs through collaboration between industry and academia**
- **Improvement of systems** for promotion of development of short-term and appealing programs
 - (1) **Expansion of Ministerial certification system** for practical programs, etc. < **Quality assurance**, such as promotion of participation of the business community in the creation of programs and **inclusion of short-term programs** and so on>
 - (2) Review of **enrollment certification systems**, promotion of the use of **credit accumulation systems**, etc.
- **Significant expansion of practical online courses** in The Open University of Japan, MOOCs, and the like

Measure (1) Fundamental increase in the number of recurrent education programs through collaboration between industry and academia

Nationwide deployment of recurrent education programs

Identification of needs

Creation and implementation of programs

Evaluation

It is necessary to expand efforts in areas with high needs in the business community and nationwide

Pioneering practice in the IT area

(Information security, AI, embedded technology, etc.)

5 hub universities, 31 partner universities and 65 partner companies, etc. are developing and implementing programs to promote relearning by IT engineers (enPiT-Pro business).

Regional bias of practical programs

- Certified courses for business practice skill development programs (BP)
Tokyo, Aichi, Hyogo and Osaka **account for around half of the total** (109 courses).

(Universities, etc.)

- Request for cooperation utilizing a place for discussion between university associations (*) and the business community.
- * Discusses and considers measures to develop science and technology personnel based on business community needs. Consisting of university and technical college personnel.

- Creation of a joint system by specialized training colleges and the business community.

(Company side)

- Presentation of areas with clear needs concerning recurrent education (and their level).

(Universities, etc.)

- **Development of programs based on needs, etc. of the business community** and **nationwide deployment** to ensure there is no regional bias.
(Manufacturing using IoT, business administration, agriculture, nursing, childcare and support for the reinstatement of women utilizing company internships, etc.)

- Advance development of around 20 programs. Implementation in universities serving as hubs nationwide.
(Including online programs and partnerships with academic societies, etc.)

- Development and dissemination of model programs for specialized training colleges.

(Company side)

- Cooperation in creation and implementation of programs, dispatch of practitioner teachers, supporting and encouraging employees to enroll as students

etc.

(Universities, etc.)

- Granting of certification to people who complete programs.
(Attention to "visualization" of results of learning)

(Company side)

- Evaluation and utilization of completion certification.

* Consideration of support measures

Measure (2) Improvement of systems for promotion of development of short-term and appealing programs

[Learning form for adult students]

Regular courses, extension courses, short-term programs ("enrollment certification programs" (systematic learning programs that are short-term, but have a fixed number of hours).

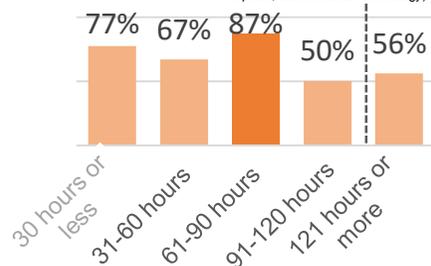
There are many adults learning in "extension courses" (potential students)

- Number of students in extension courses
FY2015: Approx. 1.39 million

"Short-term programs" currently cover those with 120 hours or more, but adults have **greater needs for shorter programs**

- Fulfillment of number of positions available in programs for adults in universities, etc.

(Research by Ministry of Education, Culture, Sports, Science and Technology)



- Number of extension courses for the purpose of relearning by the total number of hours (proportion of total)
 - 50-119 hours 38%
 - 120 hours or more 2%

A system able to meet demand for short-term programs is required

1. Quality assurance and expansion of scope of practical short-term programs*1

- ◆ **Promote participation in program creation by the business community / promotion of publication of content of knowledge and skills that can be learned.**
 - Publication related to the content, level and relationship with regular programs, etc.
- ◆ Expand the scope of **certification of short-term programs** from the current 120 hours or more to **"60 hours or more"**.
- ◆ **Also include the short-term programs of "vocational schools" (see 3. below) in the scope of certification.**

(*1) Practical and specialized programs according to the needs of adults and companies, etc. in universities and junior colleges are certified by the Minister of Education, Culture, Sports, Science and Technology
"Regular courses" and "enrollment certification programs" established in FY2015. Linked with education and training benefits.
(Business practice skill development programs)

2. Revision of enrollment certification system*2 for universities and junior colleges

- ◆ Shorten the length of short-term programs from the current 120 hours or more to **"60 hours or more"**. (Revision of the Ordinance for Enforcement of the School Education Act)
- ◆ **Consider certification and conversion of credits** for those who meet certain criteria. (※3)
(More flexible credit transfer systems and credit accumulation systems)

(*2) Special education programs other than regular courses that are mainly for adults. An "enrollment certificate" may be granted to persons who complete courses pursuant to the School Education Act. (Enrollment certification program)

(*3) The purpose and content of the program, and its relationship with regular programs must be clear based on a Certificate Policy, etc.

3. Establishment of a ministerial certification system for short-term programs in vocational schools

- ◆ **Programs** primarily for adults **that are 60 hours or longer are subject to certification.**

<Examples of short-term programs>

- **"Development of core specialist personnel in plant factories"** (Osaka Prefecture University) Course time: 67 hours
 - Training of personnel managing and operating plant factories made by combining many scientific technologies through classroom lessons, practical lessons and business plan exercises.
- **"Computing technology Science Practical Education Programs"** (Toyohashi University of Technology) Course time: 73 hours
 - Practice from the basics of the latest simulation technology to practice and learning of more advanced programming skills.
- **"Physical Therapist Clinical Brush Up Course"** (Bunkyo Gakuin University) Course time: 73 hours
 - The latest information, knowledge and techniques required in rehabilitation therapy workplaces obtained through lectures and practical work.

Measure (3) Enhancement of The Open University of Japan's Online Education and Collaboration Programs

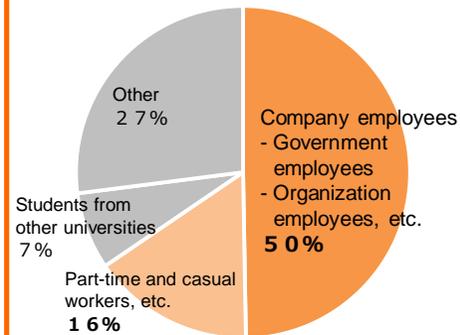
[Characteristics of the Open University of Japan]

- Accepts 90,000 students with a wide range of ages who are mainly adults. Over 350 subjects are available via television, radio and the Internet.
- Over 3,000 face-to-face classes (schooling) are held in 50 learning locations nationwide.

- Efforts needed for making it easier for adults to learn in educational institutions such as universities (top 3 items)
 - (1) Economic support for such as for the burden of tuition (46.1%)
 - (2) **Expansion of programs for adults that are useful for employment and obtaining qualifications, etc.** (35.0%)
 - (3) **Expansion of classes on weekends and holidays and at night** (34.0%)

(FY2015 Opinion poll on education and lifelong learning)

- The Open University of Japan **has a high proportion of students who are experts.**



(Composition of students of the Open University of Japan (2nd semester of FY2017))

It is necessary to expand the provision of recurrent education programs utilizing knowhow of Japan's only broadcasting and correspondence higher education institution for adults without time

Provision of practical programs by the Open University of Japan

- (1) **Collaboration with industry groups, academic societies, etc. to significantly expand practical subjects.**

(Examples of collaboration)

- **Newly open** the following subjects

Data science, cyber security, etc.

Held from FY2018 sequentially

(Cooperation with the Institute of Statistical Mathematics, Shiga University and the University of Tsukuba)

- Utilization of the **video lesson knowhow** of the Open University of Japan **to support more advanced practical training projects**

Training in incorporated administrative agencies and industry groups, etc.
* At present, collaboration with the Institute of Internal Auditors-Japan, etc.

Further enhancement of subjects related to qualifications and career advancement

- (2) **Provision of subjects accumulated in the past to the entire country according to the diverse learning needs of adults**

Of subjects closed down, programs of those that are in high demand for learning and lectures by leaders in their respective fields will be broadcast on channel BS231 (from October this year)

Expansion of online subjects to around 100 subjects (4X increase)



Cooperation in development and distribution of online courses provided by other institutions

- Utilization of resources (video studios, directors, knowhow, etc.) in the Open University of Japan and provision of a video streaming platform, etc.

Collaboration and providing technical support for efforts by other universities, student cooperatives and MOOCs

Visualization of the results of learning to society broadly

- Introduction of the "Expert mini (tentative name)" which is learning certificate partnered with the business community
- It can be used as a small group of subjects and also as a unit in university



Utilization of learning centers (50 nationwide)

- Finely tuned learning and enrollment consultation, implementation of seminars and workshops
- Promotion of the use of other organizations such as industry groups and academic societies
- Implementation of face-to-face lessons in collaboration with other organizations (Survey on mathematical information areas with other universities is scheduled to commence in FY2018)

2. Securing Human Resources Able to Provide Practical Education

[Direction of consideration]

- **Improvement of the teaching ability of practitioner teachers** by mandating training for those without experience in teaching in universities, etc. (**quality assurance**).
<Development training programs and promotion of taking training programs>
- Establishment of **mechanisms enabling the practitioner teachers** required for implementing programs **to be secured smoothly and easily (quantity assurance)**.
<Creation of platform for sharing human resources>
- Establishment of an environment facilitating teaching by practitioners working on the front line.

Securing teachers responsible for recurrent education is an issue

- Conditions for provision of programs by faculties, etc. that **do not** provide programs mainly for adults
 - **Securing teachers 46.5%**
 - Financial support 44.8%
 - Understanding the needs of adults 41.7%(Research Commissioned by the Ministry of Education, Culture, Sports, Science and Technology in FY2017)
- Problems concerning human resource development in offices
 - **Insufficient human resources providing teaching 53.4%**
 - Time required for human resource development 49.7%
 - Human resources quit even when they are developed 43.8%(FY2016 Basic Survey on Human Resource Development)

Enhancement of places for training and a mechanism for propelling the sharing of human resources is required

Measure (1) Training for practitioner teachers

- Curriculum development**
 - **Development of educational skill development programs** for practitioner teachers in universities implementing recurrent education programs.
- Designation of implementing universities**
 - **Designation by region** of universities developing and implementing the programs, and **establishment of a system enabling them to be taken nationwide.**
- Measures for promoting training to be taken**
 - Obligatory effort to take the program when a teacher is hired (consideration of revision of the Standards for Establishment of universities)
 - The program certified as BP by the Minister of Education, Culture, Sports, Science and Technology.

* The Central Council for Education will also consider the way of efforts for graduate school students to learn teaching skills.

Measure (2) Platform for sharing human resources of practitioner teachers

- Creation of mechanism**
 - **Creation of a mechanism for registering information** (expertise, skills, etc.) **on people who have completed** educational skill development programs.
- Management and operation of platform**
 - Management and operation of a human resource sharing platform for practitioner teachers by an organization with a track record in collaboration with universities and the business community.
- Utilization in companies**
 - Companies encourage their employees to teach in universities, etc. as part of their work or as a side job.

<Examples of teacher development programs>

The University of Tokyo Future Faculty Program (Todai FFP)

→ Starting with university mechanisms, learning how to make syllabi and how to conduct 90-minute lessons.

Tenure Teacher Training System at Ehime University

→ Development of skills and provision of financial support related to general tasks required as a university teacher (teaching, research and management) throughout the entire university based on a systematic program.

3. Establishment of an environment where it is easy to take courses

In order to expand recurrent education, **it is important to establish an environment that promotes evaluation** of the results learned, recognition of information on universities and independence of career building, etc., in addition to an environment responding to issues such as work style (working hours) and expense.

- Problems in relearning perceived by workers (full-time employees)
 - **I am too busy and don't have time** 59.3%
 - **Too expensive** 29.7%
 - **I don't know which course is appropriate for the career I aim for** 20.4%
 - **I don't know what career to aim for** 17.7%
 - **The results of relearning are not recognized within the company** 16.9%
 - **I can't find appropriate education and training** 16.5%

(FY2016 Basic Survey on Human Resource Development)

[Direction of consideration]

- **Visualization of the effect** of learning.
<Clarification of requirements for quality assurance such as knowledge and skills that can be learned>
- Expansion of opportunities to come in contact with information related to recurrent education.
- **Reduction of economic cost.**
<Coordination with employment insurance systems and tax systems, etc.>

Measure (1) "Visualization" of results of learning

1. Establishment of mechanisms for assuring the quality of recurrent education programs

- In addition to promoting participation of the business community in creation of programs, promotion of clarification and publication related to the content and level of knowledge and skills that can be learned, and relationships with regular programs.

2. Creation of "Expert mini (tentative name)" certifying results by the Open University of Japan



- Introduction of "Expert mini (tentative name)" facilitating learning in a short period in collaboration with the business community, etc. for the "Open University of Japan Expert" that has been used until now. * A unique subject group enrollment certification system certifying that learning is conducted systematically. A total of 28 plans including the "Basic Clinical Psychology Plan" are available.

Measure (2) Creation of contact points with learning information

1. Establishment of a portal website stimulating adults' motivation to learn

- Spread of information connecting adults with education programs such as experience in career advancement through learning (role models), consolidation of evaluation of lectures by people who have completed the program.

2. Creation of a place where adults can come in contact with information on programs of universities, etc.

- Utilization of opportunities such as exhibitions and fairs to provide places for adults and companies facing career issues (e.g. improvement of advanced IT) to obtain information on recurrent education in universities, etc.

3. Fostering of awareness aimed at career building among women who have left the workplace

- Provision of PR promoting life planning for themselves through diverse channels in life for women who have left the workplace due to childcare, etc.

Measure (3) Reduction of economic cost.

- Enhancement of lectures leading to the reduction of learning expenses, such as lectures certified by the Minister of Education, Culture, Sports, Science and Technology (business practice skill development programs, business practice specialized courses).