

Special Feature:

Off-campus practical learning and internships in civil engineering

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Introduction

In the civil engineering curricula of Japanese universities, third-year students (and recently, first-year master's students as well) can work for a company, government agency, or other organization in off-campus practical learning and training programs during their summer vacations. This is a valuable opportunity for students to get hands-on experience working in the field of civil engineering while earning wages, and it has undoubtedly played a key role in career selection for many students.

In recent years, there has been increasing use of internships, in which companies and government agencies accept students who are not yet employed, providing the students with educational benefits and improved work awareness through actual work while also contributing to the development of their industry. In 1997, the (then) Ministry of Education, Science and Culture, Ministry of Education, Science and Culture, and Ministry of Labor formed a three-way agreement concerning the promotion of internships, and this is now widely accepted. In many cases, companies and educational institutions publicize their active involvement in internship programs as a major draw.

In a questionnaire survey conducted by the editorial committee of *Civil Engineering*, many universities indicated that they do offer practical learning and internship programs, but the rate of participation is low. Many stated that these programs were established at the same time as the academic

departments and have a long history. However, at the same time, many responded that their internship programs only began a few years ago, and explanations were needed regarding traditional off-campus practical learning programs.

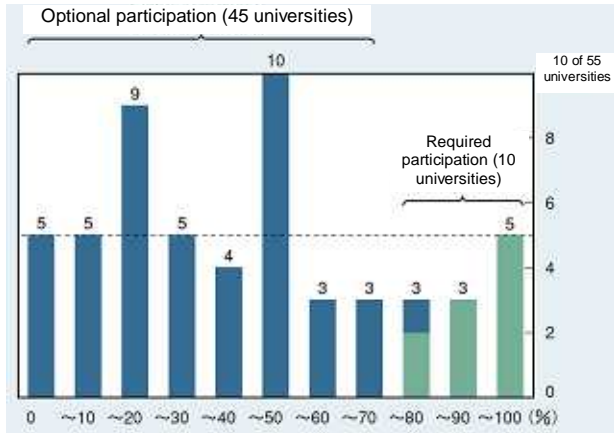
Despite the long history and track record of work experience curricula in universities' civil engineering departments, there is still a low level of awareness. It would seem that practical learning and internships ought to be used more effectively in the field of civil engineering. At present, along with the spread of internship programs, universities' civil engineering departments are moving toward the integration of practical learning and training programs with internships. Many advantages can result from organizational endeavors by universities together with the industry. However, there are misunderstandings concerning internship, and this is an area of confusion compared to practical learning and training programs, which have been in place for a longer period of time.

In this special feature, we will discuss the changing picture of practical learning and internship from various perspectives in order to promote a better understanding, with the goal of providing more opportunities for students to have positive encounters with civil engineering, thereby contributing to better career selection and better human resource development.

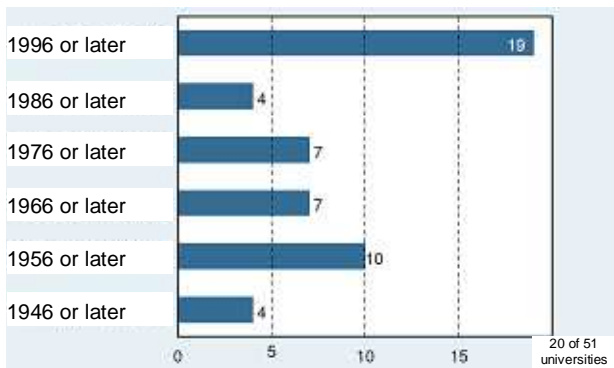
- 56 of 57 universities have off-campus practical learning and internship programs or plan to offer such programs in the future.

- 50 of 56 universities provide academic credit.
- 17 of 57 universities reported that their programs were established at the same time as the academic department.

University, Osaka Industrial University, Osaka Institute of Technology, Osaka University, Saga University, Saitama University, Shinshu University, Sojo University, Tohoku Gakuin University, Tohoku University, Tokyo Denki University, Tokyo Institute of Technology, Tokyo Metropolitan University, Tokyo University of Science, Toyo University, University of Fukui, University of Miyazaki, University of Tokushima, University of Tokyo, University of Tsukuba, University of Yamanashi, Utsunomiya University, Waseda University, Yamaguchi University, and Yokohama National University (in alphabetical order).



Reported rate of student participation in off-campus practical learning and internship programs



Note: Responses such as "since a very long time ago" or "unknown" are not included.

Reported time of establishment of off-campus practical learning and internship programs

Cooperating universities:
 Aichi Institute of Technology, Akita University, Chuo University, Ehime University, Fukuoka University, Gifu University, Gunma University, Hiroshima University, Hokkaido Institute of Technology, Hokkaido University, Hosei University, Ibaraki University, Kanazawa University, Kinki University, Kitami Institute of Technology, Kobe University, Kochi University of Technology, Kokushikan University, Kumamoto University, Kyoto University, Kyushu Institute of Technology, Kyushu Tokai University, Kyushu University, Meijo University, Meisei University, Muroran Institute of Technology, Musashi Institute of Technology, Nagaoka University of Technology, Nagasaki University, Nagoya University, Nihon University, Niigata University, Osaka City