

Ministry of Education, Culture, Sports, Science and
Technology Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance

Third-Party Evaluation
Report
2015 Academic Year

Shinshu University Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance
Third-Party Evaluation Report
(2015 Academic Year)



Introduction

The Shinshu University Advanced Leading Graduate Program, Global Leader Program for Fiber Renaissance, which was chosen for implementation during the 2013 academic year, accepted its first class of eight students in April 2014 before admitting nine second-year students and one third-year transferee the following year. Today, the program is working to foster students' development in keeping with its goal of "creating organic linkages among the technologies of different fields and technological and human resources that are scattered across the world and training global leaders who will be capable of driving new businesses and projects."

Having reviewed the valuable views voiced by the members of last year's Third-Party Evaluation Committee (the program's first such committee), program officials have worked hard this academic year to address committee members' concerns and suggestions.

To assess whether those improvements are adequate, whether the program has been administered and implemented in an appropriate manner, and whether educational activities were carried out so as to ensure a quality experience for students, we conducted a self-assessment and published the results as the Self-Assessment Evaluation Report. We then held a meeting of the Third-Party Evaluation Committee based on that Self-Assessment Evaluation Report on January 26.

Our mission is to foster the development of doctoral degree holders—global leaders—who will be able to pursue productive careers in the industry. This year's Third-Party Evaluation Committee again served to shed new light on the path we should travel by highlighting areas toward whose improvement we should strive in the future. Students joined program administrators in exchanging views with Third-Party Evaluation Committee members, and the time we were all able to spend together was extremely meaningful. While the overall evaluations were very favorable, the process also yielded some significant areas where action is needed in preparation for the upcoming academic year. To achieve the mission that the program has set for itself, all program administrators and faculty members will resist any temptation to rest on their laurels and instead reaffirm their commitment to listen anew to feedback from industry as they study how to incorporate society's needs into the program and implement it going forward.

I look forward to harnessing all feedback along with, above all, the passion and enthusiasm of committee members and the textile industry to make further improvements in the program. On behalf of the program, I would like to thank the members of the Third-Party Evaluation Committee for the significant amount of time they spent assessing and evaluating the program.

February 2016

Masayuki Takatera

Program Coordinator, Shinshu University Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance

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1. Overview of the Third-Party Evaluation Process

1.1 Third-Party Evaluation Committee Schedule and Program

Shinshu University Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance
2015 Third-Party Evaluation Committee Meeting Program

Time and date: 9:00 am on Tuesday, January 26, 2016

Location: Meeting Room 2, 7th floor, Shinshu University Faculty of Textile Science and
Technology Research Center for Advanced Science and Technology

9:00 am	Greeting by the program director (Professor Makoto Shimosaka, Dean, Faculty of Textile Science and Technology)
9:05 am	Explanation of the purpose of the Third-Party Evaluation Committee (Professor Mikihiko Miura, mentor faculty member)
9:10 am	Explanation of the status of the program <ul style="list-style-type: none">• Program status (Professor Masayuki Takatera, Program Coordinator)• Educational content and methods (Professor Shigeru Inui, Chairman, Educational Strategy Committee)• Educational quality assurance (Professor Hiroaki Ishizawa, Chairman, Steering Committee)
9:40 am	Question and answer session
10:00 am	Exchange of views between Third-Party Evaluation Committee members and students
11:00 am	Evaluation summary
11:30 am	Review
Following the review	Expression of thanks by the program coordinator (Professor Takatera)

Third-party evaluation topics:

- (1) Program structures
- (2) Admissions
- (3) Educational contents and methods
- (4) Educational quality assurance

1.2 Meeting Attendees

Third-Party Evaluation Committee members

Present:

Hideshi Ueda (Vice Chairman and Chairman of the Board of Trustees, Japan Chemical Fibers Association)
Yasuharu Takagi (Chairperson, Technology and Environmental Measures Committee, Japan Textile Finishers' Association)
Osamu Tsutsumi (Member, Technology Committee, Japan Carbon Fiber Manufacturers Association Committee)
Hideo Tsuchiya (Advisor, All Nippon Nonwovens Association)
Tomio Matsubara (Director and Chairperson, Educational Activities Committee, Japan Textile Professional Engineer Center)

Not in attendance:

Toshiji Kanaya (Vice Chairperson, Society of Fiber Science and Technology, Japan)
Hidenobu Teramura (Manager, Textile and Clothing Division, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry)

Shinshu University

Makoto Shimosaka (Program Director and Dean of the Faculty of Textile Science and Technology)
Masayuki Takatera (Program Coordinator and Professor)
Hiroaki Ishizawa (Chairman, Steering Committee, and Professor)
Shigeru Inui (Chairman, Educational Strategy Committee, and Professor)
Yasushi Tamada (Chairman, International Partnership Committee, and Professor)
Hideaki Morikawa (Chairman, Industry Partnership Committee, and Professor)
Tsutomu Ishiwatari (Mentor Aid and Special Professor)
Mikihiko Miura (Mentor and Special Professor)
Kanji Kajiwara (Mentor and Special Professor)
Toshiyuki Uchikawa (Office Manager, Faculty of Textile Science and Technology)
Kazunori Inukai (Assistant to the Office Manager, Faculty of Textile Science and Technology)
Toshimitsu Takamatsu (Manager, Graduate School Office)
Chie Fujisawa (Graduate School/Doctoral Program Coordinator)
Hirotaka Nakajima (Graduate School/Master's Program Coordinator)
Naoko Suguta (Secretariat)
Ayumi Ishihara (Secretariat)
Maki Soyama (Secretariat)
Akiko Kubota (Secretariat)

Students

Tatsuya Ishikawa	1st year, Department of Bioscience and Textile Technology, Interdisciplinary Graduate School of Science and Technology
Hiroaki Ishikawa	2nd year, Department of Applied Biology, Graduate School of Science and Technology
Minako Shitara	2nd year, Department of Textile and Kansei Engineering, Graduate School of Science and Technology
Jiaping Zhang	1st year, Department of Chemistry and Materials, Graduate School of Science and Technology
Atsuro Ohyama	1st year, Department of Chemistry and Materials, Graduate School of Science and Technology

1.3 Distributed Materials (List)

- | | |
|---|--------|
| 1. Third-Party Evaluation Committee Program | 1 copy |
| 2. Third-Party Evaluation Committee Attendance Chart | 1 copy |
| 3. List of Third-Party Evaluation Committee Attendees | 1 copy |
| 4. Third-Party Evaluation Committee Evaluation Sheet | 1 copy |
| 5. Leading Program Self-Assessment and Evaluation Sheet | 1 copy |

2. Committee Members' Evaluations Using the Program Evaluation Sheet

Three weeks prior to the meeting of the Third-Party Evaluation Committee, we mailed each committee member the program's Self-Assessment Evaluation Report and a Program Evaluation Sheet (Individual Version) (see "5. Third-Party Evaluation Materials" below). We then asked committee members who would not be able to attend the meeting to fill in the Program Evaluation Sheet based on the Self-Assessment Evaluation Report. On the day of the Third-Party Evaluation Committee meeting, we also asked committee members to use this Program Evaluation Sheet to evaluate the program based on the explanation of the program's status as provided by the program coordinator and program staff members and the exchange of views with students. The results of this process are summarized below. We asked committee members to make their evaluations using a five-grade scale (A: Exceptional; B+: Excellent; B: Normal; B-: Somewhat more effort required; and C: Significantly more effort required), focusing on the period from the January 1, 2015, after publication of the previous Self-Assessment and Evaluation Report, to December 2015.

(1) Program structures

The Leading Program's administrative organization is operating in an appropriate manner based on its objectives.

Perspective 1-1

Is the Leading Program's administrative organization operating in an appropriate manner so as to train graduates who reflect its objectives?

Committee members' individual evaluations and comments

- A In addition to listening to the views of overseas universities and research institutions as well as industry stakeholders in Japan and abroad, the program has been fundamentally successful in establishing structures that enable students to experience actual life overseas.
- B+ The program has a functional organization. In particular, more active promotion of the program to audiences in Japan is necessary (through partnerships with companies).
- B+ The program has been working successfully to improve its structures.
- A The program has built structures from a broad-based perspective, and it has made progress in implementing improvements.
- A I'm impressed that the program has launched an independent organization (the Admission Examination Committee). I'd like to learn more about how the program is strengthening its partnerships with the Graduate School of Project Design.
- B+ I believe that the program has put in place thorough and well-conceived structures for its administration. From the standpoint of fostering a new generation of global leaders, I wonder if it wouldn't be a good idea to further boost the consolidating function played by the program coordinator.
- A The program has put in place appropriate structures.

Perspective 1-2

Does the program review its administrative structures in light of social needs?

Committee members' individual evaluations and comments

- B+ The Evaluation Committee seeks feedback from industry and other stakeholders and

works seriously and sincerely to act constructively on it. I do believe that exchanges and interactions with industry should be pursued more actively.

B+ The program reviews its structures.

B Is it perhaps necessary to absorb and address social needs even more actively?

B+ Social needs are reflected in the convening of the Third-Party Evaluation Committee and in the suggestions and observations it makes.

A The program's trajectory has been corrected in line with the suggestions, advice, and experiences garnered by the Third-Party Evaluation Committee, International Evaluation Committee, and Leading Program Forum 2015.

A I believe that the program's structures have been reviewed based on the evaluations offered by last year's Third-Party Evaluation Committee members.

A I believe that the program has avoided becoming static by taking action in response to suggestions from outside and reviewing its structures accordingly.

Perspective 1-3

Have structures been put in place to facilitate international collaboration?

Committee members' individual evaluations and comments

B+ The program should pursue additional student-level exchanges with universities in Europe and the U.S. As for partnership programs with overseas universities, the program should further clarify any issues that it has identified.

B+ Such structures have been put in place.

B+ I'm impressed that the program has expanded partnerships with other overseas universities.

B+ The program has entered into agreements with major overseas schools, and progress is being made on improvements.

A The program's global structures are sufficient, as is evident based on comprehensive agreements with overseas universities and research institutions, invitations extended to overseas instructors, joint student workshops, and the planning and implementation of programs such as special overseas training.

B+ I believe that the program's entry into MOUs has been significant, along with joint retreat-style events and workshops. Otherwise, in light of the status sought by the program, I think there is room for more consideration in the decision-making that leads to specific program components.

A The program has deepened partnerships with overseas entities, as is evident based on the 57 MOUs into which it has entered, and I believe that the comprehensive agreements between the four universities are playing a useful role in terms of actual exchange activities.

(2) Admissions

The program has established a clear series of basic policies concerning selection of students, and applicants are admitted in an appropriate manner based on those policies.

Perspective 2-1

Has the program put in place an admissions policy, and has that policy been publicized and disseminated widely?

Committee members' individual evaluations and comments

- A I don't see any particular problems in this area.
- B+ None
- B+ The program is making progress clarifying its admissions policy.
- B+ There is a clear admissions policy, and it has been publicized and disseminated.
- B+ I believe that the clarification of the admissions policy as well as the structures for its publication and dissemination are adequate. However, I would like to verify that the program's efforts to assess the effects of the policy's publication and dissemination are sufficient.
- B+ The admissions policy is a little ambiguous. Does it mean that the program will accept students with any of the five listed requirements and educate them so that they meet all of them? I'd like to see an English version of the policy included, too.
- A It's important to publish the policy in both English and Japanese on the website.

Perspective 2-2

Has the program adopted an appropriate method for accepting applicants based on its admissions policy, and is that method functioning substantively?

Committee members' individual evaluations and comments

- B+ More study is needed concerning the low number of students from Japan. It's necessary to earn students' trust and confidence, including in order to ensure the program's continuity.
- B+ Broader promotional activities are needed.
- B None
- B+ It's necessary to attract students from other universities in Japan.
- B Concerning the imbalance that's evident in international students' countries of origin, the inadequate number of students from other universities in Japan, and insufficient recruitment of university students from Europe and North America, I believe it is necessary to continue to analyze the background of these developments. It is necessary to assess the effects of publication and dissemination as described in Perspective 2-1.
- B The admission guidelines are specific and acceptable. However, there are too few interested applicants, so the process isn't reaching the stage of selecting students for admission.
- B As described in the self-assessment, the imbalance in international students' countries of origin has not been eliminated. It's easy to conclude that based on current conditions there's no solution, but I'd like to see the program continue working to find one.

Perspective 2-3

Is the program involved with initiatives to verify whether student acceptance is actually being carried out in accordance with the admissions policy, and are the results of those initiatives being used to improve the selection process?

Committee members' individual evaluations and comments

- A From what I pointed out last year, there has been progress, for example in increasing acceptance of students from emerging nations other than China.
- B+ None

- B Output from students is not clear.
- B None
- B Although I recognize that effort is being made to select good applicants, the results of those efforts are not adequate. The program needs to take steps with regard to Perspectives 2-1 and 2-2.
- B+ I'm impressed that the program has revised its rules. I look forward to seeing initiatives strengthened so that the program can attract international students from a broader range of countries.
- B While I recognize that the program is involved in such verification efforts, they're not leading to sufficient improvements.

Perspective 2-4

Is the program publicizing itself to recruit talented students?

Committee members' individual evaluations and comments

- B+ Building on 2-2 above, the program needs to carry out initiatives to effectively communicate to industry its mission of graduating global professionals.
- B+ The program needs to consider how best to publicize itself inside Japan.
- B- The program is not recruiting enough students from inside Japan.
- B+ Although the program is publicizing itself, the imbalance in terms of international students and the need to attract students from other universities are issues that need to be addressed.
- B+ The program should reconsider how to create awareness among faculty and students at (textile-related) universities, particularly in Japan, in order to communicate its appeal, advantages, and vision for the future. I'd like to see the program offer more information about appealing areas of study and programs, financial support, and future prospects, particularly to undergraduates as they consider whether and how to continue their studies in graduate school.
- B It seems to me that the program has to be promoted in different ways to Japanese students and overseas students. In addition, I'd like to see more creativity in areas such as how to deepen the linkages between student recruitment and MOUs, workshops, and other aspects of the program.
- B+ None

(3) Educational content and methods

The program's educational content and methods are appropriate in order to train graduates who exhibit the qualities set forth in its objectives, and they are being implemented in an appropriate manner.

Perspective 3-1

Is the Leading Program's curriculum appropriate?

Committee members' individual evaluations and comments

- A The program is appropriate in order to train global professionals.
- B+ I think the curriculum is appropriate.
- B+ None

- A I feel the same as the self-assessment.
- A I look forward to seeing program expand students' horizons, abilities, and appetite dramatically by expanding English instruction, training in the U.S., and internships. However, be careful not to offer too much content at once and work resolutely toward the ultimate goal!
- A I think the curriculum has been structured broadly.
- B+ Although I think English instruction is a good thing, caution is necessary to ensure that students don't get too much all at once. In addition, globalization is necessary, but just offering student training in Europe or the U.S. for everything isn't the same thing.

Perspective 3-2

Is the curriculum being implemented in an appropriate manner?

Committee members' individual evaluations and comments

- A The curriculum and review are being implemented in a careful and considered manner.
- B+ None
- B+ None
- B+ The curriculum has been improved, and the program is offering new electives.
- A I'm satisfied with the state of curriculum implementation, including in terms of curriculum improvement, plant practical training and tours, visits to other universities, participation in international conferences, and enhancement of English-language education. However, I'd like to review how well students are absorbing it, their reaction, and their ethical character.
- A I think the curriculum is being implemented in an appropriate manner.
- A I think the curriculum is well conceived and that it is being implemented in an appropriate manner.

Perspective 3-3

Does the program provide a system that enables students to achieve program objectives while assessing their own progress on an ongoing basis?

Committee members' individual evaluations and comments

- A I'm impressed with how the program has established objectives and how it reviews progress toward them.
- B+ None
- B There's no report on students' self-assessment, and the details of that process are unclear.
- B None
- An adequate system has been put in place. However, it is difficult to make an evaluation because the extent to which the program's objectives are being achieved has not been disclosed.
- B+ I believe that the self-assessment sheet is generally appropriate. I am unable to make any judgment about how leadership by faculty is being leveraged, however.
- A The mentor system is appropriate.

Perspective 3-4

Is the program's educational and research environment appropriate?

Committee members' individual evaluations and comments

- A The program should more actively encourage use of research facilities and other resources.
- B+ None
- B+ None
- B+ None
- A The environment that's been put in place is adequate.
- A I think the educational and research environment is appropriate.
- A I think it was an extremely good idea to move student accommodations to the International for Fiber Engineering.

Perspective 3-5

Does the program offer appropriate support structures for students?

Committee members' individual evaluations and comments

- A The mentor program and other efforts provide fine-grained support.
- B+ I think it's excellent that students meet once a month with their mentors.
- B+ None
- A None
- A The support structures are adequate. I do have a question though—I think the environment, support, and program score 100%, so why are there so few students applying? Is it a lack of promotion? The length of the program? The future of the field? The content of the curriculum?
- A I think the program generally provides support in an appropriate manner.
- A None

Perspective 3-6

Do students find the program satisfying?

Committee members' individual evaluations and comments

- A The program is generally meeting students' expectations.
- B+ I think they're satisfied. However, it's also important to offer them an aggressive training program.
- B There may be a little too many courses during the first year.
- B+ Students' satisfaction is reflected in the regular interviews and questionnaire results.
- B I was extremely interested to see students' unvarnished reactions. I think the following four areas are key ones for mentors: (1) concerns about the future, (2) concerns about whether they can internalize the large amount of information provided by the program, (3) inadequate time for research, and (4) concern about research results. *Mentor selection and techniques (faculty mentors for research and corporate mentors for career- and job-related issues)
- B+ It seems to me that it would be beneficial to incorporate a way to give students the opportunity to think about the program itself.
- A None

(4) Educational quality assurance

The program takes steps to assure the quality of the education it offers in an appropriate manner.

Perspective 4-1

Are the program's degree conferment standards appropriate?

Committee members' individual evaluations and comments

- A The program's degree conferment standards are appropriate.
- B+ I think the degree conferment standards are appropriate.
- B+ The program has put in place new standards.
- B+ There aren't any graduates yet.
- A Based on the Shinshu University Degree Conferment Standards, the Leading Program Degree Conferment Policies, and the graduation requirements, I think the degree conferment standards are appropriate.
- B+ Although I'm not able to discuss whether the degree conferment standards are appropriate since I'm only a layperson in this area, I think that perhaps English, while it should be a requirement, need not be part of the degree conferment standards.
- It's difficult to make a judgment.

Perspective 4-2

Are the quality assurance standards appropriate when compared to social needs?

Committee members' individual evaluations and comments

- B+ The program should further strengthen structures that meet industry needs in the area of global operations.
- B+ Discrepancies between those standards and the wishes of industry need to be corrected.
- B There's a need to better match the standards with social needs.
- B+ The suitability of the standards has been verified through visits to corporations in Japan.
- B It's necessary to strengthen collaboration with society and companies. Plan, do, check, action.
- B It's desirable that the standards also reflect corporate needs where we are likely to see textile applications expanding in the future, for example IT, construction and civil engineering, medicine and sanitation, and fashion.
- I can understand the standpoint of comparing the standards to social needs and deciding that they are appropriate. As for the extent to which the program is able to turn out high-quality graduates, I'm looking forward to observing future results (without making any judgment now).

Perspective 4-3

Is the content of the qualifying examination appropriate, and is the examination offered in an appropriate manner?

Committee members' individual evaluations and comments

- A The examination is generally appropriate.
- B+ None
- B+ None
- B+ None
-

- A I think the examination is appropriate.
- B+ I feel that the content itself is appropriate, but as far as what I was able to observe last year, I have some slight doubts as to the quality of the students. I'd like for the program to think about how to communicate the actual quality of the students who pass the examination to stakeholders beyond the university's walls.

Perspective 4-4

Is the content of the systematic review appropriate, and is the review administered in an appropriate manner?

Committee members' individual evaluations and comments

- B+ It will be necessary to continue to evaluate the review going forward.
- B+ None
- Outside scope (because the systematic review remains incomplete)
- B+ None
-
- A I think the review is appropriate.
- B+ None

Perspective 4-5

Are student research findings sufficient?

Committee members' individual evaluations and comments

- B+ The research is still ongoing, so it will be necessary to evaluate it in the future.
- I think we have yet to find out. It would be difficult to make a decision based solely on the information we have right now.
- B The research remains underway, so I can't say anything about its results yet.
- B+ I would suggest that quality of findings be judged not only on the basis of the papers produced, but also on the underlying technologies' patentability.
- B+ Research findings at this point are sufficient from the standpoint of papers presented, awards received, and research presented.
- B I will look forward to seeing excellent research in the future, since few findings are yet available. I think it's important to create more opportunities for students to present research.
- B+ I'm not suggesting that findings be judged based on quantity, but I'd like a little more results on which to base my evaluation. In fact, this evaluation item may be unnecessary.

Perspective 4-6

Are students making an adequate contribution to their employers?

(Not included in this evaluation)

Committee members' individual evaluations and comments

- The program should start thinking now about how it will deal with internships and other future aspects of students' studies.
- Once students accept a job, they lose access to a broad range of information; it's one of the challenging things about the textile industry. To become a global leader, it's necessary to have a network of contacts outside one's own company. In this regard, I think this program has a major role to play.

(5) Remarks about the exchange of views with students, other

- Students showed a high level of engagement and motivation.
- I expect the students to pursue exchanges with industry in the future in order to further increase their level of motivation.
- Education that has clearly defined objectives and that lets individual students have their own objectives
- Methods that go beyond Japanese vagueness to instill an aggressive attitude (greater importance of partnerships with companies)
- In some ways, the connection between research topics and society continues to be unclear. (What specific output, including patents, will research generate?)
- I had a strong sense of personal growth on the part of the second group of students admitted to the program. I think the objectives for individual research topics and the the program's learning objectives have been more clearly defined. At the same time, I also felt the effects of program improvements and enhancements. I think it's still necessary to make additional improvements out of an awareness of industry needs.
- 1. Creative approaches in publicizing the program and recruiting students (publicizing it at universities in Japan; the "triple axis" of Europe, Asia, and Japan)
 2. I'm satisfied with the university's implementation structures. Going forward, the students have to play the lead role, and they have to stop depending on others once they reach D1.
 3. Strengthen partnerships with corporations. Creative approaches to planning, implementation, evaluation, internships, job placement, and mentoring will serve to eliminate students' unease and concerns (regarding both research and their future careers).

3. Third-Party Evaluation Committee Meeting Minutes

3.1 2015 Academic Year Third-Party Evaluation Committee Meeting Minutes

Shinshu University Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance
2015 Academic Year Third-Party Evaluation Committee Meeting Minutes

Date and time: 9:00 am on Tuesday, January 26, 2016

Location: Meeting Room 2, 7th floor, General Research Building

Attendees: Third Party Evaluation Committee members
Hideshi Ueda (Japan Chemical Fibers Association), Osamu Tsutsumi (Japan
Carbon Fiber Manufacturers Association), Yasuharu Takagi (Japan Textile
Finishers' Association), Hideo Tsuchiya (All Nippon Nonwovens Association),
Tomio Matsubara (Japan Textile Professional Engineer Center)

Shinshu University

Director Shimosaka
Professor Takatera
Professor Tamada
Professor Morikawa
Professor Ishizawa
Professor Inui
Professor Ishiwatari
Specially Appointed Professor Miura
Specially Appointed Professor Kajiwara
Office Manager Uchikawa
Assistant to the Office Manager Inukai
Manager Takamatsu of the Graduate School Office
Coordinator Fujisawa
Coordinator Nakajima
Research Assistance Coordinator Suguta
Research Assistance Coordinator Soyama
Research Assistance Coordinator Ishihara
Research Assistance Coordinator Kubota

Not in attendance: Toshiji Kanaya (Society of Fiber Science and Technology), Hidenobu
Teramura (Textile and Clothing Division, Manufacturing Industries Bureau,
Ministry of Economy, Trade and Industry), Professor Hirabayashi, Assistant
Manager Kubota

(1) Greeting by the Program Director

Program Director Shimosaka (Dean, Faculty of Textile Science and Technology) welcomed attendees ahead of the convocation of the meeting of the Third-Party Evaluation Committee.

(2) Explanation of the Third-Party Evaluation Committee

Specially Appointed Professor Miura explained the materials that had been distributed to committee members as well as the evaluation process. He also requested their cooperation with the program's plans to record audio at the meeting and to publish a report on the meeting at a future date, which the committee members approved.

(3) Explanation of the Status of the Program's Implementation

Program Coordinator Takatera joined Professor Ishizawa and Professor Inui in offering an explanation of the program's implementation, from its selection to its current status, in line with the self-evaluation report.

(4) Question and Answer Session

A question and answer session about the status of the program's implementation was held. Members of the Third-Party Evaluation Committee repeatedly acknowledged that the program had made improvements to address the issues that were pointed out during the previous year. However, they also pointed to the need to make improvements to address the imbalance in international students' countries of origin and the low number of Japanese students. Attendees also exchanged views on topics including the articulation of the program's appeal and students' motivation, ways to publicize the program among third-year undergraduate students and at other universities in Japan, and whether third-year transfer students should be admitted. Committee members also offered constructive comments, for example suggesting inviting corporate human resources officials to attend annual end-of-year presentations as a way to match students with potential job openings when corporate internships begin during the next academic year.

(5) Exchange of Views between Third-Party Evaluation Committee Members and Students

Since the number of students increased from the previous year, an exchange of views was held with five students representing each of the program's years of study (first- and second-year students). When they were asked about their growth from the previous year, students indicated that their level of understanding had increased since they had put in place a solid foundation and that they had moved from a coursework-centered year to a research-centered year that was keeping them busy, among other views. Students also cited the importance of working themselves day in and day out and noted various concerns such as finding a job, writing their dissertation, and participating in internships. In terms of research, in response to a question about how their work would benefit society, they indicated that they expected their findings to see application in a broad range of fields, including medicine, the environment, the provision of information to consumers, quality control, and depletion of oil resources. Committee members offered advice concerning the importance of patents and communication in English at companies and the need to adopt an aggressive attitude.

(6) Evaluation Summary

A summary of the evaluation was presented as described below, with Vice Chairman Hideshi Ueda chairing the proceedings.

Program structures: A

- The two absent committee members offered evaluations of "A" and "B+."

- A: There have been improvements since last year, for example by putting the Admission Examination Committee on an independent organizational footing.
- B+: From the standpoint of its objective of turning out professionals, I think that a little additional incorporation of collaboration with companies and feedback from companies would further improve the program. The program has taken the observations we made last year to heart and made improvements. I could be persuaded to give it an “A” grade.
- B+: There have been improvements in initiatives related to social needs, but I think they remain inadequate.
- B+: The observations this committee made for the last academic year have been addressed. Student recruitment remains a work in progress, particularly regarding students from other universities.
- A: The program has made improvements based on our observations compared to last year. Although there’s still work to be done in terms of meeting the wishes of companies and industry, and in terms of recruiting students from other universities, I will look forward to seeing results in those areas next year.

Admissions: B+

- The two absent committee members offered evaluations of “B+” and “B.”
- B+: As I said a moment ago, I’d like to see the program work harder to attract students from other universities.
- B: The program has not yet figured out how to recruit students from Japan. Overseas universities are not the only source of talented students. Part of my purpose in giving a grade of “B” here is to encourage the program to solve this problem.
- B+: Talented students from places such as Morocco have joined the program, but there’s a noticeable imbalance in students’ countries of origin. There still aren’t enough students from other universities in Japan. I think the program should further strengthen its efforts in this area. There’s a need to more actively publicize and promote the program’s advantages. The carrot that entices them needs to be made more clear.
- B+: The program needs to communicate to industry the fact that it is graduating global professionals. That understanding will help create a virtuous cycle in which the program will be able to attract talented students. I’d like the program to take determined action in this area.

Educational content and methods: A

- The two absent committee members both offered an evaluation of “A.”
- A: However, seeing the student questionnaire raises two concerns: research findings and job placement. Mentor professors come exclusively from the university community, but isn’t there a need to have people with corporate backgrounds participate as well?
- B+: Students are too... commonplace. I mean that the program needs to teach them to be more aggressive. Whether that can be taught is a separate issue, but the fact remains that this kind of person can play a useful role for companies, so how about addressing this issue?
- B+: In Perspective 3-3, the print on the student self-assessment sheet is too small for me to read, so I’m not sure how well they’re doing. I felt that there was a bit of an imbalance with

regard to the first-year students, who are unable to conduct research due to their heavy course load.

- B+: Although there has been progress in student satisfaction and objective establishment, this information remains unclear for some students.
- A: I think the program is doing a good job overall. As I pointed out a moment ago with regard to course content, students are motivated to become global professionals, but there are few opportunities to teach them about global corporate activities. It seems like the vertical divisions track professors' existing areas of specialization. They're not receiving a clear and specific picture. It would be good to seek more unvarnished feedback.

Educational quality assurance: B+

- The two absent committee members both offered an evaluation of "B+."
- B+: Although it was difficult to evaluate the program in this area since it hasn't yet produced any graduates, it's positive that the program is accommodating feedback received from sources such as company visits in a positive manner.
- B+: I'm not sure whether the program has been successful in matching what it offers to the industry's needs. The SR is not yet finished, so that's outside the scope of this evaluation. Concerning research findings, I took a strict view since students haven't yet produced research at that level.
- B+: I had no comment for perspectives 4 and 5 since the program's performance in those areas remains to be seen. "Maintenance" is necessary in order to ensure that what the program offers continues to meet corporate needs.
- B+: It seems to me that the question of how to have companies participate remains an issue. It's difficult to make a judgment now. How can the university's vision of the ideal graduate be reconciled and matched with corporations' visions of the ideal employee? Are research findings generated in a university setting a sufficient condition for a leading program degree? Shouldn't research findings also be judged on the basis of their corporate relevance?
- B+: Although some tasks will need to be undertaken in the future, failure to do a good job now, including with internships to facilitate future job placement, is unacceptable. These aren't problems that can be addressed next year or the year after that. I'd like the program to forge more connections.

Overall evaluation: A

- The program has clearly adopted a posture of making improvements.
- The program is steadily improving its performance in the area of training global human resources.
- Going forward, it will be importance to administer the program such that it takes industry needs into account even more actively.
- From that standpoint, it will be necessary to broaden the range of topics covered in classes from the standpoint of program structures, admissions, companies' global operations, and the approaches followed by corporate executives (including from the standpoint of cost effectiveness and executives' aspirations), and it will be necessary to strengthen the program in these areas, including by enhancing how the program publicizes itself to the

industry in order to facilitate students' job searches. These will be issues as the program moves toward the next academic year.

Other comments

- An evaluation of “A” qualified with comments seems appropriate, including from the standpoint of how effectively the program develops in the future.
- It seems to me that if the curriculum were implemented with a little more cooperation from outside, from industry, that students would identify problem areas more clearly themselves.
- Students still exhibit the thinking of students.
- It may be that writing a patent oneself is the specific form that being aggressive takes.
- It seems to me that it's important to talk about patents and aggressiveness when offering students guidance.
- It seems that it would be helpful to have more classes about intellectual property and patents. It's necessary to study these topics. From a corporate standpoint, whether a candidate can write a patent is an important distinction.

(7) Review of the Evaluation

Vice-chairman Ueda notified Shinshu University of the committee's overall evaluation of “A.”

(8) Expression of Thanks from the Program Coordinator

Program Coordinator Takatera expressed his thanks to the committee members in order to close the meeting.

3.2 Exchange of Views between Third-Party Evaluation Committee Members and Students

Program secretariat staff attended the exchange of views between Third-Party Evaluation Committee members and students and recorded the interactions. An account of the session follows. In the exchange, committee members asked questions, and students responded. Committee members also made comments in reaction to the students' responses.

Committee member 1: I have a question for the two students who are in their M2 year of study. Compared to last year, how would you describe your level of satisfaction and concerns this year?

Student 1: Whereas I spent a lot of time studying topics such as basic textile technologies during my first year, this year I had the opportunity to view a variety of textile-related manufacturing machinery while participating in ITMA in Italy. I felt that it was thanks to the fundamentals I learned last year that I was able to understand the mechanisms at work in the various things I saw and that I was able to digest everything. I don't really have any concerns about the future. I think my field of view has grown a little since last year.

Student 2: Last year was mainly classroom work, but the good thing about this year is that I've been able to find lots of time for research. At the same time, spending less time studying textiles is a negative. Now that the first three

years of students have enrolled in the program, I had hoped I'd be able to help with program implementation and activities, but I wasn't really able to do that. I'll have to work harder on that in the future. Soon I'll have to start thinking about looking for a job, so I'm worried about that, as well as about earning my master's and doctoral degrees.

Committee member 2: When you think about looking for a job, where do you envision yourself working, and what do you envision yourself doing?

Student 2: My biggest problem is that those things aren't clear to me yet. This academic year I visited a plant in Thailand that manufactures Japanese products. When I saw employees at the plant using Japanese machines to make products with Japanese specifications, I questioned whether that arrangement was really well suited to those Thai workers. I'm interested in a job that would allow me to design machines and lines of motion that suit people. I was interested in making machinery that would be easy to use for Thai workers. Although I'd also like to have a research-related job...

Committee member 2: What are your thoughts and concerns with regard to research and finding a job?

Student 3: With regard to research, I've had to read papers myself and go to lectures to gather information, in part because my advisor had a different area of specialization. I'm still a little vague about my job search as I continue to weigh my options. Although I've decided to pursue a global career, I'm having trouble deciding whether I'd like to work in research or management. I'm trying to figure out which I'll be better suited for after earning my doctorate.

Committee member 2: Do you have any hopes concerning an internship?

Student 3: I wanted an internship in a university lab, but I was told that that wouldn't be approved, so now I'm looking for a corporate host. I'd like to work in R&D in nonwoven cloth, which is my area of specialization. I'm interested in global operations, but I'm not sure how to link that to my own dissertation. It would be tricky to be cut off from that work for three or four months.

Committee member 2: What about the two first-year students? What about your studies do you find satisfying, and what concerns you?

Student 4: On a scale of 10, I'd rate my experience a 9. The missing point involves Japanese. I'd like to study Japanese a little more. During my time as a first-year student, I felt that most of the time was dedicated to classroom

work, and I wanted more time for experimentation.

Committee member 2: Beyond your personal experiences, how do you feel about the program?

Student 5: Most of my work in organic chemistry has involved evaluating physical properties, which has nothing to do with textiles, but by studying the field of textiles, with which I've had nothing to do until now, I feel that I gained a second pillar of knowledge that has provided the support I needed so that I could come this far. The coursework is designed to allow students to earn a master's degree in two years, and I've arranged my schedule to allow me to do that, so I don't feel that it's too heavy a load.

Committee member 3: You said that you feel organic chemistry and textiles are completely different, but for me, they're linked together. You could (somewhat uncharitably) characterize textiles as a study of general knowledge. It's impossible to have an understanding of textile engineering without a range of knowledge. Furthermore, my understanding of textile engineering is that it combines low-tech and high-tech elements. Consequently, textile phenomena such as dyeing have an organic chemistry basis. What if you looked at organic chemistry from its essence, for example pollution or biochemistry? Myself, I think everything is connected. How about you?

Student 5: I feel the same way, but because I studied electrochemistry, I felt that it was a little different than textiles. I can certainly see organic chemistry in textiles.

Committee member 3: If you think about this in terms of electricity, recall that when you all created a nozzle like the Seiko Epson inkjet nozzle last year, there was ink and there were electricity and electronics, and they were intimately connected. Electricity and electronics are also connected to textiles. It seems that you need to adopt the perspective of seeing broad connections, of digging deep, of discovering what you want to do.

Committee member 4: I suspect that you all have your own objectives for your research, but I'd like to know how you envision it ultimately serving society.

Student 1: I think my research will find use in the production of medical-use socks. By changing the characteristics of silk, it is possible to change its elasticity so that it can "get used" to people's bodies. It can do things that are not possible with synthetic chemistry.

Committee member 4: We've created synthetic textiles chemically and used them to do the things that silk cannot. It's only natural to take advantage of silk's characteristics, but I think the proper approach is to do things with silk

that other materials cannot do. What do you think?

- Student 1: I don't think it's necessary to determine the application. Even for capabilities that come from small changes in perspective, the important question is how they have a positive influence on people. Aren't even small changes a good thing?
- Student 2: I'm evaluating wood products, and I think there may be two social uses. First, with regard to an environmental problem, I'd like to put my research to use in order to create new methods for using waste lumber and lumber from thinning trees that have grown in an unplanned manner. Second, I had an opportunity to focus on how people obtain information from target objects in my lab rotation, where I had been looking exclusively at people's reactions. One example of how that could be useful is in identifying how sellers of wood products should provide information in order to most effectively communicate it to consumers.
- Student 3: I'm working to decipher the relationships linking manufacturing conditions, structure, and properties for nonwoven cloth, and I think that my findings will be useful in quality control. An understanding of these three aspects of the manufacturing process would make it possible to prevent production of defective products. Another benefit is that more accurate evaluation and design of nonwoven cloth connection points would likely enable use of the material in fields and clothing in which we have not been able to use it in the past.
- Committee member 4: The basic research you described in the first part of your comment is extremely meaningful from the standpoint of manufacturing.
- Student 4: I think that cellulose will come to play an increasingly important role in solving challenges such as environmental problems and depletion of oil resources. In addition, I think that if we can produce super-fine cellulose, we will be able to use it as a substitute in industrial fields when we run out of oil.
- Student 5: I think my research will make people's lives more convenient and satisfying. For example, I'm researching organic transistors to see if the silicon transistors used on tags on candy wrappers to aid in shipment can be produced more easily and inexpensively. These transistors are made using dangerous solvents right now, but I'm researching whether they can be produced without using such substances.
- Committee member 4: That's fine, but how specifically will you pursue that research? Isn't it impossible to eliminate organic solvents from organic silicon?

- Student 5: There are already reports describing how organic transistors can be produced from powder during the printing process, so I don't think it's completely impossible.
- Committee member 5: What is your greatest source of motivation right now? In addition, although you can write a dissertation as long as you make a new discovery in your research, companies care about patentability. It's hard to obtain a patent unless an invention has novelty and embodies a noteworthy degree of progress. How do you feel about patents?
- Committee member 1: Is education about patents a part of the curriculum?
- Student 3: It's not a requirement, but there's a seminar being planned at the SVBL that will be open to student participation.
- Committee member 1: Other universities offer quite a bit of instruction in this area.
- Student 2: It's a simple thing, but opportunities to communicate with students in other fields and international students provide one source of motivation for me. The importance of English. As for patents, I haven't ever thought about them.
- Student 3: Having lots of skills to be able to study various subjects is the biggest motivating factor for me. For example, the Edanz seminar provides a chance to learn about technique, like how to structure a dissertation in English, how to make presentations, and how to write papers so that they pass peer review. It's fun. I also enjoy discussions at the Graduate School of Project Design. When discussions go well, that means there was a good facilitator. I can learn from things like that as well. In terms of research, I'm enjoying myself because the program has installed new nonwoven equipment so that I can conduct research in the way I wish. Concerning patents, that's a pretty difficult subject. I think corporations dominate the field of nonwoven cloth, which makes finding a patentable invention difficult. Recently, the program added a new melt-blown system, and I'm thinking how we can use it to pursue a new research topic.
- Student 4: I haven't really decided on a topic yet for my own research, and I want to do various things. I haven't thought about patents.
- Student 5: I'm very competitive, and I don't want to be outdone by the other students in the Leading Program. I'd like to obtain a patent with some initial help from my supervisor.
- Committee member 2: Is there anything any of you students would like to ask? We've got

people who are active in industry here, so they could probably offer you some valuable advice.

Student 3: The program's goal is to train professionals for careers in industry, but what specific sorts of skills do we actually need to gain in the program in order to put the skills required in industry to use globally?

Committee member 3: If you take an extremely thin strip of wood, with a thickness on the order of nanometers, and apply it to glass, you end up with a look that's gentle on the body when sunlight hits it. There's a company that actually makes such things. As I heard at an exhibition in Italy, Japan has plentiful water, but Europe does not—yet the dyeing process requires water. Japanese dyeing machines use a lot of water. That's unacceptable in Europe. Water, inkjet printers, there are various connections. Try using a nonwoven machine to make woven fabric. You'll end up with something different. Look at things differently. You'll end up creating something new. My background is in machining, so I tend to think in mechanical and physical terms, but that sort of new way of looking at things is important.

Committee member 1: The most useful thing overseas is English. The second most useful thing is the ability to get along with different kinds of people. And not hanging back, not hesitating, but rather being more active and engaged. Yesterday, the international students were extremely active. Take an active stance and be able to get along with everyone. Follow the curriculum you're using right now carefully. Results are a different matter. I think the good thing about the Leading Program is that it's providing a condensed version of what should be done at companies, or what it wasn't possible to do. Take the initiative to act yourself, without relying on your company or instructor. You can't wait on your instructors. You've got to do it yourself. Everything.

Committee member 4: I spent seven years overseas, and English is important. The question is whether you'll develop the ability to communicate reliably and effectively. Who knows whether your research themes are also being pursued by companies. Companies will look at what kind of base you have and what you're thinking about. You've got to have a solid base, and you've got to have knowledge in a variety of fields, not just in certain areas. Objects don't have shapes. Study a variety of things hard.

Committee member 5: Right now things are handed to you. It may be that way at first after you find a job, but the key will be to discover problems yourself and then search for solutions. I mean the ability to find problems. That skill will always serve you well, whatever situation you find yourself in. Next is how effectively you can involve your colleagues organizationally, and communication skills are powerful as well.

- Committee member 3: Companies follow the PDCA cycle, and they do so over and over again. To accomplish one thing, they do so dozens of times. You have to check and correct your doctoral dissertations over and over again before they become true dissertations; companies are the same.
- Committee member 2: More than you yourselves imagine, students gather globally and participate in lectures from a global standpoint. It's important to communicate globally with a focus on textiles. I'd like you to do your best. I want you to remain continually aware of what society expects of textiles. This will become more and more important. While you're at the university, you'll find that subjects are divided into vertical "silos." You need the ability to dig down into those structures. Even for the Japan Chemical Fibers Association, these things are easy to talk about but hard to actually do. I'd like you all to maintain this awareness as you cultivate awareness of what society requires of textiles and to remain sensitive to those needs as you pursue your studies.

3.3 Question-and-answer Session between Third-Party Evaluation Committee Members and the Program Coordinator

The question-and-answer session between Third-Party Evaluation Committee members and the program coordinator served as a constructive exchange of views between committee members and the program coordinator.

- Committee member: Listening to the students' presentations yesterday, I had the distinct impression that they really want to become global professionals. I can see how a variety of improvements are being carried out in a serious manner to address what was pointed out last year. In the area of corporate involvement, possibilities include having students tour companies, or having corporate representatives come talk to students and participate in exchanges. Students could learn about how large companies like Toray and Teijin actually run their global operations. Supply chain lectures alone aren't enough; isn't this what the students actually want to learn about?
- Shinshu University: We offered lectures on corporations' supply chains and global operations as part of the doctoral program by inviting instructors from companies such as Kuraray, Toyobo, and Asahi Kasei to give lectures. We'd like to incorporate that type of content into the Leading Program.
- Committee member: If the program includes lectures by corporate managers, students will gain an understanding of a new frontier spirit when they hear those managers' passion and enthusiasm, and they may find themselves inspired to pursue a similar career themselves. It all begins with enthusiasm. At its root, the tiny difference between Japanese students and

international students is a difference in enthusiasm. It seems to me that this kind of education is necessary so that our students can become Japanese citizens whose skills and abilities will be recognized overseas.

Shinshu University: Human resources are important; what kind of human resources can we graduate to play a role in globalization and new industries? We need to work harder.

Shinshu University: During the international evaluation, an evaluation committee member from the U.S. asked what served as the carrot (the motivation) for students to join the Leading Program. There's no carrot, so students aren't joining the program. In the U.S., when companies indicate that they need a certain kind of human resources, universities train and provide such students. Does the U.S. and European approach to human resources development—where universities go about their jobs independently—suit Japan? Perhaps we can incorporate the positive aspects of both the Japanese approach and the U.S. and European approach. A European committee member pointed out that it is difficult to forge domestic connections. We'd like corporate representatives to offer more guidance in a variety of areas. Some Japanese companies accept interns from overseas. There's a need to reexamine what strategy we should use going forward.

Committee member: Compared to last year, the program has made some extremely creative changes to its admissions process, and those are very impressive. What if the program publicized itself directly to third-year undergraduate students? Or sent students in the doctoral program to recruit students at other universities? International students are able to make intuitive decisions, but Japanese students lag quite a bit in their ability to do so. Japanese students aren't hungry for success. They don't have goal awareness. On whose behalf does the program exist? Is it for foreigner students?

Shinshu University: If it were possible for third-year students to transfer into the program, perhaps we would be able to attract more students from other universities.

Committee member: What if you changed the standards to allow students to transfer in from other programs? I understand that making a five-year commitment is difficult. As things stand now, it is understandably difficult for students to come from Japan and Europe.

Committee member: What if the annual end-of-year presentations were opened to attendees from other universities? That could be extremely stimulating, in the manner of the Leading Program Forum that was held in Tokyo.

- Shinshu University: It seems that it is important to shift the center of gravity from overseas to Japan.
- Shinshu University: The fact that there's only one new student from Japan joining the program next year gives the impression that the program has no appeal. We have to think more carefully about how to address this issue. If any of you committee members knows a potential student, please recommend him or her to us.
- Committee member: What does the program seek from internships? Companies need to be able to ascertain what students are looking for and whether they can provide that to them.
- Committee member: Companies accept interns from overseas relatively readily. When it comes to Japanese students, companies are concerned about things like which company they'll end up working for after graduation, and they end up treating them like guests.
- Shinshu University: Some students just want to gain experience in a corporate setting, while others are hoping to parlay their internship into a job. We need to think about how to match each group with appropriate companies.
- Shinshu University: If we're talking about internships as part of the doctoral program, is there an issue with pursuing those internships under the basic assumption that students will accept a job at the company hosting them as interns and that companies will hire those students?
- Committee member: I imagine that Japanese students want to learn skills globally as a way to invest in themselves, while international students come to Japan because they want to pursue a textile-related career globally. In that context, it seems to me that it will be important to provide thorough student profiles to companies and approach the internships in a case-by-case, tailor-made manner. In this sense too, it seems important to create opportunities for students to hear about international operations around their third year in the program and to use those opportunities to help companies get to know the students.
- Shinshu University: We examined how to send doctoral program students to companies as part of a human resources development project in the Faculty of Textile Science and Technology. The Leading Program also has the goal of training doctoral degree-holders for corporate careers. I think these internships have the role of facilitating "arranged marriages" for companies in a way that's different from doctoral degree-holders in the past.

- Shinshu University: When making requests of companies, I think it's key to do so after fostering students' understanding of non-disclosure agreements (NDAs).
- Committee member: Students graduate and then go to work for a company. Then they come to graduate school (a doctoral program) from that company. If that partnership continues, companies that assume doctoral students lack expertise except in a narrow field of specialization may change their thinking. This could help attract more Japanese students.
- Committee member: When I joined Teijin, I was told that the first 10 years would be a time of study and learning. I was not expected to produce results right away. As I moved up the corporate ladder, the experiences from that time have been truly useful. When I look at students, they are very quiet and polite, and they lack wildness. Students must participate in internships and see how the real world works; they have to jump right in and learn how to implement the "plan, do, check, action" cycle themselves. I think the program's structures are sufficiently robust, but the question is whether it can be continued instead of just closing it down once the budget runs out. Whether the the Ministry of Education, Culture, Sports, Science and Technology will provide funding. If students who graduated from the program come back in the future to recruit its students for jobs, then the program will have been successful. The program should invite corporate HR representatives to the annual end-of-year presentations. Since those are open, it's a waste not to use them in this way.

4. Response to the Third-Party Evaluation

Masayuki Takatera
Program Coordinator

Over the course of the last year, we've worked to improve the program based on the observations and suggestions of last year's Third-Party Evaluation Committee. These improvement initiatives, and the effort they represent, received favorable evaluations from committee members, who observed that the program "has clearly adopted a posture of making improvements" and that it is "steadily improving its performance in the area of training global human resources." However, committee members also identified issues with which we must deal as we prepare for the next academic year, noting, "Going forward, it will be important to administer the program such that it takes industry needs into account even more actively." They also observed that "it will be necessary to broaden the range of topics covered in classes from the standpoint of program structures, admissions, companies' global operations, and the approaches followed by corporate executives (including from the standpoint of cost effectiveness and executives' aspirations), and it will be necessary to strengthen the program in these areas, including by enhancing how the program publicizes itself to the industry in order to facilitate students' job searches." As a program administrator, I plan to work to make improvements as outlined below in order to address the problems identified by committee members.

(1) Program structures

Committee members observed that "more issues have been addressed than last year," but also offered the following advice concerning outside support structures and partnerships: "From the standpoint of its objective of turning out professionals, I think that a little additional incorporation of collaboration with companies and feedback from companies would further improve the program." The need to strengthen partnerships with industry was also identified in connection with educational content and methods. With regard to these observations, I'm hoping to have stakeholders and other corporate representatives participate in more program graduates' activities and point out what else we need to do to ensure our students become global leaders. I'd like to take what we learn and use it to make further improvements to the program's structures. I think that through this initiative we will also be able to address a committee member's observation that "there have been improvements in initiatives related to social needs, but I think they remain inadequate."

In addition, concerning a committee member's specific proposal to "invite not only stakeholders, but also HR representatives from other companies to Leading Program students' annual end-of-year presentations, which are held every year," we plan to do just that starting with the next set of presentations.

(2) Admissions

Concerning the area of international student diversity, which was raised last year, committee members acknowledged a certain level of improvement, for example the admission of talented students from places such as Morocco, due to our administration of the entrance examination via the Internet and Skype. However, committee members' observations concerning our recruitment

of Japanese students included the following:

- “The program has not yet figured out how to recruit students from Japan.”
- “There are not enough students joining the program from other universities in Japan. The program needs to think about how to further enhance this aspect of its implementation.”
- “I’d like to see the program work harder to attract students from other universities.”
- “Student recruitment remains a work in progress, particularly students from other universities.”

With regard to these observations, I look forward to augmenting our efforts to date to publicize the program at other universities through pamphlets by having faculty members visit other universities directly to recruit applicants to the program and hold information sessions so that we can gain more students from such universities.

Another committee member offered, “The program needs to communicate to industry the fact that it is graduating global professionals. That understanding will help create a virtuous cycle in which the program will be able to attract talented students.” Based on this advice, I plan to have members of the program committee in charge of collaboration between industry and academia promote the superlative nature of the students trained by the program even more energetically when visiting companies as a way to secure more student internships and job offers.

(3) Educational content and methods

We received favorable evaluations in this area, with one committee member noting, “I think the program is doing a good job overall.” However, other committee members had some more critical things to say about collaboration with industry in education.

One committee member called for more classes on “companies’ global operations and the approaches followed by corporate executives,” and another pointed out, “students are motivated to become global professionals, but there are few opportunities to teach them about global corporate activities. It seems like the vertical divisions track professors’ existing areas of specialization. They’re not receiving a clear and specific picture. It would be good to seek more unvarnished feedback.” I plan to address these observations by having more corporate officials and managers participate in multiple program courses as guest speakers. With regard to the committee member who asked whether people with corporate backgrounds should join mentors, who come exclusively from the university community, in offering guidance to students, I’m planning to have corporate officials consult with students and participate in guidance as corporate mentors when they come to campus as guest speakers.

Another committee member noted, “Students are too... commonplace. I mean that the program needs to teach them to be more aggressive.” With regard to that observation, I plan to try methods such as facilitating activities led by students and increasing the number of opportunities for students to enter into dialog with corporate officials and managers.

(4) Educational quality assurance

Concerning educational quality assurance, one committee member observed that “it’s positive that the program is accommodating feedback received from sources such as company visits in a positive manner.” At the same time, other valuable comments addressed the subject from the

standpoint of companies, with one committee member asking, “How can the university’s vision of the ideal graduate be reconciled and matched with a corporation’s vision of the ideal employee? Are research findings generated in a university setting a sufficient condition for a leading program degree? Shouldn’t research findings also be judged on the basis of their corporate relevance?” With regard to these observations, we plan to offer a doctoral degree with the characteristics that companies seek and to work to ensure program students’ ability to clearly envision the program’s vision of the ideal graduate and future path through continued exchanges of views with companies in an effort to better train the high-quality human resources that companies require. I believe that in quality assurance, it is important to harmonize the standards required by students, the university, and companies.

5. Third-Party Evaluation Materials
5.1 Program Evaluation Sheet (Individual Version)

Shinshu University Advanced Leading Graduate Program
2015 Academic Year Third-Party Evaluation Committee
Program Evaluation Sheet (Individual Version)

Target dates: January 2015 to December 2015

Overall Evaluation

[A / B+ / B / B- / C]

A: Exceptional B+: Excellent B: Normal

B-: Somewhat more effort required C: Significantly more effort required

Evaluation items

1. Program structures

[A / B+ / B / B- / C]

The Leading Program's administrative organization is operating in an appropriate manner based on its objectives.

Perspective 1-1

Is the Leading Program's administrative organization operating in an appropriate manner so as to train graduates who reflect its objectives?

[A / B+ / B / B- / C]

Comments

Perspective 1-2

Does the program review its administrative structures in light of social needs?

[A / B+ / B / B- / C]

Comments

Perspective 1-3

Have structures been put in place to facilitate international collaboration?

[A / B+ / B / B- / C]

Comments

2. Admissions

[A / B+ / B / B- / C]

The program has established a clear series of basic policies concerning selection of students, and applicants are admitted in an appropriate manner based on those policies.

Perspective 2-1

Has the program put in place an admissions policy, and has that policy been publicized and disseminated widely?

[A / B+ / B / B- / C]

Comments

Perspective 2-2

Has the program adopted an appropriate method for accepting applicants based on its admissions policy, and is that method functioning substantively?

[A / B+ / B / B- / C]

Comments

Perspective 2-3

Is the program involved with initiatives to verify whether student acceptance is actually being carried out in accordance with the admissions policy, and are the results of those initiatives being used to improve the selection process?

[A / B+ / B / B- / C]

Comments

Perspective 2-4

Is the program publicizing itself to recruit talented students?

[A / B+ / B / B- / C]

Comments

3. Educational content and methods

[A / B+ / B / B- / C]

The program's educational content and methods are appropriate in order to train graduates who exhibit the qualities set forth in its objectives, and they are being implemented in an appropriate manner.

Perspective 3-1

Is the Leading Program's curriculum appropriate?

[A / B+ / B / B- / C]

Comments

Perspective 3-2

Is the curriculum being implemented in an appropriate manner?

[A / B+ / B / B- / C]

Comments

Perspective 3-3

Does the program provide a system that enables students to achieve program objectives while assessing their own progress on an ongoing basis?

[A / B+ / B / B- / C]

Comments

Perspective 3-4

Is the program's educational and research environment appropriate?

[A / B+ / B / B- / C]

Comments

Perspective 3-5

Does the program offer appropriate support structures for students?

[A / B+ / B / B- / C]

Comments

Perspective 3-6

Do students find the program satisfying?

[A / B+ / B / B- / C]

Comments

4. Educational quality assurance

[A / B+ / B / B- / C]

The program takes steps to assure the quality of the education it offers in an appropriate manner.

Perspective 4-1

Are the program's degree conferment standards appropriate?

[A / B+ / B / B- / C]

Comments

Perspective 4-2

Are the quality assurance standards appropriate when compared to social needs?

[A / B+ / B / B- / C]

Comments

Perspective 4-3

Is the content of the qualifying examination appropriate, and is the examination offered in an appropriate manner?

[A / B+ / B / B- / C]

Comments

Perspective 4-4

Is the content of the systematic review appropriate, and is the review offered in an appropriate manner?

[A / B+ / B / B- / C]

Comments

Perspective 4-5

Are student research findings sufficient?

[A / B+ / B / B- / C]

Comments

Perspective 4-6

Are students making an adequate contribution to their employers?

(Not included in this evaluation)

Comments

Remarks about the exchange of views with students, other

Comments

Form completed by: _____

5.1 Program Evaluation Sheet (Overall Version)

**Shinshu University Advanced Leading Graduate Program
2015 Academic Year Third-Party Evaluation Committee
Program Evaluation Sheet (Overall Version)**

Target dates: January 2015 to December 2015

Overall evaluation: [A / B+ / B / B- / C]

Evaluation items

- | | |
|-------------------------------------|-------------------------|
| 1. Program structures: | [A / B+ / B / B- / C] |
| 2. Admissions: | [A / B+ / B / B- / C] |
| 3. Educational content and methods: | [A / B+ / B / B- / C] |
| 4. Educational quality assurance: | [A / B+ / B / B- / C] |

General observations on program:

January 26, 2016

Evaluator

Name: _____ [SEAL]