Shinshu University Advanced Leading Graduate Program

Global Leader Program for Fiber Renaissance

Third-Party Evaluation Report

(2019 Academic Year)



Shinshu University Advanced Leading Graduate Program Global Leader Program for Fiber Renaissance Third-Party Evaluation Report / 2019 Academic Year

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Shinshu University Advanced Leading Graduate Program Global Leader Program for Fiber Renaissance Third-Party Evaluation Report / 2019 Academic Year

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

2019 Third-Party Evaluation Committee Meeting Program

Time and date: 9:00 am on Thursday, January 9, 2020 Location: Amanda, 3rd floor, The Grand Tiara Ueda (Takasagoden) (2-2-2 Tenjin, Ueda-shi, Nagano Prefecture)

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
	(Professor Masayuki Takatera, Program Coordinator)
	Program status
	Educational content and methods
	Educational quality assurance
9:30 am	Question and answer session
10:00 am	Exchange of views between Third-Party Evaluation Committee
	members and students
10:50 am	Evaluation summary
11:40 am	Review
Following the	Expression of thanks by the program coordinator□
review	(Professor Takatera)

Third-Party Evaluation topics:

- ① Program structures
- 2 Admissions
- 3 Educational content and methods
- Educational quality assurance

1.2 Meeting Attendees

Third-Party Evaluation Committee Meeting Minutes

Third-Party Evaluation Committee Members

Kenichi Tomiyoshi (Executive Vice President, Japan Chemical Fibers Association)

Osamu Tsutsumi (Technology Committee, The Japan Carbon Fiber Manufacturers Association)

Hideo Tsuchiya (All Nippon Nonwovens Association)

Tomio Matsubara (Director and Chairman, Educational Activities Committee, Japan Textile Professional Engineer Center)

Hiroki Murase (Vice Chairperson, Society of Fiber Science and Technology, Japan)

Not in attendance:

Hiromi Sugiura (Manager, Lifestyle Industries Division, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry)

Yasuharu Takagi (Japan Textile Finishers' Association)

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)

Kimio Hirabayashi (Chairman, Student Evaluation Committee, and Professor)

Shunichi Kobayashi (Chairman, International Partnership Committee, and Professor)

Mikihiko Miura (Mentor and Specially Appointed Professor)

Katsuyuki Otsuki (Office Manager, Faculty of Textile Science and Technology)

Hirotaka Nakajima (Manager, Research Support and Accounting Group, Faculty of Textile Science and Technology)

Tomoko Ikeda (Secretariat/Research Assistance Coordinator)

Akiko Kubota (Secretariat/Research Assistance Coordinator)

Students

- ① Shintaro Kurasawa, 3rd year (Interdisciplinary Graduate School of Science and Technology, Department of Mathematics and System Development, course of Electrical and Electronic Engineering)
- ② Dennis Burger, 2nd year (Graduate School of Medicine, Department of Science and Technology, Science and Technology [Textile Technology Division/Biofiber Technology Unit])
- ③ Suphassa Pringpromsuk, 1st year (Graduate School of Medicine, Science and Technology, Department of Science and Technology [Textile Technology Division/Smart Materials Science and Technology Unit])
- Ryotaro Ota, 1st year (Graduate School of Medicine, Science and Technology Department of Science and Technology [Textile Technology Division/Smart Materials Science and Technology Unit])
- Shinya Misono, 1st year (Graduate School of Science and Technology, Department of Textile Science and Technology, Advanced Textile and Kansei Engineering Division/Kansei Engineering

Unit)

1.3 Distributed Materials (List; One Copy of Each Provided)

- 1. Third-Party Evaluation Committee Program
- 2. Third-Party Evaluation Committee Attendance Chart
- 3. List of Third-Party Evaluation Committee Attendees
- 4. Program Implementation Status Information
- 5. Third-Party Evaluation Committee Evaluation Sheet
- 6. Leading Program Self-Assessment and Evaluation Sheet

2. Committee Members' Evaluations Using the Program Evaluation Sheet

One month 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 an explanation of the program's status 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 January 2019, after publication of the previous Self-Assessment and Evaluation Report, to December 2019. Evaluations from committee members not in attendance based on an examination of documents provided by the program have been indicated by the note "(Not in attendance)" preceding each observation.

(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

- I see no problems at the present time, and students also indicate that the program's administrative organization is operating satisfactorily. However, some students indicated feeling concern with regard to the level of financial support that will be available starting next year, and as a result there is a need to take a careful look at whether graduating students will be able to enter society having fulfilled the program's goals.
- B+ Expenses will be high during the 2020 academic year, but the "Other" category accounts for most expenditures. It seems to me that there's a need to analyze those expenditures in more detailed manner.
- B+ Even if the administrative structures improve in an appropriate manner, the transition accompanying future budgetary declines will be problematic.
- A During the six years since its launch in 2014, the program has established structures conducive to achieving its goals while continually making improvements. The program will continue working to achieve those goals even after the end of subsidies from the Ministry of Education, Culture, Sports, Science and Technology.
- A I conclude that the program has strengthened the operation of its organization in anticipation of the university's assumption of sole responsibility for the program starting in 2020.

B+ (Not in attendance) The program has been able to study sustainable program structures while taking advantage of university funding sources and a fund for which it has been soliciting donations since April 2020, when subsidies from the Ministry of Education, Culture, Sports, Science and Technology end.

Perspective 1-2 Does the program review its administrative structures in light of social needs? Committee members' individual evaluations and comments

- B+ Observations made by the Third-Party Evaluation Committee have been properly applied to the program.
- A I hope the program will continue things like internships and corporate visits in the future.
- A The program reviews its structures in an appropriate manner, for example through third-party evaluations and by working with companies.
- A The program has made good progress improving its structures by incorporating social needs. I'm particularly eager to see the program draw on feedback from companies and graduates when reviewing program structures.
- A I believe that the program has sought out information about social needs in a variety of ways and that it has brought that feedback to bear on its operation.
- B (Not in attendance) In order to accurately assess the needs of industry, I'd like to see the program pursue partnerships with companies that are even more involved, for example by going beyond internships and plant tours to enter into joint research agreements designed to resolve companies' issues.

Perspective 1-3 Have structures been put in place to facilitate international collaboration? Committee members' individual evaluations and comments

- A The university's broad international network is being utilized effectively.
- B+ Mutual exchanges continue, and I hope to see the program maintain them in the future.
- A The program has established concrete structures for facilitating collaboration with a large number of universities and research institutions overseas.
- A The University has done a great job collaborating with 62 universities and research institutions, conducting joint workshops, exhibiting at ITMA 2019, and holding special overseas seminars.
- A This kind of collaboration is a major characteristic of the program, and I think it's wonderful how both graduates and current students have been able to build skills through activities that foster an international outlook.
- B+ (Not in attendance) The program has been successful in collaborating with regions that are highly competitive in the international textile and apparel industry, including through exchanges with L'Ecole Nationale Supérieure des Arts et Industries Textiles in France and the University of Natural Resources and Life Sciences, Vienna, and participation in the ITMA 2019 Textile & Garment Technology Exhibition.

(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

- B+ .
- A This information has been publicized in the admission guidelines.
- A The program had had such a policy in place since the beginning, and it has publicized and disseminated it in an appropriate manner since.
- A The program's five admissions policies are clear, and they have been disseminated both in Japan and overseas. The program's vision of the ideal applicant has been adequately communicated to prospective students.
- A I believe that the program has fulfilled this task appropriately.
- B+ (Not in attendance) The program has offered a vision of its ideal student as someone who will embrace the challenge of solving social problems with textile and fiber technology, and that vision is clear.

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 My views are summed up by the self-evaluation.
- B+ It's not clear whether students have strong interest in the textile and fiber field.
- B+ The program needs to address the fall-off in international students caused by the decline in applicants.
- B+ I expect to see the program introduce a new level of creativity in its efforts to recruit students following the end of subsidies from the Ministry of Education, Culture, Sports, Science and Technology. There's a need to establish methods for clearly communicating the advantages, features, and appeal of the program to prospective students (to convey companies' expectations and graduates' satisfaction).
- B+ I think the program has fulfilled this task appropriately, but I want to emphasize that it's important for the program to adequately explain its significance and educational curriculum to students at the time of admission and ensure that this information is well understood.
- B+ (Not in attendance) The number of inquiries from fourth-year students on our campus is rising due to information sessions and one-on-one consultations, even as the number of student places declines due to the end of the Ministry of Education, Culture, Sports, Science and Technology's subsidy program. As a result, I find the program's efforts in this area to be appropriate.

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

B My views are summed up by the self-evaluation.

- Although the program's initiatives are generating results, for example as seen in the B+ increasing number of Japanese students, the relationship of those changes to the admissions policy remains unclear in some ways.
- Verification initiatives targeting Japanese applicants are appropriate. B+
- I'm satisfied with the program's admissions structures and verification system. B+ However, two disappointing realities that I've pointed out in the past remain: (1) a tendency to admit students from other universities and (2) an imbalance in the countries from which international students are drawn.
- I believe that the program has fulfilled this task appropriately. B+
- (Not in attendance) In my view, the program has been able to carry out a B+ multifaceted verification through such means as the Steering Committee and the Entrance Examination Committee.

Perspective 2-4 Is the program publicizing itself to recruit talented students?

Committee members' individual evaluations and comments

- В
- B+ Although the program is publicizing itself both inside and outside the university, in the future...
- B+ Additional improvements are needed as the budget declines.
- B+ I'd like to see the program get creative in taking measures to ensure that reductions in financial support don't undermine its efforts to attract students. (1) The program should publicize its track record over the last six years (in terms of research, job placement, and student and company satisfaction) to prospective students. (2) The program should follow up on the ripple effects it has created. (3) I'd like to see the program work to maintain quality, rather than quantity.
- B+ I feel that reductions in financial support have made it more difficult to attract students, but I'd like to see the program seek out information about graduates' activities and evaluations by supervisors at their new employers and collect it in the form of materials that can be used to promote the program's effectiveness.
- В (Not in attendance) The program is making use of methods such as holding oncampus information sessions, handing out pamphlets at other universities, asking faculty members directly to recommend students, and manning booths at events, but I think it should consider publicity methods that would offer more pronounced ripple effects, for example using the Internet and social media.

(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

- Students' workload is high, but so too is their level of satisfaction, and the program B+ is proving to be effective from the standpoint of human resources development.
- I believe the program's curriculum is appropriate. However, it needs to study how its Α

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content should be adjusted to accommodate the budget starting next year.

- A The curriculum, which reflects an array of opinions, is appropriate.
- A The program has made a variety of improvements over the six years since it began. I would very much like to see the philosophy that was in place when the program was launched continue after subsidies from the Ministry of Education, Culture, Sports, Science and Technology end. (I would like to see curriculum revisions carried out in a way that does not sacrifice the program's philosophy.)
- B+ I'm concerned about the curriculum next year, when the size of the budget will shrink.
- B (Not in attendance) Although the curriculum incorporates a clear vision, I'd like to see the program pursue partnerships with companies that are even more involved, for example by going beyond internships and plant tours to enter into joint research agreements designed to resolve companies' issues, as a way to achieve that vision.

Perspective 3-2 Is the curriculum being implemented in an appropriate manner? Committee members' individual evaluations and comments

- B+
- A I believe that the curriculum is being implemented appropriately.
- A The curriculum is being implemented appropriately, as is evident by the fact it has incorporated classes that students want to take.
- A l've been able to confirm that TOEIC results, plant training, the Manufacturing and Value Creation Seminar, lab rotations, and internships are being implemented according to plan.
- A I believe that the curriculum is being implemented appropriately.
- B+ (Not in attendance) I've concluded that the curriculum designed by the program 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 The program has a fairly strict evaluation system, and it's being utilized in an effective manner. It's clear that the evaluation system is appropriate, for example from the correlation between students' evaluations and their ability to deliver their annual, end-of-year presentations effectively.
- A I believe the program's evaluation structures are appropriate.
- A The system is appropriate thanks to the self-evaluation system and exchanges with graduates.
- A Based on the graduate survey, students are sufficiently eager to achieve the program's objectives through their self-evaluations.
- A I think it was a great idea to hold events where graduates and current students could meet. I hope that the program will continue to hold such events.
- B+ (Not in attendance) I've concluded that the program provides structures that allow faculty mentors and advisors to assess goals for their students based on their selfevaluation sheets and provide feedback concerning inadequacies.

Perspective 3-4 Is the program's educational and research environment appropriate? Committee members' individual evaluations and comments

- B+ Although the program's structures require students to study more subjects than graduate students typically do, those structures are working properly, and organizational backup in particular is effective.
- B+ It's unclear how adequate the program's experimental equipment is.
- A The program's research equipment and other aspects are adequate.
- A The program has done a good job putting in place and improving such aspects as the students' living area, individual desks, facilities, and equipment.
- A I believe that the program has put in place an appropriate research environment.
- B (Not in attendance) I've concluded that the this aspect of the program is appropriate, for example thanks to a living area for exclusive use by program students, individual desks in labs, and ongoing reviews of lab equipment.

Perspective 3-5 Does the program offer appropriate support structures for students? Committee members' individual evaluations and comments

- B+ Same as above (same as 3-4).
- A It's fair to say that the program's support structures are appropriate.
- B+ The support structures need to be improved in the future.
- A The program's support structures have been praiseworthy over the last six years. However, I have concerns about how those structures will be maintained after the end of financial support from the Ministry of Education, Culture, Sports, Science and Technology. I'd like to see support structures continue to the extent that they do not interfere with the philosophy under which the program was launched.
- B+ As I read the survey, I was left with the feeling that the program needs to offer greater support for doctoral students' job searches.
- B+ (Not in attendance) The program has built a multifaceted system of support structures that go beyond meetings with faculty mentors to include female mentors, corporate mentors, and corporate matching, among other measures. Additionally, students exhibit a high level of satisfaction with the program's financial support structures.

Perspective 3-6 Do students find the program satisfying?

Committee members' individual evaluations and comments

- B+ Students expressed a high level of satisfaction, including during the exchange of views.
- A I believe the program is appropriate in this regard.
- A Students' views are reflected in the program, and the survey results indicate that they feel satisfied.
- A I was able to confirm a high level of satisfaction based on the student survey.
- B+ Although I believe that students are generally satisfied with the program, when the graduate survey (5-10) asked respondents whether they would recommend the program to younger classmates, 12% characterized their feelings as "would not recommend" or "definitely would not recommend." That figure seems somewhat

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high. If the reason for that dissatisfaction were known, it seems to me that it could be used to help make improvements. I'd like to see the program consider researching those reasons, if possible.

B (Not in attendance) The program works to make improvements through such means as interviews with students and a survey, and I've concluded that the program is working to improve students' satisfaction.

(4) Educational quality assurance

Educational quality assurance

Perspective 4-1 Are the program's degree conferment standards appropriate? Committee members' individual evaluations and comments

- B+ .
- A I believe the program is appropriate in this regard.
- A The standards are appropriate, and graduates are making a contribution to their employers' missions.
- A In my judgment, the program's unique degree conferment standards (which add English proficiency and global leadership requirements) are appropriate. However, it will be critical to reflect the job performance of students who have earned degrees.
- A I believe the program's standards, which impose the high bar of a TOEIC score of at least 800, are operating appropriately.
- B+ (Not in attendance) The program, which requires students to not only satisfy Shinshu University's degree conferment standards, but also to fulfill a number of unique degree conferment requirements, for example by achieving a minimum TOEIC score of 800 points, is appropriate to its goal of training global leaders.

Perspective 4-2 Are the quality assurance standards appropriate when compared to social needs? Committee members' individual evaluations and comments

- B+ -
- B+ With regard to the question of how well the program is aligned with social needs, the program needs to provide survey results. ⇒ I've been able to confirm that the program is aligned with social needs; however, the program needs to communicate its unique characteristics in comparison to other doctoral programs.
- A In the future, it will be important to evaluate graduates' job performance.
- A I expect to see continuity of the program's social needs-oriented initiatives and of the evaluation of the program. I'd like to review an evaluation of graduates after 10 years.
- A I believe the standards are appropriate.
- B (Not in attendance) The members of the Industry Partnership Committee are working to assess social needs by administering surveys to, and exchanging views with, invited corporate managers and companies that have employed graduates. Additionally, in order to accurately assess the needs of industry, I'd like to see the program pursue partnerships with companies that are even more involved, for example by going beyond internships and plant tours to enter into joint research

agreements designed to resolve companies' issues.

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

- B+
- A I believe that the qualifying examination is being offered appropriately.
- A The examination is being offered appropriately, including through the addition of leadership questions.
- A I'm pleased with the manner in which the QE is being offered, with a presentation and subsequent Q&A session.
- A I'm pleased with how the examination is being implemented.
- B+ (Not in attendance) I'm pleased that the qualifying examination is being offered in an appropriate manner.

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+
- A The content of the systematic review is appropriate.
- A The systematic review is being administered in an appropriate manner.
- A The systematic review is being administered appropriately based on the program plan's strengths.
- A I'm pleased that the examination is being implemented in an appropriate manner.
- B+ (Not in attendance) I'm pleased that the qualifying examination is being offered in an appropriate manner.

Perspective 4-5 Are student research findings sufficient?

Committee members' individual evaluations and comments

- B+ Most papers being presented by students are written in English, indicating that the program is serving to train global leaders.
- B+ It seems to me there should be some sort of standard regarding the number of papers students are required to complete.
- A From the corporate perspective, industrial property rights are also important.
- A My view is that students are producing sufficient findings (in the form of papers and conference presentations) while carrying out research and a large amount of case work.
- A Students' comments convey the difficulty of conducting research while participating in a variety of programs. I find it praiseworthy that the program is increasing the number of papers written by students under such conditions.
- B+ (Not in attendance) In my estimation, students' research findings are sufficient at present, and this fact is highlighted by steady growth in the number of papers that students present and the number of awards they receive.

Perspective 4-6 Are students making an adequate contribution to their employers? Committee members' individual evaluations and comments

- B+ Students are highly evaluated by their employers.
- B+ I've concluded that students are making an adequate contribution, but continued confirmation and follow-up are needed.
- A Survey results are generally favorable.
- B+ My feeling is that students are making an adequate contribution, although information is only available from a limited number of companies.
- B+ Although future evaluations may change since little time has passed since graduates were hired by their employers, I feel that the favorable evaluations students are receiving in the areas of language ability and problem-solving skills in particular speak to the program's effectiveness.
- B+ (Not in attendance) Graduates have been hired by corporate research departments, overseas universities, and other entities, and survey results indicate a high level of satisfaction on the part of their employers.

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

M1 students had a particularly difficult task since the presentations were so short, but there's no question that the expertise they gained will prove essential in the future. Since the D1 and D2 students had few problems, I expect to see presentation techniques improve.

- •The program is performing well as a global program.
- •I'd like to point out that financial aid has had a significantly positive effect.
- •I'm also impressed with the exchanges with companies.
- •TOEIC scores and English fluency do not necessarily correlate.

I feel that the program has been refined into an extremely effective system. How to continue offering that system in the future is a key question.

Although changes to the program in the future will be unavoidable, it will also be necessary to establish new support structures such as tuition subsidies from companies.

- The philosophy under which the Leading Program was launched is praiseworthy. It's clear that the university's professors, administrative team, and students have worked hard to implement that philosophy.
- 2. It's extremely regretful that subsidies from the Ministry of Education, Culture, Sports, Science and Technology have ended. However, that development must not be allowed to interfere with the program's philosophy.
- 3. The students' research findings and academic record are exemplary. But the most important thing is how they perform going forward. I hope to see them accomplish great things by building on the foundation provided by this program.
- 4. The program's true success will be determined by the accomplishments of its graduates 5 years--and 10 years--in the future. Consequently, I expect to see the continued development of a system for evaluating the program from outside the university.
- 5. Student concerns

- (1) Future economic support
- (2) Post-graduate plans
- (3) TOEIC score improvements
- (4) Failure to judge global skills > TOEIC and research results
- (5) Dilemma of conducting research and serving as a case worker at the same time
- 6. Student satisfaction
 - (1) Numerous opportunities (international students, cases***, language study, factory tours)
 - (2) Language study support
 - (3) Economic support
- 7. Aspects that fell outside expectations
 - (1) More rigorous student selection process going forward > Various abilities, motivation, understanding of program
 - (2) Continuation, even if the necessary resources are lacking
 - (3) The first stage has been a major success. The second stage will require creative effort.

Many students are concerned about the decreasing level of financial support, but I would ask that they continue to work hard.

In some cases, students who did not have a sufficient understanding of the program's significance and educational content when they enrolled ended up dropping out. I believe it's necessary to explain how the need to satisfy the requirement of a TOEIC score of 800 and complete more coursework and off-campus training than normal graduate schools result in increased workload compared to normal student life before allowing students to enroll.

Looking at the employment environment in Japan, I feel that doctoral degree-holders continue to be shortchanged when it comes to how they are evaluated and perceived. I hear that elsewhere, researchers and engineers at Japanese companies often lag behind their overseas counterparts when it comes to global joint research. It will be necessary to train high-quality doctoral degree-holders in order to survive increasingly global competition in the textile industry in the future, and I believe the program has an extremely significant role to play from this standpoint.

In order to train high-quality human resources whose skills meet the needs of industry, I'd like to see the program pursue partnerships with companies that are even more involved, for example by going beyond internships and plant tours to enter into joint research agreements designed to resolve companies' issues.

3. Third-Party Evaluation Committee Meeting Minutes

Shinshu University Advanced Leading Graduate Program
Global Leader Program for Fiber Renaissance
2019 Academic Year Third-Party Evaluation Committee Meeting Minutes

Time and date: 9:00 am on Thursday, January 9, 2020 Location: Amanda, 3rd floor, The Grand Tiara Ueda

Attendees: Third Party Evaluation Committee members (titles omitted)

Kenichi Tomiyoshi (Japan Chemical Fibers Association), Osamu Tsutsumi (The Japan Carbon Fiber Manufacturers Association), Hideo Tsuchiya (All Nippon Nonwovens Association)

Tomio Matsubara (Japan Textile Professional Engineer Center), Hiroki Murase (Society of Fiber Science and Technology, Japan)

Shinshu University

Director Shimosaka, Professor Takatera, Professor Ishizawa, Professor Tamada, Professor Inui, Professor Hirabayashi, Professor Kobayashi, Specially Appointed Professor Miura, Office Manager Otsuki, Manager Nakajima, Research Assistance Coordinator Ikeda, Research Assistance Coordinator Kubota

Not in attendance: Hiromi Sugiura (Lifestyle Industries Division, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry), Yasuharu Takagi (Japan Textile Finishers' Association)

Professor Ishizawa explained changes in the membership of the Third-Party Evaluation Committee (consisting of the program's educational partners) and introduced Executive Vice President Kenichi Tomiyoshi of the Japan Chemical Fibers Association ahead of the convocation of the meeting of the Third-Party Evaluation Committee.

1. Greeting by the Program Director

Program Director Shimosaka (Dean, Faculty of Textile Science and Technology) welcomed attendees.

2. Explanation of the purpose 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 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 offered 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. Numerous comments from committee members concerning the program's track record over the last six years indicated that they felt it had eliminated all of the concerns identified at the beginning and that they were extremely satisfied with how it had been refined over time.

They also offered the following questions, views, and hopes.

A. Concerning funding following the end of subsidies

Although a specific budget has been formulated now that subsidies have ended, the fact remains that funding will decline from current levels. I'm concerned about opacity in areas such as procurement and status of future funding, internal coordination, and planning. The status and methods of fund procurement demand specific explanation.

As the scale of the budget shrinks, what will happen to educational effectiveness?

A reduction in funding just as the program has achieved a high level of refinement will lead to a decline in enrollment. There's a need to build collaboration with companies. I'd like to see the program finalize structures to facilitate direct scholarships for students from companies and other support for the program from its corporate partners, and to see it think about measures to give shape to such policies.

B. Concerning collaboration with companies, including in the area of career development It seems to me that there's still room to study how the program can promote itself more effectively to corporate personnel who are responsible for hiring.

It would be great to see the program effectively communicate to corporate personnel who are responsible for hiring how program students have strengths that set them apart from ordinary doctoral degree-holders in a way that leads to hiring of those students.

How can the program turn contacts with employees in companies' R&D departments and exchanges with students into job offers? The program should create more of those opportunities and promote them.

I want the program to build deep relationships with a number of companies that could serve as a sort of support group and create ample opportunities for students and corporate personnel to interact.

C. Concerning collaboration with overseas institutions with which the program has academic exchange agreements

The Leading Program is only involved with exchanges with a relatively small number of the overseas universities with which it has entered into MOUs. I'd like to hear more about the program's relationships with those 62 institutions, and about how the program is being promoted. I think an examination of the program's network of connections and of how other institutions view the program will reveal a larger variety of methods by which the program can be promoted.

A majority of the program's students are international students, and exchanges between Japanese and international students have had a positive influence on the program to date. I'm concerned about the decline in the number of international students.

- D. Concerning how outside feedback is brought to bear on the program How is feedback from stakeholders brought to bear on the program?
- 5. Exchange of Views between Third-Party Evaluation Committee Members and Students Committee members exchanged views for about one hour with five students representing four years of study (one or two from each year). Committee members asked questions about topics including the program's benefits and areas of improvement.

6. Evaluation Summary

A summary of the evaluation was presented as described below, with committee member Tomio Matsubara chairing the proceedings.

Program structures: B+ (verging on an A)

The program structures have performed in a praiseworthy manner over the last six years. The end of subsidies is an issue.

- B+ Funding is going smoothly at present, but there's a need to look closely at what will happen after the budget is no longer being supplemented.
- B+ The program has to study future operation.
- ▶ B+ The problem is whether the future budget will be sufficient. The program needs to clarify its future approach.
- > The program structures are fairly robust.
- > I'd like to see the program reflect efforts to continue structures after the end of subsidies as well as students' views and issues.
- ▶ B+

Admissions: B+

The program should focus more on PR. The advantages of exchanges between international students and Japanese students are substantial.

- ➢ B The admissions process is being administered in an appropriate manner. The admissions policy is clear, and associated structures are functional.
- ➤ B+ The program is having difficulty attracting international students, as highlighted by the fact that more than half the students are Japanese.
- ➤ B+ It's unclear to me how the program is addressing the decline in the number of international students. The program needs to publicize and promote itself more.
- ▶ B+ The admissions policy is being implemented appropriately. The program needs to narrow and focus its PR activities further.
- > B+ The program needs to do a better job explaining students' appeal. Imbalances in acceptance of students from other universities and in students' home countries have not yet been addressed.
- ▶ B+

Educational content and methods: A

The program has developed and refined systems such as the self-evaluation program for students. Shrinkage in the curriculum after the end of subsidies is concerning.

- ➤ B+ The program has put in place a system by which students can evaluate it even as they evaluate themselves.
- > A The program is implementing its curriculum in a robust manner.
- A The program has reflected feedback from a variety of stakeholders in its implementation. Facilities are also appropriately extensive.
- A Shrinkage in part of the curriculum due to the decreasing budget is concerning. I'd like to see the program strengthen systems for helping doctoral students find jobs.
- A The program has put in place a solid curriculum. TOEIC results are outstanding. The self-evaluation system, which is linked to other aspects of the program, is functioning well.
- ▶ B+

Educational quality assurance: A

I have high expectations regarding evaluations from companies that accept graduates in the future.

- > B+ A survey of companies that hired graduates yielded praise for the program.
- ➤ B+ Survey results indicate that the program is meeting social needs. It will be necessary to express the program's characteristics in the future.
- A It's particularly outstanding that questions about leadership have been added to the QE.
- A The extremely high level of praise from employers of graduates is a testament to the program's effectiveness.
- A The response from companies remains insufficient, and how they will respond as the number of graduates increases is unknown.
- ▶ B+

Overall evaluation: B+

The program's track record is praiseworthy. A large number of future issues remain to be addressed.

- B+ (verging on an A)
- ▶ B+
- > A
- A (I have high expectations regarding evaluations from companies that accept graduates in the future.)
- Student growth over the last seven years has been remarkable, and I find the hard work of everyone involved to be praiseworthy.
- There's been a lot of study and planning with regard to future program operations and student support, but the overall vision going forward remains unclear.
- The track record, student growth, and the program's level of refinement are all praiseworthy.

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- While I have high expectations with regard to the next step forward, I'd like to see the program clarify current areas of concern in the future. My evaluation reflects my expectations for the future and my hope that new support structures will be clarified and improved in a way that facilitates the program's continuation and development.
- I'm eager to see the program continue in the future.
- 7. Review of the Evaluation

 Committee members notified Shinshu University of the committee's overall evaluation of "B+."
- 8. Expression of Thanks from the Program Coordinator
 Program Coordinator Takatera expressed his thanks to the committee members.

4. Response to the Third-Party Evaluation

Response to the 2019 Third-Party Evaluation

Masayuki Takatera Program Coordinator

This academic year, the program's last to receive subsidies from the Ministry of Education, Culture, Sports, Science and Technology, the members of the Third-Party Evaluation Committee offered a positive evaluation of the hard work of the program, whose graduates are working in the fiber field, and its use of feedback offered to date to make improvements. They also expressed concerns about the program's budget during and after the next academic year. We also received new advice and views, and we will continue to use that feedback to help make the program even better.

1. Program structures

One Third-Party Evaluation Committee member noted, "During the six years since its launch in 2014, the program has established structures conducive to achieving its goals while continually making improvements." As a result, members offered praise for program structures, indicating that there are "no problems at the current time," that "the program has sought out information about social needs in a variety of ways and that it has brought that feedback to bear on its operation," and that "the university's broad international network is being utilized effectively." At the same time, evaluators noted that "some students indicated feeling concern with regard to the level of financial support that will be available starting next year," voicing apprehension about the shrinking scale of economic support offered by the program and noting that "there is a need to take a careful look at whether graduating students will be able to enter society having fulfilled the program's goals." One evaluator observed, "I'm particularly eager to see the program draw on feedback from companies and graduates when reviewing program structures."

I'd like to take this opportunity to address some of the concerns about human resources development following the end of subsidies from the Japanese government, which were voiced by numerous committee members, Although student scholarships and research funds will shrink, support for expenses associated with implementing the program's distinctive curriculum will remain at current levels, including funds covering the cost of travel to attend special overseas seminars (academic internships), transportation costs associated with corporate internships, the cost of travel to and participation in international conferences, and the cost of proofing and submitting papers. We're also adding new economic support in the form of a 50% tuition exemption for doctoral students. Accordingly, while the number of students, particularly international students, who are interested in enrolling in the program may fall due to the decline in scholarship funds, we do not expect these changes to have a significant impact on the educational experience of students who are enrolled in the program. To alleviate committee members' concerns, we plan to work to produce talented graduates using such methods as are feasible within our limited budget while continually verifying whether the program is producing graduates who meet its goals.

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With regard to "drawing on feedback from companies and graduates when reviewing program structures," we've surveyed both companies and graduates in the past, and we use the results of those surveys to improve the program. We plan to study how we can more precisely assess company and graduate feedback, as suggested in the committee member's observation, and to bring that feedback to bear even more on the program's implementation going forward.

2. Admissions

Of PR efforts designed to attract talented students, one committee member wrote, "The number of inquiries from fourth-year students on our campus is rising due to information sessions and one-on-one consultations, even as the number of student places declines due to the end of the Ministry of Education, Culture, Sports, Science and Technology's subsidy program. As a result, I find the program's efforts in this area to be appropriate." However, a number of committee members proposed specific PR activities by noting that "there's a need to establish methods for clearly communicating the advantages, features, and appeal of the program to prospective students (to convey companies' expectations and graduates' satisfaction)," that the program should "seek out information about graduates' activities and evaluations by supervisors at their new employers and collect it in the form of materials that can be used to promote the program's effectiveness," and that the program should "consider publicity methods that would offer more pronounced ripple effects, for example using the Internet and social media." Other feedback on admissions included observations that the program should accept students from other universities and concerns about imbalances in students' home countries.

We look forward to actively adopting some of the methods committee members proposed for promoting the program in order to attract talented students. With regard to companies' expectations toward, and satisfaction with, graduates and to graduates' job performance, we plan to take advantage of opportunities to promote the program to prospective students, including opportunities other than information sessions. With regard to using the Internet and social media, we plan to study specific methods for increasing the number of students who apply to the program.

With regard to admitting students from other universities, we will continue to work hard to accomplish just that. With regard to the imbalance in students' home countries, we're working to ensure balance, but applicants are clustered in two or three Asian countries. That, combined with a lack of applicants from Europe and North America, has resulted in the imbalance. We'll continue to work to promote the program so as to attract applicants from as many countries worldwide as possible. However, the elimination of scholarships for students enrolling during the next academic year means that we'll focus on attracting international students who are already enrolled in the Faculty of Textile Science and Technology only. We'll attract international students from a limited range of countries since direct applications from abroad will cease, but we'll work to keep applicants from becoming concentrated in any one country, even under those conditions.

3. Educational content and methods

Committee members voiced praise for the program's unique self-evaluation system for students and

its performance evaluation system, noting that "students' workload is high, but so too is their level of satisfaction, and the program is proving to be effective from the standpoint of human resources development," and that "the program has a fairly strict evaluation system, and it's being utilized in an effective manner." The latter evaluator continued, "It's clear that the evaluation system is appropriate, for example from the correlation between students' evaluations and their ability to deliver their annual, end-of-year presentations effectively."

Another noted a desire "to see the program pursue partnerships with companies that are even more involved, for example by going beyond internships and plant tours to enter into joint research agreements designed to resolve companies' issues." One observed that the program "needs to offer greater support for doctoral students' job searches" and that "12% characterized their feelings as 'would not recommend' or 'definitely would not recommend,'" concluding that those figures are high and that "if the reason for that dissatisfaction were known, it seems to me that it could be used to help make improvements."

With regard to pursuing more involved partnerships with companies, for example through joint research, several program students are already carrying out joint research with companies under the guidance of their faculty advisors. Although it would be difficult for the program to become involved in such research directly, we will work to use company visits and plant training as opportunities to introduce students' research and facilitate joint research projects.

With regard to the observation that we need to offer more support for doctoral students' job searches, we consider that to be a key part of helping students realize their goals. The program has offered support for job search activities to date through one-on-one interviews of students by the chairman of the Industry Partnership Committee, individual interviews by coordinators at the University's Human Resources Development Center, and internships at companies in which students are interested as potential future employers. Nonetheless, students continue to express concern about job placement, and we plan to address those concerns by moving up the timing of job search interviews.

With regard to the 12% of survey respondents who indicated they would not recommend the program to younger classmates, we were surprised at those findings. We're already looking into the reasons for them, and we plan to use what we find to make additional improvements.

4. Educational quality assurance

Committee members praised educational quality assurance in the program, with one noting, "The program, which requires students to not only satisfy Shinshu University's degree conferment standards, but also to fulfill a number of unique degree conferment requirements, for example by achieving a minimum TOEIC score of 800 points, is appropriate to its goal of training global leaders." Another wrote, "Students are highly evaluated by their employers." However, one committee member noted that the program needs to communicate its characteristics in contrast to those of other, more typical doctoral programs.

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With regard to the need to clarify comparisons of program graduates to graduates of other, more typical doctoral programs, I believe that is an extremely important point. The program personnel and faculty advisors who administer the program and interact with students on a daily basis have an excellent and immediate understanding of the many ways in which they excel compared to students of other, more typical doctoral programs, and we look forward to finding ways to better communicate that information.