Program for Raising Standards of Dental Education Utilizing Integrative Functions

Program for Promoting Inter-University Collaborative Education by the Ministry of Education, Culture, Sports, Science and Technology in 2012

Outline

Purpose

To Attain the International Standard for Dental Education

The purpose of this project is ultimately to aim for higher quality in dental education. This will be carried out mutually strict, objective evaluations, this project will serve to standardize dental education, and disparities among institutions due to the streamlining of curricula.

In addition to these, other areas of concern were indicated. These included a lagging behind in international and domestic standards for dental education, and disparities among institutions arising from the lack of accreditation system in dental education in Japan.

This report noted the following problems and issues in dental education:

1) A decline in both clinical practice and clinical abilities on graduation from dental departments
2) A decline in modern dental practitioners' abilities and knowledge
3) Ensuring the application of outstanding scholars intending to answer the social demands for dentistry;
4) The need for fostering the next generation of dental researchers.
5) The need for augmenting educational resources for implementing seamless dental instruction;
6) The need for ensuring outstanding candidates;
7) The need for developing Problem-Based Learning for identifying and solving problems;
8) The development, provision, implementation, and improvement of outstanding educational materials.
9) The development of distinctive, specialized instruction (exchanging of lectures, courses);
10) The provision of non-directed practical experiences.

To achieve the goals of the project, the three universities will first establish a "Collaborative Educational Platform" for joint instruction, releasing its first report on the "Plan for Training Dental Professionals Equipped with Recognized Abilities in Clinical Practice" by the Ministry of Education, Culture, Sports, Science and Technology in 2013.

As practical measures for planning and managing this project, the Collaborative Educational Platform will sponsor faculty development programs and direct exchange among those faculty members in order to achieve the goals of the project.

In response to these, the following recommendations were made:

- PR via Homepage
- Sponsorship of joint Faculty Development Seminars/Workshops
- Program Symposium (Niigata University)
- Annual internal evaluation
- Presentation of joint accomplishments (domestic/overseas)
- Sponsoring of joint Faculty Development Seminars, Workshops
- Confirmation among the three universities of each other's curricula, challenging issues
- Sponsoring of Kick-off Symposium (Ascertain of current situation/Clarification of problems)
- Clarification of primary issues with stakeholders
- Establishment of Collaborative Educational Platform
- Creation of a homepage/information dissemination
- Publication of pamphlet
- Survey of the latest trends in oral health education/evaluation methods
- Development/research for evaluation methods
- Annual internal evaluation
- Program Symposium (Niigata University)
- Provision, enhancement, and development of shared teaching materials
- Creation of a homepage/information dissemination
- Nationwide provision of shared teaching materials/compilation of survey results
- Development/research for evaluation methods
- Annual internal evaluation
- Program Symposium (Niigata University)
- Integration of lectures, fieldwork (Improvements based on survey results)
- Improvement in shared teaching materials based on survey results
- PR via Homepage
- Sponsorship of joint Faculty Development Seminars/Workshops
- Evaluation methods trials
- Annual internal evaluation
- Program Symposium (Hiroshima University)
- Enhancement of dental education, Development/Implementation, and Improvement of integrated functions
- Nationwide provision of shared teaching materials/compilation of survey results
- Development/research for evaluation methods
- Annual internal evaluation
- Program Symposium (Hiroshima University)
- Final evalutions
- Integrative Functions
- Nationwide provision of shared teaching materials/compilation of survey results
- Development/research for evaluation methods
- Annual internal evaluation
- Program Symposium (Niigata University)
Common Concerns Among 21 Dental Universities and Schools in Japan

Educational Resources with Distinctive Features at Three Universities
Niigata University, Tohoku University, Hiroshima University

Collaborative Educational Platform

Niigata University
- Development and provision for an integrated model for teaching and learning educational instruction in oral health

Tohoku University
- Provision of program for training researchera: Development and provision of program for linking dental engineering (extradisciplinary integrated model); Development of program for clinical training instruction to meet current needs

Internal Evaluating Committee
(Self-confirming/self-evaluating)

External Evaluating Committee
(Overseas/Domestic Practitioners)

Stakeholders
- Collaborative educational planning/proposals
- Comprehensive educational system with transferable accreditation for coursework
- Collaborative Faculty Development education planning/proposals/implementation
- Summer School programs
- Establishment of mutually-accredited elective courses

For Society
- Information dissemination
- Return on research contributions
- Provision of high-level training

Network for Implementing Collaboration

To promote this program, a joint educational platform, the “Collaborative Educational Platform Committee” is to be established. This will comprise the deans of the three university dental departments, the academic heads as well as board members of the Japanese Dental Education Association and committee members from other related bodies. As stakeholders, these persons will carry out management of the program, evaluations, and official announcements as they work together to further the operations. The tri-university joint program will be implemented with the establishment of four Working Groups (1) Working Group for developing educational evaluating methods; 2) Working Group for Joint Faculty Development/Workshops; 3) Working Group for surveying the latest trends in education; 4) Working Group for mutual evaluations) serving this Committee in aiming for the development of educational and evaluation methodologies.
Training Dental Practitioners to meet the needs of today’s changing society

Anticipated Outcomes

For Society/Citizens
- Information dissemination
- Return on research achievements

For Dental Education
- Nation-wide penetration
- Standardizing of dental education
- Guaranteed quality of instruction

Network for Evaluations, etc.

Evaluations will be carried out by both internal and external evaluating committees. The Internal Evaluating Committee will implement regular (yearly) surveys for self-confirmation and self-evaluation. It will comprise the Deans of the dental departments of the three universities as well as board members of the Japanese Dental Education Association as stakeholders. In addition, the External Evaluating Committee will comprise practitioners outside the three universities as well as practicing instructors in the field of dental education from overseas to carry out the above evaluations (at the end of the third year and at the conclusion of the final year).
Intended Goals and Indices

1. Training Dental Specialists equipped with essential skills in clinical practice
   - All graduates will have acquired the skills specified in the contents of the clinical practice offered in the Dental Model Core Curriculum
   - All graduates will complete the Integrated Educational Model for Simulating Clinical Practice and be equipped with fundamental clinical skills before their clinical practicum commences.
   - Enhancing of tutorial PBL instruction to ensure that over 80% of students respond affirmatively to a survey that they have self-awareness of skills for pursuing lifelong education.

2. Fostering the Next Generation of Dental Researchers
   - Ensuring more than 90% complete post-graduate degrees
   - Annually employ Special Research Fellows

3. Cultivating International and Societal Outlooks
   - Seek to have up to 20% of students have overseas study experience, including short-term stays
   - Increase by 20% the number of students specializing in new fields of dentistry such as dysphagia rehabilitation and oral engineering

4. Development of Evaluation Methods and Educational Ability
   - Ensure more than 80% of faculty experience Faculty Development/Professional Workshops
   - Following two years after this program's inception, continue to have official reports by the three universities of its achievements to stakeholders at academic conferences (Japanese Dental Education Association)

Anticipated Outcomes

1. Enabling the training of oral health care professionals who contribute to improvements in the oral health care of all citizens by aiming for a high level of fundamental clinical oral health instruction/practice together with the development of lifelong education in Problem Based Learning skills for identifying and solving challenges.

2. Developing research capabilities in a seamless program that fosters such skills from the undergraduate level on and enables the training of research-minded dental students for the purpose of increasing the number of candidates progressing on to graduate studies. This, along with the recruitment of greater numbers of the research fellow supported by the Japan Society for the Promotion will link with the training of researchers to shoulder the future of oral health studies.

3. Working toward the training of human resources able to take leading roles in the fields of international oral health care and hospital settings, through the introduction of Future Global Leadership Program, thus enabling the fostering of international awareness.

4. Make possible a large pool of oral health care professionals able to work actively in an aging society, one of the social demands of these times. This will be done by developing and sharing in an educational program which incorporates study in social work and oral health, hitherto lacking in the field of dental education.

5. Ensuring high quality dental instruction as well as national guarantees for the quality of dental education by developing methods for evaluating training skills that are special features of dental education as well as for objective evaluations of PBL instruction, implementing these on a nation-wide basis in tandem with cooperating toward improved instructional capabilities.
Background

In 2009, the Ministry of Education, Sports, Culture, Science and Technology compiled and released its first report on the “Plan for Training Dental Professionals Equipped with Recognized Abilities in Clinical Practice.” This report noted the following problems and issues in dental education:

- A decline in both clinical practice and clinical abilities on graduation from dental departments due to the streamlining of curricula;
- The need for augmenting educational resources for implementing seamless dental instruction;
- The need for ensuring outstanding candidates;
- The need for fostering the next generation of dental researchers.

In response to these, the following recommendations were made:

1) Ensuring of necessary clinical capabilities for dental professionals;
2) Implementation of a seamless course of instruction to train outstanding dental practitioners;
3) Ensuring the application of outstanding scholars intending to answer the social demands for dental practitioners;
4) Training of researchers for pioneering work in the field of oral health care.

In addition to these, other areas of concern were indicated. These included a lagging behind in international and domestic standards for dental education, and disparities among institutions arising from the lack of accreditation system in dental education in Japan.

This report indicated the urgency for resolving these issues in ensuring quality of dental education.

Purpose

The purpose of this project is ultimately to aim for higher quality in dental education. This will be done by utilizing the existing educational and research networks that have been created and managed so that the three institutions of higher learning (Niigata University, Tohoku University, Hiroshima University) can jointly share their particular educational resources and thus augment each other’s dental education. In addition, by communicating with each other their accomplishments and carrying out mutually strict, objective evaluations, this project will serve to standardize dental education practices. This will contribute toward ensuring the quality of oral health care in the future even as it aims to bring the standards of oral health care in Japan to internationally recognized levels.

Outline

To achieve the goals of the project, the three universities will first establish a “Collaborative Educational Platform” which will serve as a forum for promoting educational improvement among them.

As practical measures for planning and managing this project, the Collaborative Educational Platform will sponsor faculty development programs and direct exchange among those faculty members in charge. It will implement the following actions for the three universities to achieve together the goals of the project:

- The development, provision, implementation, and improvement of outstanding educational materials for dentistry;
- The development of Problem-Based Learning for identifying and solving problems;
- The provision of distinctive, specialized instruction (exchanging of lectures, courses);
- The implementation of externships--student exchange--in the field of dentistry;
- The development of objective methods for evaluations.
The purpose of this project is ultimately to aim for higher quality in dental education. This will be done by utilizing the existing educational and research networks that have been created and even as it aims to bring the standards of oral health care in Japan to internationally recognized levels.

This report noted the following problems and issues in dental education:

- A decline in both clinical practice and clinical abilities on graduation from dental departments arising from the lack of accreditation system in dental education in Japan.
- Other areas of concern were indicated. These included a lagging behind in abilities in clinical practice.
- This report indicated the urgency for resolving these issues in ensuring quality of dental education.

In response to these, the following recommendations were made:

- Establishment of Collaborative Educational Platform (Designated Faculty, Appointment of Temporary Instructors)
- Clarification of primary issues with stakeholders
- Sponsoring of Kick-off Symposium (Ascertain of current situation/Clarification of problems)
- Confirmation among the three universities of each other’s curricula, challenging issues
- Sponsoring of joint Faculty Development Seminars, Workshops
- Annual internal evaluation
- Survey of the latest trends in oral health education/evaluation methods
- Publication of pamphlet
- Creation of a homepage/information dissemination

Program for Promoting Inter-University Collaborative Education, representing institution

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### Schedule for Implementation by Year

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<tr>
<th>Year</th>
<th>Goals</th>
<th>Plans Implemented</th>
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<tbody>
<tr>
<td>2012</td>
<td>Preparations for project implementation</td>
<td>● Establishment of Collaborative Educational Platform (Designated Faculty, Appointment of Temporary Instructors) ● Clarification of primary issues with stakeholders ● Sponsoring of Kick-off Symposium (Ascertain of current situation/Clarification of problems) ● Confirmation among the three universities of each other’s curricula, challenging issues ● Sponsoring of joint Faculty Development Seminars, Workshops ● Annual internal evaluation ● Survey of the latest trends in oral health education/evaluation methods ● Publication of pamphlet ● Creation of a homepage/information dissemination</td>
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<td>2013</td>
<td>Coordination of joint education, Development of teaching materials, Investigative survey of evaluation methods</td>
<td>● Provision, enhancement, and development of shared teaching materials ● Pilot lectures/field work in integrating coursework (Improvements based on survey results) ● Presentations of joint research results regarding instruction ● Program Symposium (Niigata University) ● Annual internal evaluation ● Development/research for evaluation methods ● Sponsorship of joint Faculty Development Seminars/Workshops ● PR via Homepage</td>
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<td>2014</td>
<td>Commencement of pilot program for joint instruction</td>
<td>● Nationwide provision of shared teaching materials/compilation of survey results ● Pilot lectures/field work in integrating coursework (Improvements based on survey results) ● Sponsorship of Mid-term Symposium including mid-term external evaluations ● Program Symposium (Tohoku University) ● Presentation of joint accomplishments (domestic/overseas) ● Annual internal evaluation ● Evaluation methods trials ● Sponsorship of joint Faculty Development Seminars/Workshops ● PR via Homepage</td>
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<td>2015</td>
<td>Enhancement of joint instruction, Evaluation method trials</td>
<td>● Improvement in shared teaching materials based on survey results ● Integration of lectures, fieldwork (Improvements based on survey results) ● Sponsorship of summer school programs ● Presentation of joint accomplishments (domestic/overseas) ● Annual internal evaluation ● Program Symposium (Hiroshima University) ● Sponsorship of joint Faculty Development Seminars/Workshops ● PR via Homepage</td>
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<td>2016</td>
<td>Enhancement of joint instruction, Final evaluations</td>
<td>● Joint improvements based on survey results, Proposals for policy improvements following conclusion of the program ● Integration of lectures, fieldwork ● Final symposium on evaluations ● Sponsorship of joint Faculty Development Seminars/Workshops ● Sponsorship of summer school programs ● Presentation of joint accomplishments (domestic/overseas) ● PR via Homepage</td>
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