

[Iwate University] Program for Developing π -type Environmental Leadership by ISO14001 and Industry-University-Government-Citizen Collaboration

【Objectives and Contents】

◆ Based on the achievement of “Galaxy of Learning” Project, we develop Programs to nurture π -type environmental leadership with two vertical axes - expertise of faculties (axis1) and practical environmental competency on environment management (axis2) - beside basic environmental competency (horizontal axis) by four approaches below.

[Approach 1] Enhance environment education quality in general education courses

[Approach 2] Develop field programs of practical environment management

[Approach 3] Students help green the community

[Approach 4] University qualifies Certified Environmental Management Specialist



【Project Illustration】

Approach 1

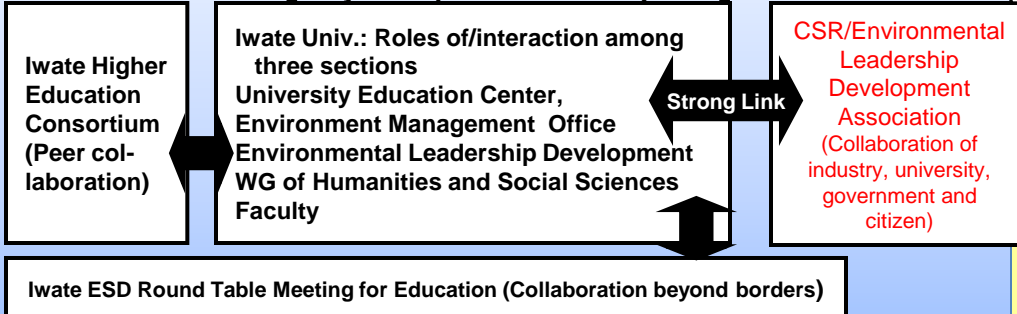
◆ Enhance environment education in general education courses

- ① “Basic Seminar”: Raise environmental awareness
- ② ESD subjects in collaboration with external partners
Learning in Practice How to Organize a Sustainable Community
ESD: Learning from Local Businesses
- ③ Develop Teaching Materials for Environmental Education subjects



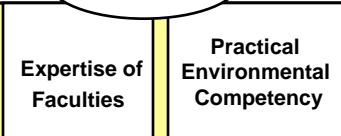
π -type Environmental Leadership

【Project Implementation System】



Basic ESD Values Environmental Competency

Approach 2



◆ Develop programs of environmental management skills

- ① Subject of ISO 14001 “Environmental Management of Iwate Univ”. (2 credits in 2nd term of 1st year)
- ② ISO14001 Campus Audit Practice “Practical Environment Management” (2 credits in 1st term of 2nd year)
- ③ Subject for Supporting Local Smaller Firms to Green their Management “Practical Environment Management Seminar” (* Students help smaller firms develop their environment report.) (2 credits in 2nd term of 2nd year)

Specialized Education of Faculties
(Strong motivation and leverage)

Approach 3

◆ Students help green the community
Iwate Higher Education Consortium
Iwate ESD Round Table Meeting for Education
CSR/Environmental Leadership Development Association
Japan Network for International Education
* Promote internship/volunteer activities in cooperation with partner organizations

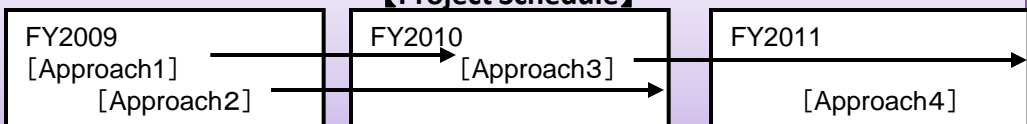
Approach 4

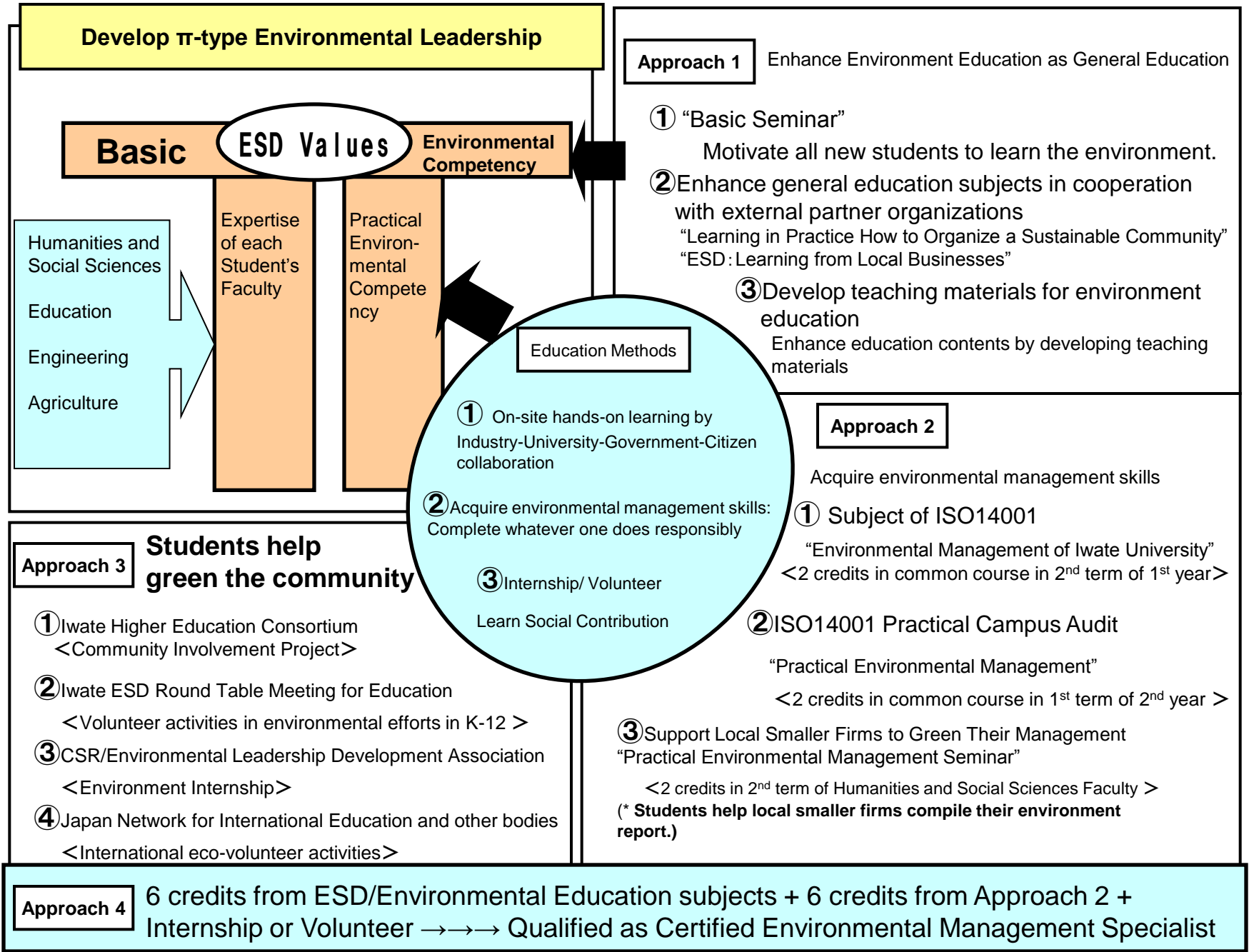
◆ Certified Environmental Management Specialist qualified by the University
* Students who meet the requirements of the 3 approaches.

【Novelty of the Project (What makes the project distinguished)】

- ◆ Succeed “Galaxy of Learning” which embeds ESD in all general education courses
- ◆ President leads the campus-wide approaches mainly in general education courses.
- ◆ “Practical Environment Management Seminar” starts in which students practice environment management skills in community, cooperating with local smaller firms.
- ◆ “Certified Environmental Management Specialist” qualified by the Iwate University.

【Project Schedule】





Develop π-type Environmental Leadership

Basic Environmental Competency (including **ESD Values**)

- Humanities and Social Sciences
- Education
- Engineering
- Agriculture

Expertise of each Student's Faculty

Practical Environmental Competency

Education Methods

- ① On-site hands-on learning by Industry-University-Government-Citizen collaboration
- ② Acquire environmental management skills: Complete whatever one does responsibly
- ③ Internship/ Volunteer Learn Social Contribution

Approach 1 Enhance Environment Education as General Education

- ① "Basic Seminar" Motivate all new students to learn the environment.
- ② Enhance general education subjects in cooperation with external partner organizations "Learning in Practice How to Organize a Sustainable Community" "ESD: Learning from Local Businesses"
- ③ Develop teaching materials for environment education Enhance education contents by developing teaching materials

Approach 2

- Acquire environmental management skills
- ① Subject of ISO14001 "Environmental Management of Iwate University" <2 credits in common course in 2nd term of 1st year>
- ② ISO14001 Practical Campus Audit "Practical Environmental Management" <2 credits in common course in 1st term of 2nd year >
- ③ Support Local Smaller Firms to Green Their Management "Practical Environmental Management Seminar" <2 credits in 2nd term of Humanities and Social Sciences Faculty > (* Students help local smaller firms compile their environment report.)

Approach 3 Students help green the community

- ① Iwate Higher Education Consortium <Community Involvement Project>
- ② Iwate ESD Round Table Meeting for Education <Volunteer activities in environmental efforts in K-12 >
- ③ CSR/Environmental Leadership Development Association <Environment Internship>
- ④ Japan Network for International Education and other bodies <International eco-volunteer activities>

Approach 4 6 credits from ESD/Environmental Education subjects + 6 credits from Approach 2 + Internship or Volunteer →→→ Qualified as Certified Environmental Management Specialist