



Faecal Sludge Management: Experiences from running an online course

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UNESCO-IHE and partners



Why to design an online course in FSM?

- Impart knowledge on important aspects of FS
 - Enhance capacity for design and operation of a comprehensive FSM system
 - Produce trained professionals dealing with planning, promoting, designing, operating or managing FS
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- Benefit of online: study in your own time; in your own location (at a lower cost)
 - Challenge: to keep motivated! & reduced peer to peer learning



Initiation of the course

1. Increased need of managing faecal sludge
2. Lack of needed knowledge for rapid implementation
3. Development of FSM book “Faecal Sludge Management: System Approach for Implementation and Operation” in collaboration with Sandec
4. Unique aspect: development in partnership with educational institutes and international experts



Methodology: Course Design

Course 1	Introduction to FSM		Book Chapter
	Unit 1.1	General intro into FSM	0, 1
Course 2	Technological fundamentals of FSM		
	Unit 2.1	Characterisation of FSM (quality, quantity, SOPs)	2
	Unit 2.2	Treatment mechanisms	3
Course 3	Collection and Transport		4
Course 4	FS Treatment Technologies		
	Unit 4.1	Overview of Technologies	5
	Unit 4.2	Settling - Thickening	6
	Unit 4.3	Drying beds	7, 8
	Unit 4.4	Co-treatment with FS	9
	Unit 4.5	End-use	10
Course 5	Management		
	Unit 5.1	Operation and Maintenance	11
	Unit 5.2	Institutional Frameworks	12
	Unit 5.3	Financial Transfers and Responsibility	13
Course 6	Planning		
	Unit 6.1	Assessment of the Initial Situation	14
	Unit 6.2	Planning of Integrated FSM Systems	17



Methodology: Study Load

Course period of 16 weeks;

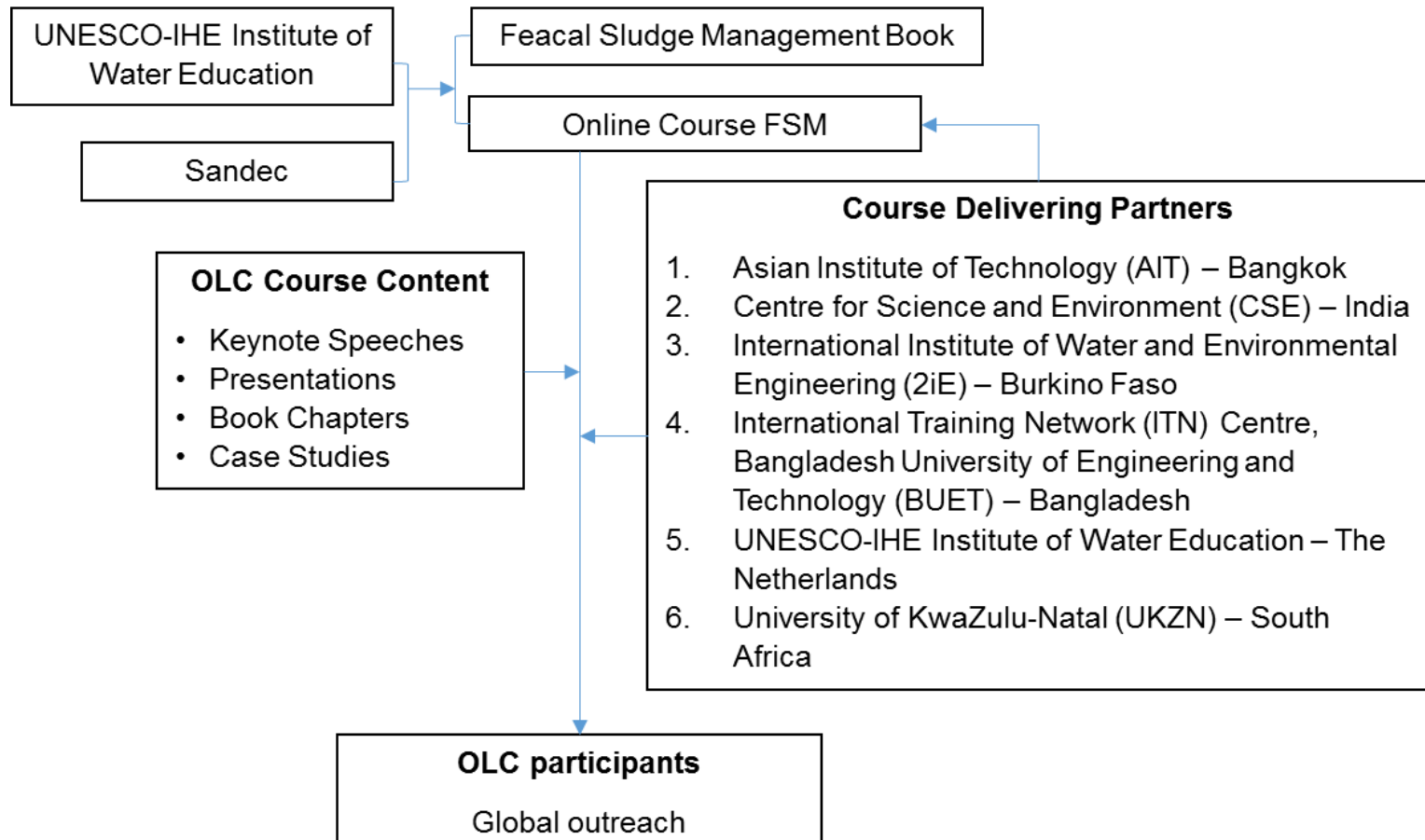
Each unit with a study load of 8 hours, to be completed within one week.

Build-up of each unit:

1. **Unit plan:** introducing the topic and materials
2. **Key note speech** video by experts on current and future highlights
3. **Reading material** in the form of a corresponding chapter from the FSM book
4. A **case study video** on current situations and practices on FSM
5. Suggested **reading materials**



Methodology: Course Delivery





Still looking for Latin American
FSM OLC delivering partner..!

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Fee structure/scholarships

- CONTENT of the course free for downloading!
- Payment is for supervision, guidance, feedback from the teacher, certification
- Fee varied among delivering partners
- Scholarship for first 20 graduates



Tests and scoring method

- Weekly quizzes (6): 40 - 70%
- Assignments (2): 30 - 40%
- Final oral/written exam: 20% *optional*



Certification: different options

- [Certification of registration: Incomplete assignments]
- Certificate of attendance: A final grade not less than 60% without completion of the final exam
- Certification of completion: Completion of self assessment tests, assignments and final examination with equal to or higher than 60% marks; completion of all the quizzes with at least 50% mark
- 5 European Credit Transfer and Accumulation System (ECTS) points: 2iE and UNESCO-IHE

Outcome of the partner cooperation

Improved quality of the FSM OLC : Collaboration among well established institutes and experts

Multiple ownership: Six partners from Africa, Asia and Europe partnered and delivered course

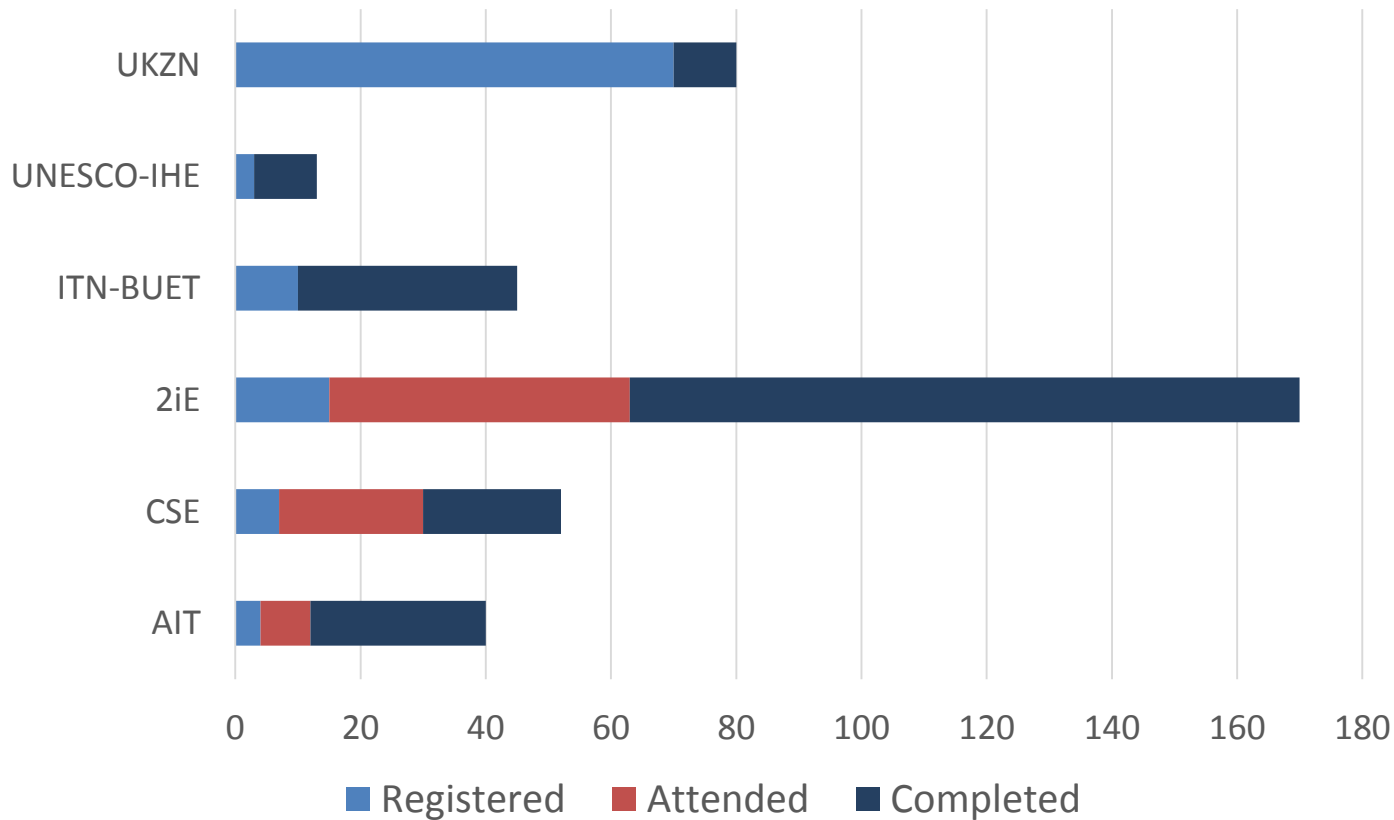
Acquired skills by partners: Experience and skill to run online course; enhanced FSM knowledge

Introduced new products by partners: Case studies, key notes, lectures, assignments



Outcome of the first runs of the FSM OLC

Increased reach: 400 participants registered



Additional spin-off: enhanced visibility

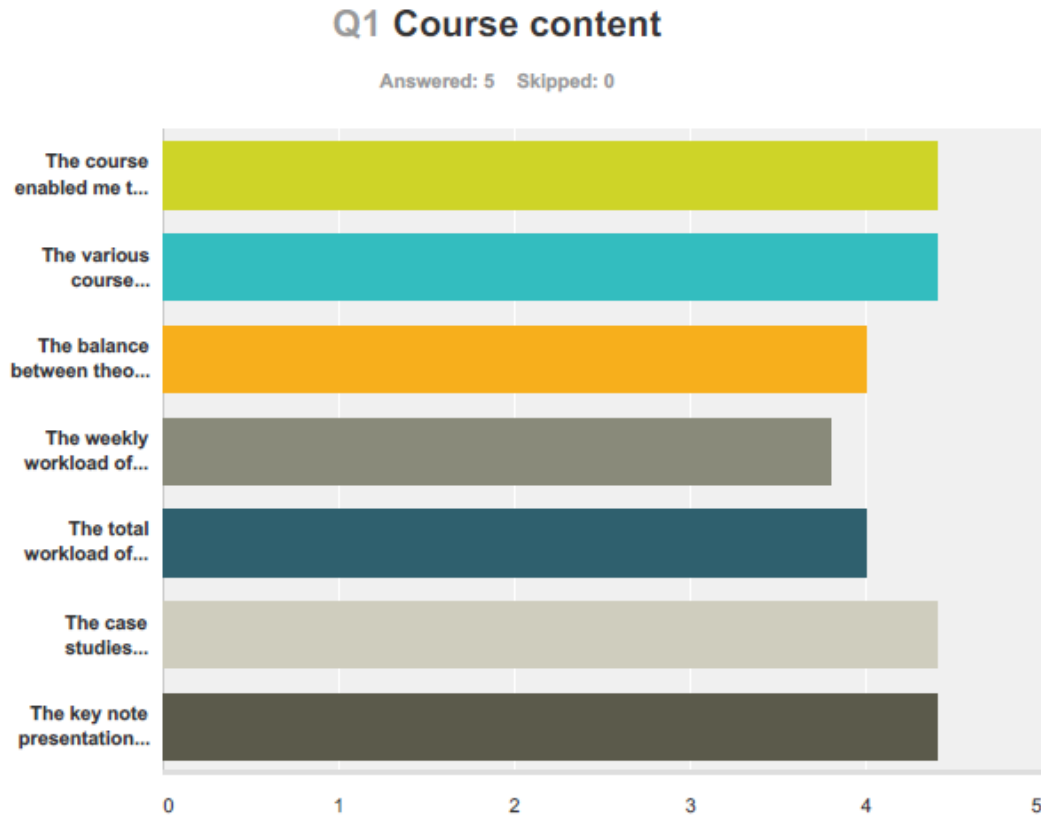
- Partners' official webpages and other web portals like SuSanA , Swacch Bharat Mission (Government) website
- Social Media: Facebook, LinkedIn
- Brochures, organisation magazine
- Global Faecal Sludge Management eLearning Alliance
 - For mutual learning, sharing and forging partnerships, leveraging or developing new FSM projects



GLOBAL FAECAL SLUDGE MANAGEMENT e-LEARNING ALLIANCE



Most important: how did the participants like it?



- “Very helpful, I learned a lot!”
- “Case studies, video presentations, quiz, the course management were great!”



Points of recommendation

- **Offer material in sections** (fundamentals, technology and planning). This makes learners to manage their own learning time and overcomes problems such as internet connection.
- Include more **design practical work** and include FSM treatment system design as a practical exercise
- **Shorter videos with higher quality** will be more attractive
- Increase opportunity for **F2F and discussions**



Challenges for delivering partners

- Some partners took **training sessions** from local Moodle expert
- Occasional issues with long **approval process** at the University
- Generating **meaningful discussion** among participants in the discussion forums is challenging
- Keeping **participants engaged + maintaining timeline**
- Language constraints [**Course to be translated in French and Spanish soon!**]
- Internet connection



Way Forward

- **Collaboration**
 - Continuing the collaboration among existing partners
 - Forging partnership with other institutes/government agencies to expand the scope of the course
- **Course packaging**
 - Improving course quality
 - Packaging the course into short courses
 - Revising course content to contextualise
 - Including tools like SFDs, more case studies
- **Exploring and integrating learning techniques**
 - Social media, Skype sessions
 - Peer to peer learning
 - Unit-wise review questions with immediate feedback



Way Forward contd...

- **Facilitating face to face sessions**
 - Identifying pool of local experts and champions in the country/region
 - Providing opportunities to participate in strategic workshops and field visits/study tour
 - Providing opportunity of live session/discussion with experts to facilitate interactions and troubleshooting
 - Establishing linkages of participants in FSM activities/projects



Thank you!

And don't forget to visit us at
<http://fsm-e-learning.net>

