Innovation in Flexible and Collaborative Learning: Moving from theory into practice in Moodle 2.2

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Abstract
This document has been prepared to report on and showcase a variety of e-learning pilot projects and initiatives launched by the IB Online Professional Development department (hereinafter ‘IB Online PD’) of the International Baccalaureate (hereinafter ‘IB’) in The Hague, Netherlands.

Founded in 1968, the International Baccalaureate is an international organization that aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.1

The IB Online PD department, as an integral global service provider, offers a wide range of online workshops for new and experienced coordinators, teachers and administrators in all of our educational programmes. Online workshops are available through the open source learning management system, Moodle platform, and tailored for all subject groups in both the Diploma programme and Middle Years Programme, as well as workshops for the Primary Years Programme. The workshops are available in English, French and Spanish.2

Notably, IB Online PD is now in the process of reengineering current processes, methodologies, and systems to ensure high quality, pedagogically sound, innovative and user-centred e-learning experiences. As such, IB Online PD has introduced two multi-faceted projects aimed at [a] innovating the look & feel and instructional design of the current Moodle version (1.9) and [b] strengthening the direct application of online collaborative learning in all IB online workshops so as to ensure a measurable and positive impact.

This document includes a brief description of two projects: [1] Project 1: Innovating content design and development for effective collaborative learning: migration from Moodle 1.9 to 2.2, [2] Project 2: Strengthening online collaborative learning through just-in-time and flexible learning, and highlights key e-learning initiatives that have strengthened the online collaborative learning experience for all key stakeholders involved.

Keywords
internal innovation, knowledge-building, collaborative learning, online professional development, synchronous learning, flexible learning

Introduction
Fostering global professional development through innovative and flexible learning.

The success and sustainability of online collaborative learning in any online course offered by any organization is directly linked to five components: [1] alignment with organizational strategy, mission, and resources to support innovation in learning, educational systems, and development, [2] the design and development of a pedagogically sound and stakeholder-focused learning management system, [3] interactive content and up-to-date resources, [4] a well-equipped and highly knowledgeable team of online facilitators and committed
participants and [5] the effective and high quality delivery of support services. These guarantors of success are briefly depicted in the diagram below and explained in the following paragraphs.

1. **Organizational mission and support**
The design and development of innovative learning management systems (LMS) requires support from and alignment with the organization’s mission and strategy. As an international education institution aimed at providing high quality education to students, schools and teachers worldwide, the IB supports creative and innovative approaches to learning systems, methodologies and resources.

2. **Innovative and pedagogically sound LMS**
The design and development of a LMS for the purpose of professional development should be directly aligned with andragogical and instructional design principles and methodologies. More often than not, LMS are introduced and launched as a ready-to-go platform without ensuring that the platform meets the needs and common behaviours of its end users. As such, the LMS that is to be used for online collaborative learning should include spaces for this methodology (i.e. peer coaching, self assessment, discussion forums, wikis, blogs, etc).

3. **High quality team of online facilitators and lifelong learners**
The people involved can either make or break a successful e-learning course. To ensure that an e-learning course is highly collaborative, active and generates knowledge-building, the organization must count on a highly qualified and experienced online facilitation team and hope for a proactive and engaging group of lifelong learners. Both the online facilitation team and the team of lifelong learners should be provided with relevant support and training prior to engaging in a learning activity and during the delivery process.

4. **Interactive and up-to-date content and resources**
The content and resources of an online course are as important as the people that are required to lead it and learn from it. More often than not, outdated content and material are used to build capacity through state-of-art platforms. The focus tends to be on the learning management system as opposed to the very content that online learners are to focus on. This strategy results in a low acquisition of knowledge and a better understanding of the LMS. The emphasis should be on the balance of both – high acquisition of knowledge and high acquisition of
LMS skills. Content should be interactive and foster collaboration (i.e. group work, wiki-building, debates, case studies, etc) and resources should be up-to-date and readily available to learners at any time and at any place.

5. High quality and efficient delivery support services
In addition to organization buy-in, an innovative LMS, a highly-skilled team of facilitators and lifelong learners, and interactive content and resources, it is paramount that an organization count on an efficient delivery of support services. These efficient support services require [a] an operationally-sound registration system, [b] a customer-service driven technical staff, and [c] a highly qualified training and instructional design team. A breakdown in any one of these services will negatively affect the learning process during the delivery stage.

Acknowledging the importance of global professional development through innovative and flexible learning, the IB Online PD department, in collaboration with the Global Professional Development department, has developed and launched two projects and other e-learning initiatives to address and attend to stakeholders’ needs and interests. These pilot projects and initiatives are introduced below.

Project 1: Innovating content design and development for effective collaborative learning: migration from Moodle 1.9 to 2.2
With the aim to improve and innovate the current design and development of IB online workshops, the IB Online PD team has launched Project 1: Innovating content design and development for effective collaborative learning – migration from Moodle 1.9 to Moodle 2.2.

The central aim of this project is to migrate from the current Moodle 1.9 version to Moodle 2.2 and ensure that the new LMS includes the following components and features:

1. Innovative and user-friendly look and feel
2. Increased space and possibility for visual aids and audio streaming (video tutorials, audio files)
3. Personalized learning space for participants and facilitators alike, including the inclusion of the learning portfolio, personal files, personal inbox, and blogs
4. Icons and imagery representing diversity (in age, race, culture)
5. Easy-to-use web display and navigation tools
6. Easy-to-manage and monitor web content, structure, layout, and learner participation

Expected Project Outcome
The intended outcome of this project is to launch a newly improved learning management system that enriches and enhances the online collaborative learning process through personalization and the use of innovative products and tools available in Moodle 2.2 for both online learners and online facilitators.

Implementation Plan
This project is now in the final production phase. Then, the following steps will follow:

- Delivery date for Alpha version of Moodle 2.2: end of May 2012
- Delivery date Beta version of Moodle 2.2: June 2012
- Testing phase: June – August 2012
- Launch date of the newly revised version of IB Online PD’s LMS: September 2012

Evaluation Plan
The new Moodle interface for IB Online PD will be tested prior (ex ante evaluation) to its official launch on September 2012 and during the delivery phase. For the ex ante evaluation, key stakeholders including staff members and external coordinators, will be asked to test the functionalities of the new platform. Feedback on the testing will be collated systematically and communicated to the third party provider. For the evaluation during the delivery, participants and facilitators alike will be asked to assess the new platform through an online workshop evaluation survey. Results of this survey will be collated and analyzed in a systematic way.

Success Criteria
The success criteria will be measured on the migration from Moodle 1.9 to 2.2 will be based on the
following components:

- Efficient and easy-to-use access to the new IB Online PD interface
- Stable and effective performance of the LMS
- Qualitative and quantitative feedback received from key stakeholders (learners, facilitators, staff members, and the IB community)

**Pilot Project 2: Strengthening online collaborative learning through ‘just-in-time’ and flexible learning**

Centralized on the aim to strengthen active participation and collective knowledge building in online workshops, the IB Online PD team has also launched a Pilot Project 2: *Introducing synchronous interaction to strengthen online collaborative learning*.

The key aims of this *Pilot Project* are to:

1. Assess learner and facilitator interest and demand for synchronous communication tools, like web-conferencing and webinars, in current and future online workshops
2. Build online facilitator capacity in these synchronous tools
3. Develop an integration plan for synchronous tools in Moodle-based online workshops

**Expected Project outcome**

The proposed outcome of this *Pilot Project* is to test its use and, ultimately, integrate and re-package some components of workshop content through selected synchronous communication tools that are functional and operational in Moodle 2.2.

**Implementation Plan**

This *Pilot Project* is now in the evaluation phase. Results and future learning strategies will be clearly defined at the end of May 2012.

**Evaluation Plan**

The integration of synchronous learning in the current online workshops offered by IB Online PD will be dependent on the results of the current *Pilot Project*. The key components of this decision-making process are:

Perceived benefits and challenges outlined by the focus group involved in the *Pilot Project*, including online facilitators, selected participants, and external coordinators Feasibility and sustainability (directly related to financial and resource allocation) of synchronous learning in IB online workshops and e-learning projects.

**Success Criteria**

This *Pilot Project* is aimed at strengthening collaborative and active learning in IB online workshops. As such, the criterion for the successful integration of synchronous learning and interaction is directly linked to:

- Improvement in learner participation and knowledge building through asynchronous and synchronous learning activities
- Positive learner, facilitator, and organizational feedback on the utility and benefits through the end-of-course evaluation surveys.

**Other e-Learning Initiatives**

**Community-building through Social Networking**

Community-building through social networking is an essential first step to ensure sustainable success in any online learning experience. Social platforms, like Facebook, Twitter, and My Space, only confirm that individuals share, experience, and learn more rapidly and proactively (fostering active participation) through informal and social interaction. Experience and research studies show that this is most relevant in e-learning.
courses too. As such, learners enrolled in an online learning activity must feel that they belong to a group or community that shares the same or similar objectives and interests and that respect the differences and richness in experience, knowledge, language and cultural.

To address the need for community-building in online workshops, IB Online PD has now repositioned the ‘social networking space’ (denominated ‘Coffee Corner’) Moodle discussion forum in all IB online workshops and has trained and sensitized online facilitators and online learners alike on its use and benefits during the delivery of the online workshops.

**Capacity-building on Online Facilitation and e-Learning Pedagogy**

As briefly mentioned in the *Introduction* above, the roles of the online facilitator and the online learner are key in the successful application of online collaborative learning in any e-learning activity.

To strengthen the expertise and to align the roles and expectations of all key stakeholders involved in any online course, IB Online PD has [1] developed an online facilitation workshop aimed at new and existing online facilitators and [2] developed all-inclusive online learner’s toolkit aimed at new and existing online learners. Both online workshops are now in the testing phase. A quality assurance report will be prepared and distributed in June 2012.

**Conclusion**

Internal innovation embodies the response of an organization or department to stakeholder needs and interests. Improving processes, methodologies, practices and systems to better serve the learner is an important and continuous process that any e-learning provider should invest in.

IB Online PD has refocused its strategy and resources to transfer a theoretically sound idea into tangible and sustainable solutions – from cloud learning to real lifelong collaborative learning.

**Electronic references**

The following electronic references in preparation for this conference proposal:

International Baccalaureate
IB Online Professional Development