CONCEPT-DRIVEN TEACHING

Concept-driven teaching is a foundational feature of the IB Middle Year Programme (MYP) framework. This is firmly established in *MYP: From principles into practice* (IBO, 2014, updated 2016), which notes that "Concepts represent the vehicle for students' inquiry into the issues and ideas of personal, local and global significance, providing the means by which they can explore the essence of a subject" and introduces MYP key and related concepts.

This report summarizes the findings from the research study by the Claremont Evaluation Centre (CEC) on implementation of concept-based teaching as part of the key strategies.

What does MYP concept-driven teaching implementation look like across the world?

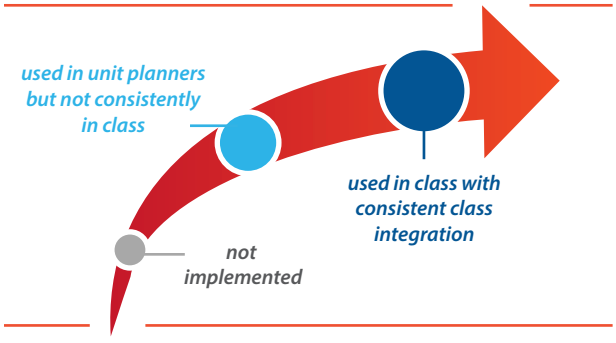
findings from teacher surveys (2017, 2018)

- Teachers' perceptions about and attitudes toward concept-driven teaching are consistent with IB expectations and they indicate using practices consistent with concept-driven teaching at least once every two weeks.
- Unfortunately, although most teachers meet IB expectations, nearly a third of teachers do not use specific concept-driven teaching techniques. Specifically, techniques that require teachers to embed concept-driven teaching into in-class learning experiences are not used as often as intended.
- Teachers also say they emphasize facts in student assessments more often than the standards recommend.
- Students report experiencing regular, if not daily, exposure to concept-driven teaching. However, this exposure appears to be heavily weighted in favour of specific concepts (e.g. communication, culture, creativity) over others (e.g. form, aesthetics).

Implementation practices

findings from 2018 schools visits (27 schools)

Below you can find the trajectory of implementation of concept-driven teaching in MYP schools.



Factors that allow for progression in the implementation of concept-driven teaching are:

1) Key and related concepts are not implemented in class
2) Key and related concepts are used in unit planners but not consistently in class
3) Key and related concepts are integrated in the learning process

In the **first category** falls a minority number of schools. Teachers said they did not integrate key / related concepts into their unit plans. These teachers said they were currently working on embedding other strategies into their planners, thus were not focused on the concept- driven teaching.

In the **second category** a small number of teachers said they included Key / Related Concepts in unit planners but rarely discussed them in the class or used them to guide assignments. At sites in this category, teachers and students explained that the key / related concepts tended to be presented explicitly at the beginning of the units.

In some schools instead, teachers embedded key / related concepts into their unit and lesson plans, used the key / related concepts to develop assessments and select and structure class activities, but did not mention them in class or discuss them with students. Some teachers in this category felt that drawing explicit attention to key / related concepts was redundant and so they did not make explicit connections during class time.

One of the key concepts of the unit that you saw today was management and intervention…so there's a lot of assignments, like the students relate it to those concepts. But then mentioning it to them, making it clear that this is actually that concept that you're talking about, or bringing it back to the concept again. I don't often do that, and I must admit that sometimes it feels like you're kicking in an open door. – MYP Teacher

In the **third category** around half of the schools we observed at least one teacher had purposefully selected key / related concepts to develop their unit and lesson planners, frame class activities, and develop group projects. These teachers were also observed frequently linking the key / related concepts to class activities during reflection exercises and class discussions. A commonly observed practice was the use of real-world examples and current events as a structure to facilitate the practical relevance implications of key / related concepts.

Students in these schools described the use of key / related concepts as helpful in increasing their understanding of course content, making it more interesting and relevant to their lives.

Yes in a physics class, he first explained the key concept, then he started explaining it and discussing the unit basically, then after we finished, he connected, explained and discussed the key concepts so we can understand.... We used to find relationships between let's say when increasing the voltage and the current that is produced by increasing the voltage…So this was our key concept in this unit and it was very clear for us why we used our relationships as our key concept. – MYP Teacher

SUPPORT
to the implementation of concept-driven teaching

Teacher understanding of key / related concepts and how to embed them in the classroom

Type of school (private schools report higher levels of implementation than public schools)

Formal planning time allocated for the integration of key / related concepts into unit planners and classroom activities

Duration of school implementation of MYP: Next chapter

BARRIERS
to the implementation of concept-driven teaching

Teacher attitudes that concept-driven approaches were **not an important use of class time**.

Limited understanding causes teachers to view inclusion of concepts in their unit planners as **'check the box' activity**

Concepts were **"too big" and "hard to make real for the students".**

IB concept-driven construct: a student's view

To gain additional insights into ***students' understanding of the structure of knowledge,*** 100 students responded to an open-ended question asking them to explain the difference between a **fact**, a **topic**, and a **concept** using leadership as an example. Most of these students understood the overall structure of knowledge, recognizing the relationship between facts, topics, and concepts. However, they had difficulty defining each of the three constructs, and in particular struggled to define concepts (11% indicated they did not know what a concept was).

Most students had difficulty using leadership as an example of facts, topics, and concepts, with 61% of students providing general descriptions with no mention of leadership. Only 14% provided a full leadership-based example that was reflective of the IB's approach to the structure of knowledge.

Provocations

In your school, do you have a shared understanding of what a concept is?

How far is the IB's approach to the structure of knowledge (a fact, a topic, and a concept) explicitly taught in your school context?

Background

In mid-2015, the IB commissioned the Claremont Evaluation Center (CEC) to lead a multi-year research project on the MYP: Next chapter's implementation and impact. The CEC study provides a wealth of data about what the implementation of the MYP curriculum looks like around the world in critical curriculum components.

Based on this multi-year research, the IB has identified three themes that categorize nine high-quality implementation strategies for the MYP:

- Collaborative strategies
- Key strategies
- Optional strategies

The IB will disseminate the CEC research findings in form of reports for high-quality implementation strategies and many other resources to support schools in further implementing the MYP programme.