# Skill maps, analytics and more with Google's Course Builder 1.8

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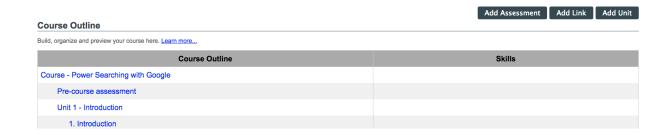
Over the past couple of years, Google's Course Builder has been used to create and deliver hundreds of online courses on a variety of subjects (from sustainable energy to comic books), making learning more scalable and accessible through open source technology. With the help of Course Builder, over a million students of all ages have learned something new.

Today, we're increasing our commitment to Course Builder by bringing rich, new functionality to the platform with a new release. Of course, we will also continue to work with edX and others to contribute to the entire ecosystem.

This new version enables instructors and students to understand prerequisites and skills explicitly, introduces several improvements to the instructor experience, and even allows you to export data to Google BigQuery for in depth analysis.

- **Drag and drop, simplified tabs, and student feedback**

  We've made major enhancements to the instructor interface, such as simplifying the tabs and clarifying which part of the page you're editing, so you can spend more time teaching and less time configuring. You can also structure your course on the fly by dragging and dropping elements directly in the outline.
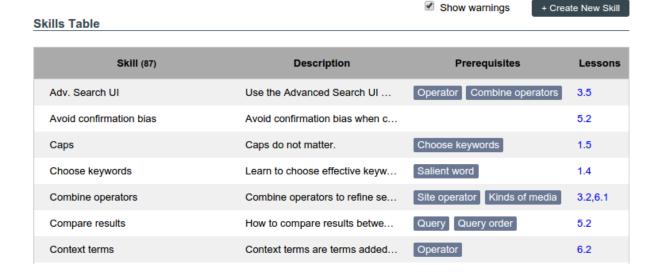
Additionally, we've added the option to include a feedback box at the bottom of each lesson, making it easy for your students to tell you their thoughts (though we can't promise you'll always enjoy reading them).
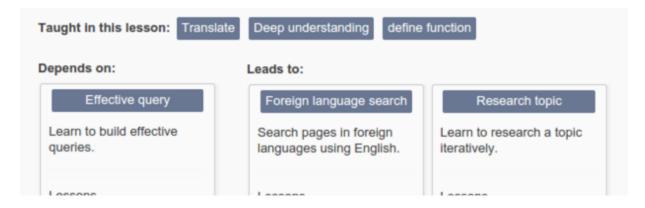
- **Skill Mapping**

You can now define prerequisites and skills learned for each lesson. For instance, in a course about arithmetic, addition might be a prerequisite for the lesson on multiplying numbers, while multiplication is a skill learned. Once an instructor has defined the skill relationships, they will have a consolidated view of all their skills and the lessons they appear in, such as this list for Power Searching with Google:



| Skill (87) | Description | Prerequisites | Lessons |
|---|---|---|---|
| Adv. Search UI | Use the Advanced Search UI … | Operator   Combine operators | 3.5 |
| Avoid confirmation bias | Avoid confirmation bias when c… | | 5.2 |
| Caps | Caps do not matter. | Choose keywords | 1.5 |
| Choose keywords | Learn to choose effective keyw… | Salient word | 1.4 |
| Combine operators | Combine operators to refine se… | Site operator   Kinds of media | 3.2,6.1 |
| Compare results | How to compare results betwe… | Query   Query order | 5.2 |
| Context terms | Context terms are terms added… | Operator | 6.2 |

Instructors can then enable a skills widget that shows at the top of each lesson and which lets students see exactly what they should know before and after completing a lesson. Below are the prerequisites and goals for the Thinking More Deeply About Your Search lesson. A student can easily see what they should know beforehand and which lessons to explore next to learn more.

Skill maps help a student better understand which content is right for them. And, they lay the groundwork for our future forays into adaptive and personalized learning. Learn more about Course Builder skill maps in this video.

- **Analytics through BigQuery**

One of the core tenets of Course Builder is that quality online learning requires a feedback loop between instructor and student, which is why we've always had a focus on providing rich analytical information about a course. But no matter how complete, sometimes the built-in reports just aren't enough. So Course Builder now includes a pipeline to Google BigQuery, allowing course owners to issue super-fast queries in a SQL-like syntax using the processing power of Google's infrastructure. This allows you to slice and dice the data in an infinite number of ways, giving you just the information you need to help your students and optimize your course. Watch these videos on configuring and sending data.

To get started with your own course, follow these simple instructions. Please let us know how you use these new features and what you'd like to see in Course Builder next. Need some inspiration? Check out our list of courses (and tell us when you launch yours).

Keep on learning!

Google