



Case Study

Oregon Health and Science University



“Too often in education, we ask students to memorize facts – without helping them understand the relationships between the facts. By putting the information into a single MindManager map, they start seeing the big picture.”

ROI

Makes student learning more efficient; streamlines the quest to solve complex research problems.

Company Profile

Oregon Health and Science University is the state's only health and research university and academic health center. OHSU has schools in dentistry, medicine, nursing, and science and engineering, and teaches more than 3,900 students, interns, residents, fellows, and clinical trainees each year and over 18,000 health professionals through its continuing education programs. OHSU is Portland's largest and Oregon's fourth-largest business, with 11,500 employees.

Challenge

To help students absorb large amounts of information and help professors manage complex research projects.

Education

Two dentistry professors use MindManager to help students learn complex subjects more effectively.

Students in dental school are overwhelmed with information. To become a dentist, students take more than 100 classes over four years, each introducing reams of complex facts to absorb and remember. Using Mindjet® MindManager® to create visual representations of course content, Professors Ron Sakaguchi and John Mitchell of Oregon Health and Science University have found a way to make the information they must convey clearer and more concise.

“In some courses, students receive so much information that they often remember very little of it,” says Professor Sakaguchi. “But when it's organized into a visual map, they have a greater opportunity to understand and convert facts into knowledge.”

Improving the learning process

Along with copies of the PowerPoint slides he's delivering, Sakaguchi gives students a MindManager map of each lecture's objectives and content. Then, before exams, he summarizes his lectures into a single map—providing students with an easily understood one-page course overview. He encourages his students to use the maps to reflect on what they've heard in class, and recommends they distill their class notes into key points and then attach these notes to the overview map.

“It's much easier to look at relationships when it's all on one page instead of having to sort through 10 pages of scribbled notes,” he says. “Too often in education, we ask students to memorize facts – without helping them understand the relationships between the facts. By putting the information into a single MindManager map, they start seeing the big picture.”

Going deeper into the subject matter

In his first lecture, Sakaguchi gives students a mind map that provides a broad overview of all the materials used in dentistry – fillings, bridges, crowns, and so on – and organizes the information by the procedure in which the materials are used.

As the course unfolds, he uses MindManager to unfold layers of information, from the different ways to measure the strength of materials, to an explanation of key engineering terms. Using the branching structure of the map, he can show how these abstract concepts come together in actual patient care.

“For example, when you're interested in bending a wire, that wire has to take on what's called 'plastic deformation,’” he says. “But when the wire starts working like a clasp, it has to have some elastic properties. It's difficult for students to visualize how the same material can be used to address different conditions.” To better convey this complex information, Sakaguchi adds other media to the map. Any electronic object, image or file can be added to the map – from photographs of clinical procedures, to a shot of the gaping mouth of a Great White Shark, to tables or charts – to trigger critical thinking and speed understanding.

Taking the stress out of studying

Students who've been using MindManager in class say they like having one map to study from come test time. “I use MindManager to outline my notes and key points from course materials,” says second-year student Ingrid Schultz. “It gives me a brief outline of where I need to go with my studying. It's really easy to add or change things, and I like how you can expand and contract the map to change how much information you see.”

“I prefer mind maps because I can attach color or graphics,” says second-year dental student Kevin Scott. “Last year in the anatomy course I would color-code

Solution

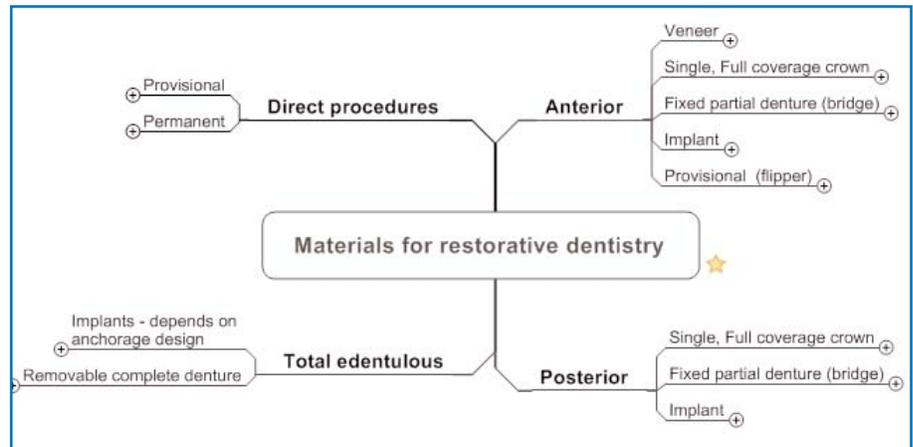
Professors Sakaguchi and Mitchell use MindManager to help students study and to organize their own work.

Product

Mindjet MindManager

Result

Students report more efficient studying and time-management, and professors are more productive in their research and administrative work.



Mapping "material for restorative dentistry" information with Mindjet MindManager

nerves and arteries and veins. Then when I was in a test situation I could more easily recall what something was because of the visual memory that I'd formed. The maps created a very clear image in my mind, which was really helpful."

A few of Professor Mitchell's students are using MindManager to prepare for their board exams. "Rather than going through years' worth of notes, they've produced maps to quickly and easily review many courses at once," says Mitchell. "They've even looked into the idea of marketing these to other students."

Making research less daunting

Mitchell also uses MindManager to create a single snapshot of research projects with lots of moving pieces. For instance, he's developing a tooth desensitizing product, the research for which involves testing multiple ways to administer the product. As he moves through the tests, he fills out separate map topics for each experiment and sub-topics for test results of different concentrations of the product.

"The approach we are taking has never been tried before," Mitchell says. "We're creating a roadmap to keep track of these disparate bits of information. It's hard to imagine how we could manage this project without using MindManager to keep everything all on one page."

Helping in other ways

"Personally, I like using MindManager because it helps me brainstorm and analyze information," says Sakaguchi. "I wear a lot of different hats in the school and have a lot of different education and research projects going on simultaneously. Mind maps help me focus. I can also unload a lot of information into the maps very quickly, then organize them later. It reduces the stress of trying to keep all these balls in the air at the same time."

Sakaguchi says MindManager is also being used for the dental school's strategic planning. "The dean wanted to look at different areas within the school that needed review and enhancement. We identified three or four principal areas and mapped out some preliminary concepts. Then we developed different working groups that are now implementing aspects of the plan. The dean can now refer to this big map of the draft strategic plan that he has hanging in his office."

"The beauty of MindManager," Mitchell says, "is that it enables you to create instant snapshots of where you've been, where you are now and where you're going. Whether you are a student or a faculty member, it gives you a single easy-to-digest, easy-to-understand way to track just about everything."



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