

# CURRICULUM MAPPING

A guide to help you navigate the process of implementing virtual reality into your existing curriculum.

# Introduction

Nursing is an ever-evolving profession. As the adoption of common competency frameworks becomes standard, many are now looking back and making key changes to their curricula to support these new initiatives.

A curriculum map can help put it all into perspective. It makes it easier to understand how students will meet learning objectives, outlining what's being taught, how, and when.

## Are you:

1. Looking to establish ROI or improve your ROI?
2. Looking to better track learner performance with objective data?
3. Save your staff valuable time and resources in curriculum mapping?
4. Conduct a gap analysis?
5. Looking for ways to modernize your curriculum?

## If so, you're in the right place!

At Oxford Medical Simulation, we're here to make that process easier than ever.

OMS scenarios authored by our in-house team of Clinical Authors are all aligned with Standards of Best Practice and can be mapped to competency frameworks. You can rest assured that in using OMS scenarios, your learners are getting the most up-to-date practice that they can take with them as they go off into the clinical setting.

Our Educational Specialists, who share experiences in direct patient care and academia, can act as your guide in understanding where VR is best placed to optimize learning outcomes. Their expertise is at the confluence of VR, nursing education, and patient care, meaning they are uniquely positioned to provide guidance on the best course of action for implementing VR into your program.

## Planning is essential.

In this guide, we'll cover:



Considerations for incorporating VR into your curriculum



Determining the right VR software for your institution



Planning and preparing for VR implementation into your curriculum



Curriculum mapping with OMS

Read on to discover the benefits of curriculum mapping with OMS!

## Chapter 1

# Establishing the Foundation for Technology in Education

There's a lot to consider when planning your simulation program.

Physical simulation has an important role, but it does come with a set of limitations.

Space constraints, scheduling difficulties, set up and breakdown time, maintenance, troubleshooting, and administrative planning can all impact just how much time students get to spend in simulation.

Nursing educators around the world have been at the forefront of adopting advancing technology into curricula to enhance student learning and automate workflow inefficiencies.

Integrating virtual reality (VR) into an existing curriculum has been done successfully using an appropriate framework, like the NLN Jeffries Simulation Theory and INACSL Standards of Best Practice.

[Educators at Johns Hopkins](#) reported that implementing VR can result in better engagement from students while improving skills like decision-making and psychomotor skills.

Other institutions have used VR for beginners through advanced learners, with exciting findings around [diagnostic reasoning](#) and [critical thinking](#).

From a learning perspective, VR has also shown [benefits in procedural memorization](#) and recall time. In this study, authors demonstrated that learning transferred from the virtual environment to the real world, with higher levels of immersion relating to improved recall accuracy.

### **A systematic review showed [VR had positive effects on:](#)**

- Knowledge retention
- Knowledge transfer
- Problem-solving
- Critical thinking
- Skill performance
- Active learning
- Conceptual and procedural learning

Students have also reported positive impacts on confidence and perceived efficacy, as well as a reduction in anxiety.

With such positive findings, the next question might be - **'where does VR actually fit into the curriculum?'**

As VR has an inherent flexibility to it, there's lots of ways nursing schools have embedded VR to bolster their educational experiences.

**A few ways VR has been incorporated into the curriculum are:**



Educators have been leveraging VR across the curriculum, from the immediate application of knowledge in the classroom to encouraging deliberate practice at home.

Objective data and analytics of a platform like OMS also provide educators with lots of tools they can use to optimize assessment processes and identify where students need more - whether on an individual or cohort level.



VR can work for you in lots of different ways, so it's important to first start with a clear picture of your needs to figure out which software is your best fit.

## Chapter 2

# Choosing the Right VR software

To kick off your search for a VR partner, start by listing your overall objectives. Those can be your learning objectives for students, or it can include goals you have for your team, like saving time on administrative tasks.

Will you be using VR with beginners or advanced learners? Maybe you plan to start with a small pilot group and expand from there.

Knowing what your goals are helps create a framework for embedding VR, making it easier to identify where it fits best.

### For example:

Need more sim more often?



Find a VR company offering remote access to scenarios

Need objective assessments?



You'll likely use VR in-headset with a facilitator present, but make sure the platform is logging the data you need to enhance your processes

Need a rich debriefing experience?



Have students complete a scenario at home, and use data from the platform to facilitate an in-person, group debrief

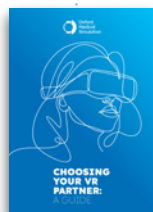
Need more clinical placement experiences for learners?



Use advanced, holistic scenarios or multi-patient scenarios to truly reflect the clinical experience



Once you've identified your needs and any gaps you're looking to fill, you'll have a much easier time figuring out how VR fits into the bigger picture.



Check out this guide for a more comprehensive look at [what to consider when choosing a VR partner](#), giving detail on everything from learning objectives to budget to FAQs.

**Below is a quick look at four of the key factors to consider in your search:**

### **1. Alignment with learning objectives**

Make sure the scenarios offered match the skill level of your learners. Look at the different modalities learners can engage with and the flexibility of access.

Pick out what's most important for your learners to achieve and what's most important for you as an educator - the experts should be able to fill in the rest, giving you a narrowed-down list of options that suit your overall goals.

### **2. Establish content fit**

Who's creating the scenarios your students will learn from? Are they aligned with best practice?

These questions can give you peace of mind that your students will be learning the most up-to-date content reflective of real world practice, created by experts who know their stuff.

Then, it's onto the scenario content itself - does it align with your course, lecture, or objective?

Expert guidance really matters at this stage. The OMS Library, for example, houses over 240 scenarios across specialties and disciplines.

While it's important to see what's offered, it's near impossible to decipher all the concepts that every scenario will touch on. Our Educational Specialists, who share a wealth of experiences in direct patient care and academia, can connect the dots and make it a whole lot simpler to figure out what content fits where.

### 3. Get the support you need

Who's responsible for implementing this tech? What support can you expect from your VR partner?

Save the surprises for the magic show.

Embedding a new technology into any curriculum is an undertaking no matter which way you slice it.

Having guidance and fast-acting support can make all the difference in getting VR into learners' hands and making sure it gets used to the fullest extent.

#### Industry-leading support at every step of your journey

##### OMS Customer Success & Support Teams



01

#### Welcome

Customer Success Team welcomes you and stays in consistent contact as you start your OMS journey.



02

#### Onboarding

Coordinated, individualized onboarding sessions for technologists, admins, and learners.



03

#### Regular check-ins

Frequent touchpoints to monitor and assess progress in achieving your objectives.



04

#### Impact review

Feedback and review session at the 6 month mark to ensure you continue to see value from the OMS platform.

#### 4. Data and analytics

What good is this new tech if it doesn't tell you anything more about how learners are performing?

Lots of platforms offer data & analytics, so be sure to inquire about what exactly that means.

Can you see individual and cohort level data? Is the scoring system objective? Do students receive feedback based on performance?

While it may not be your leading question, it's so important to make sure you're getting objective data that a) reduces your workload and b) supports data-driven decisions.

With the right VR partner, you actually can have your cake and eat it, too.



Take it from the folks at Nightingale, who used VR to enhance clinical judgment and critical thinking competencies for their learners (and now, they're running over 20,000 scenarios per semester!).



Another success story is the team at the University of Lincoln, who have saved over 200 hours of staff time in using VR for their OSCEs assessments while identifying correlations between amount of time spent in simulation and overall performance scores.



With all that in mind, it's onto the meat and potatoes of implementation - the planning phase.



## Chapter 3

# Planning and Preparation

With all that information, all those options - it can be hard to know where to begin! If you're this far into the process, you probably know what your curriculum needs, you probably know what you're looking for from VR, and you probably have a set of learning objectives you're setting out to meet.

That's a great time to reach out for guidance to bridge the gap and get the process started.

Educational Specialists (ES) at OMS are here to support your process, whatever outcome you're looking to achieve.

Once you have a sense for how VR will fit into your curriculum, you'll want to put together a plan of action for how you're going to get VR into learners' hands.

Then, you can start configuring your implementation - work with your Customer Success representative to get your faculty familiar with VR as they need, bring together any prebrief or orientation materials for learners, and button up any odds and ends.

It's important to also establish any metrics you'll use to determine the success of your VR endeavor.

**Common  
metrics you  
might use  
include:**



Number of  
scenarios  
completed



Time spent in  
scenarios



Exam scores



NCLEX pass  
rates



Learner course  
evaluations



Community  
partner  
feedback



Post graduation  
surveys

Our expert team at OMS can help you put all of this together - from start to finish

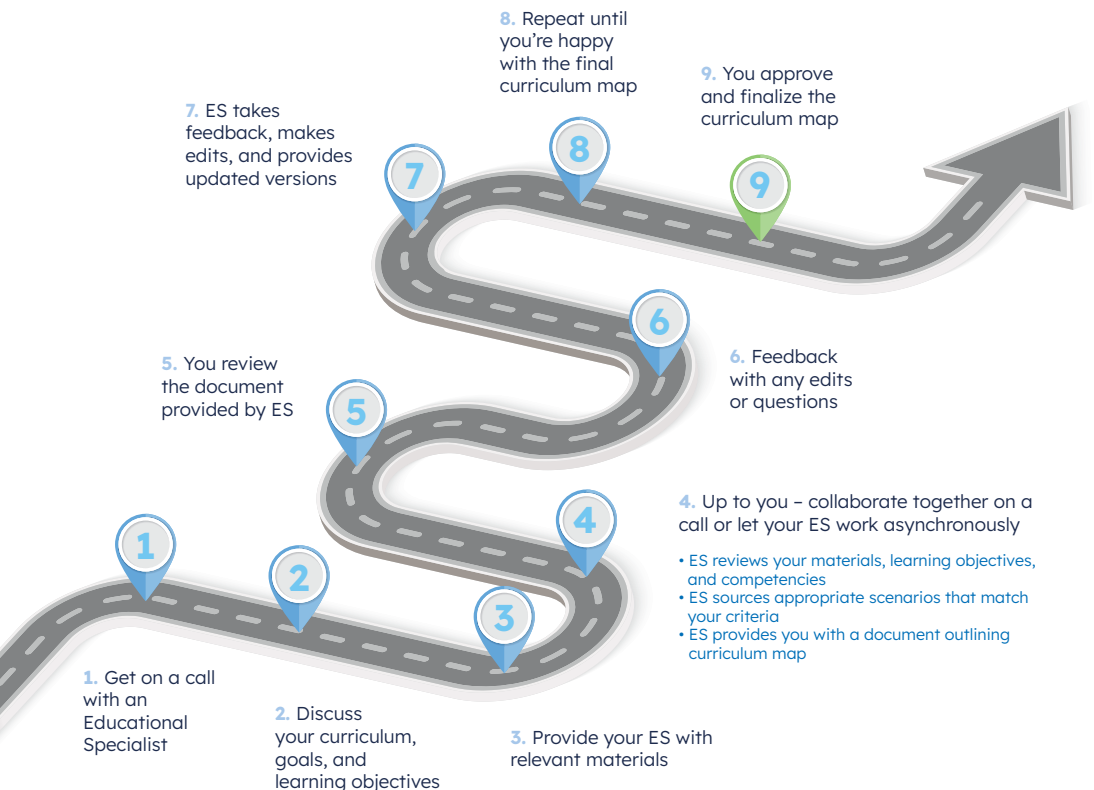
## Chapter 4

# Curriculum Mapping as a Service

While you know your curriculum best, the OMS Scenario Library houses over 240 scenarios - it's no small feat to comb through each one and pick out your favorites!

Because of the unique intersection of their collective background and experience, ES's can help you seamlessly pair course objectives with VR scenarios. They can also give you insights into how to prepare learners and get faculty buy-in to make your implementation smooth.

When you start the curriculum integration process with OMS, an Educational Specialist will walk with you through identifying opportunities for meaningful learning with VR. They'll help you figure out where and how to embed VR into your existing curriculum, discuss possible activities that may suit your learners, and provide you with resource materials you can take with you in the process.



Aligning VR scenarios with your curriculum is a core part of the process in working with OMS, and it's all included as a part of the service we provide.

When you start your journey with OMS, a curriculum mapping workshop is just one of the many services provided to you at no additional cost.

Our knowledgeable ES's work side by side with you providing tailored insights into concepts, competencies, and skills associated with OMS scenarios - and ensuring you get the most out of the OMS platform.





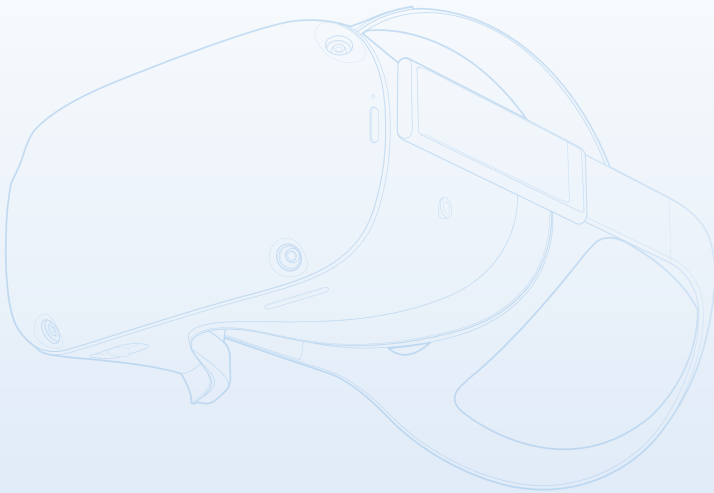
## Conclusion & next steps

VR can be implemented in lots of different ways to suit the needs of learners and support learning objectives. To make the selection process simpler, consider starting with your learning objectives, key concepts, or any identified gaps. This can narrow down your options and provide clarity on where exactly VR can fit to optimize your and your learners' experiences.

As you get further into the process, you may want to work with a knowledgeable guide to help you determine the ways in which VR can support your curriculum and best help your learners.

Once you've gone through the mapping process, it's onto the planning and implementation phase, putting it all together, and getting VR scenarios into your learners' hands.

Whatever outcome you're looking to achieve, find the right team to support your plan, making all the difference.



# Speak to an expert!

When you're considering using virtual reality to support your existing curriculum, just know you don't have to take on the task alone.

From software fit to hardware needs, buy-in, training, and measuring success - it can be a heavy lift, but it can be streamlined and simplified with the right support and tools. To learn more about how OMS can help you build out your VR program, book a call with one of our Educational Specialists - and you're off!

To get a sense of what you can expect when partnering with OMS, scan the QR code below to book your demo, or visit [oxfordmedicalsimulation.com](http://oxfordmedicalsimulation.com) to learn more about what we do.



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