



TRANSDISCIPLINARY LEARNING IN HEALTHCARE EDUCATION

Nurse Assistant / Dietitian / Oral hygienist / Nurse

Duration: 7 hours (Wednesday+Thursday)

International teams

Oscar – Challenge

(teacher version)



CHALLENGE

Start date: 20/11/2024
Finish date: 21/11/2024

Duration: 3h 30 minutes (Wednesday)
– 3h 30 minutes (Thursday)



Student information is written in BLUE

Teacher preparation is written in RED

OBJECTIVES / LEARNING OUTCOMES

TECHNICAL SKILLS

ANATOMY

- To understand physiological revalidation of the patient it is important to know the basics of anatomy of the lower leg (bones + muscles)

TECHNICAL NURSING INTERVENTIONS

- Good care and knowledge of aseptic techniques (wound care protocols) are important to stimulate wound healing
- Good knowledge of the use of anticoagulants and pain medications

PSYCHOLOGY

- As a healthcare professional it is important to have a basic knowledge about the psychological impact of illness and trauma on your daily life
- As a healthcare professional it is important to know how to organize transdisciplinary care

SOFT SKILLS

INDIVIDUAL SKILLS

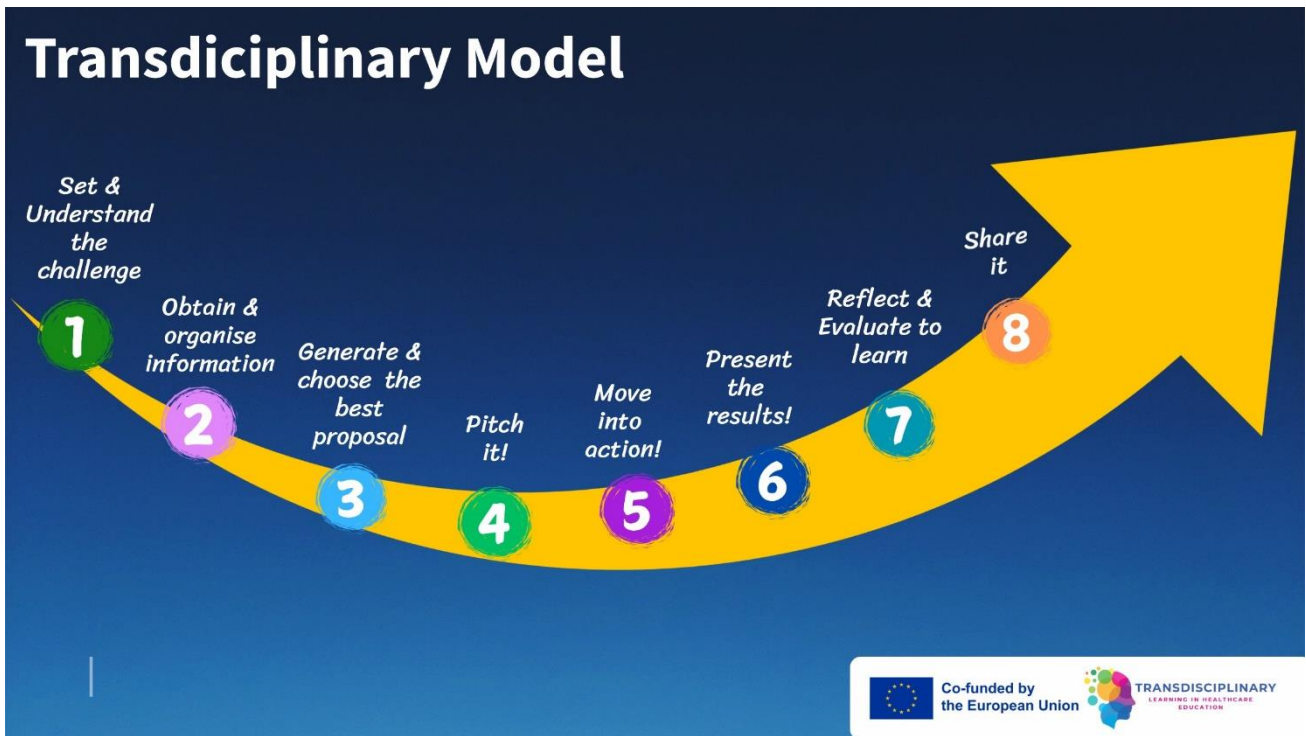
- Autonomy, involvement and problem solving skills

COMMUNICATION SKILLS

- Oral and written communication

COLLABORATIVE COMPETENCE

- Teamwork and leadership



ACTIVATE THE TEAM

Expected duration: xxxx

In case, it was needed, the Dynamic of colours could be used.

1. SET & UNDERSTAND THE CHALLENGE (Wednesday)

Expected duration: 90 minutes

Oscar is a 19-year-old male student from Germany, studying and living in Hasselt, who was recently discharged from the hospital. He was admitted for an open tibia fracture and had an operation to repair the bone. Stubborn as he is, Oscar wants to stay in Belgium and continue his studies at PIVH. Because of his operation he needs help for almost every activity of his daily life including going to school.

We expect from you to help Oscar organise his revalidation and organizing his stay/studies in Belgium in a transdisciplinary way.

RESULTS	
PRODUCT 1	Make a list of all the problems Oscar can face in his daily life during his revalidation
PRODUCT 2	Find a solution for all the problems Oscar can face in his daily life during his revalidation
PRODUCT 3	Make a presentation that contains Oscar his problems and your transdisciplinary solution
PRODUCT 4	Make a short abstract about the technical AND the soft skills you learned about solving this challenge (integrate this in your presentation)

Make sure that the learners have understood what they have to do.

Briefly review the 8 steps from “The Arrow Model” and explain what students should do at each step

- Dynamic 1: Each person writes on 1 post-it what they have understood to do in the challenge (maximum 10 words).

2. OBTAIN & ORGANISE INFORMATION (Wednesday)

Expected duration: 45 minutes

- Read the case-study carefully
- Ask the supervisors for additional information if necessary
- Look up things that are unclear to you or that you do not understand (you can use a computer, ipad, phone or every other information source you find appropriate)

In this section, students should come up with the knowledge needs they have in order to solve the challenge.

They have to write questions that need to be answered in order to solve the challenge.

If students don't come up with any questions, teachers should guide them into making the right questions

Examples:

- What is the distance between the dorm and school?
 - Check google maps, you can find out yourself
- What type of rehabilitation exercises Oscar has to do?
 - If allowed by the surgeon
 - Folding and stretching of the knee (while sitting and lying down)
 - Folding and stretching of the ankle and foot
 - Lower limb strength training
- Where can he do them in Hasselt? Are there any physiotherapists in Hasselt?
 - Yes, search for them in google
- How long will the recovery expected to take?
 - Full recovery takes 3-6 months, but personal factors play an important role in rehabilitation
- Can he continue the study on part time base?
 - Why do you think it is necessary to study on part time bases?
- Are there flexible class schedules or online learning options?
 - All learning materials are available online via smartschool, but we have to encourage Oscar to attend as many lessons as possible
- Is there access to accessible toilets?
 - Yes, every floor has toilets and both buildings have an elevator
- Who can help carrying his school materials?
 - Classmates???
- What in case of emergency like fire?



- The elevator must not be used. Either he can go down the stairs, or he can go through the intermediate door to the PXL section (small hammer with a key at each door).
- Possibility to extend deadlines or extra time for exam?
 - Why is this necessary? Oscar has a problem with his leg, not his arms or head?
- Who can assist Oscar with his daily tasks (Groceries, transportation, ...), Which supermarkets is nearby? Or is there the chance to arrange grocery deliveries or assistance from other students?
 - Talk to Oscar... what does he wants?
 - There are shops in Belgium who delivers groceries at home (Delhaize)
- What are the legal and insurance implications for Oscar? What about the insurance policies, if any, from the home university?
 - <https://economie.fgov.be/nl/themas/financiele-diensten/verzekeringen/specifieke-situaties/erasmusstudenten-het>
 - <https://wegwijs.vlaanderen/article/polissen-voor-erasmusstudent/>
 - Oscar has a special Erasmus-insurance to cover all the costs
- Who is responsible for the insurance matters in Belgium? And who is contactperson in Germany?
 - Erasmus-students are responsible for their own insurance. The guest country doesn't arrange insurance
- Does he have braces, crutches or... whatever he needs?
 - Crutches for sure, if he wants, maybe a wheelchair is appropriate for further travel
- Is there help for cleaning his studio or doing laundry while he is unable to do this himself?
 - Familiehulp
- Can his home university in Germany coordinate with the Erasmus program in Belgium to ensure he can continue his study?
 - Communication and coordination is always an option
- What is the duration of the Erasmus program?
 - 3 months: November-december-januari
- What is Oscar's medical history?
 - Check case-study
- Where is Oscar staying? Dormitory? Studio? Host family?
 - Check case-study
- Is there another room available at the school's boarding school?
 - If rooms are available, he can stay at boarding school. But I don't think Oscar will like to move
- Are there any other Erasmus students from his country?
 - NO
- How does Oscar cope with adversity? Is he a positive, entrepreneurial person?
 - As an Erasmus-exchange-student Oscar is always up for a challenge. He doesn't want to go home and he wants to finish his exchange program
- Are there local services or student groups that can provide emotional support during this period?
 - care coach pivh
 - www.desocialekaart.be
 - www.centrageestelijkegezondheidszorg.be
 - www.kohesi.be
 - Flemish association for students (vva.ac)
 - www.zelfhulpgroep.be No self-help group around open-leg fracture, but secondary problems

There will be different ways of obtaining that information such as: students find it themselves, teachers give lectures, there are external professionals who give masterclasses...

3. GENERATE & CHOOSE THE BEST PROPOSAL (Wednesday)

Expected duration: 45 minutes

- Think *individually* about how you will solve the challenge and what resources you will need to do so
- Decide in your *group* which is the best option to solve the challenge (you can combine several options if the group thinks this is the best option)
- Think about your pitch!

Each student has to think about how he/she will solve the challenge and what resources he/she will use to do so.

In a small group of 3-4 people, students choose the best option to solve the challenge.

4. PITCH IT! (Wednesday)

Expected duration: 2 minutes per group / 20 minutes in total

- Explain in the international group how your group is going to solve the challenge, ideas,...
- Listen to the ideas of the other groups

Each team explains what they have decided to do, how they are going to approach the challenge and they listen to other people's ideas. Make it short: each team has **2 minutes** to explain the proposal.

A timer will be projected.

<https://www.google.com/search?client=firefox-b-d&q=timer+online>

5. MOVE INTO ACTION! (Wednesday)

Expected duration: 100 minutes

- Make a list of all the problems Oscar can face
- Try to find a solution for these problems (*think in a transdisciplinary way!*)
- Make a presentation about your work and how you are going to help Oscar

They have to make a small draft of the steps they are going to take to solve the challenge, the resources they'll use, the ideas...

Students have to organise themselves to solve the challenge in an effective and efficient way.

This step could be developed further with more time and using tools like Trello or Excel but in this case, it is not applicable.

6. PRESENT THE RESULTS (Thursday)

Expected duration: 15 minutes per group / 90 minutes in total

- Present your groupwork to the international group

Students present their results in front of the rest of the class. Each team will have 15 minutes to present.

7. REFLECT & EVALUATE TO LEARN (Thursday)

Expected duration: 10 minutes per group / 120 minutes in total

- Receive feedback on your work and answer possible questions
- Reflect on your work

Students and teachers receive feedback on the work done among international teams. Check out the rubric on the next page for more evaluation information.

8. SHARE IT (Thursday)

Expected duration: xxxx

Students have to share some of the content of the challenge on their social media, blogs, school boards.

PRODUCT RUBRIC				
	4	3	2	1
TECHNICAL SKILLS				
Understanding and Follow-up results (product 1-3)	Analysis is insightful, comprehensive, and demonstrates a deep understanding of patient perspectives and barriers to adherence	Analysis is accurate and informative, but may lack some depth or detail	Analysis is generally accurate but may contain minor errors or omissions	Analysis is incomplete or inaccurate, and does not adequately address the issue
Anatomy	Anatomy of the lower leg is well known on a professional level (use of medical terminology)	Anatomy of the lower leg is sufficient at patient level	Anatomy of the lower leg is known but contains minor errors or omissions	Knowledge of the anatomy of the lower leg is insufficient or missing from the presentation
Technical nursing interventions	Knowledge of wound care protocol and the use of anticoagulants/pain medication is sufficient and performed at professional level	Knowledge of wound care protocol and the use of anticoagulants/pain medication is sufficient, max 1 minor error is made	Knowledge of wound care protocol and the use of anticoagulants/pain medication is sufficient but contains multiple minor errors, guidance is necessary	Knowledge of wound care protocol and the use of anticoagulants/pain medication is insufficient, sterility errors are made or missing from the presentation
Psychology	Knowledge of the psychological impact of trauma on the daily life and the transdisciplinary approach is consistently embedded through the presentation	Knowledge of the psychological impact of trauma on the daily life is sufficient and a transdisciplinary approach is used now and then	Minimal recognizing the psychological impact of trauma and a minimal transdisciplinary approach is used in the presentation	Minimal or not recognizing the psychological impact of trauma and not approaching the patient on a transdisciplinary way
SOFT SKILLS				
Individual skills	Demonstrates initiative, works independently, meets deadlines consistently, consistently contributes valuable ideas	Works independently most of the time and follows guidelines, participates in team activities and sometimes suggests ideas	Requires occasional guidance to complete tasks but not always fulfill commitments	Requires constant support and assistance, demonstrates poor attendance, time management or respect for materials
Collaborative competence	Effectively manages conflicts, contributes positively to the team, and fosters a positive atmosphere	Collaborates well with the team and contributes to a positive environment	Collaborates but may occasionally cause tension within the team	Does not collaborate and creates a negative team environment
Communication skills	Communicates clearly, confidently, and effectively, maintaining eye contact and adhering to time limits (oral and written)	Delivers clear and organized presentations but may have minor issues (oral and written)	Communicates basic ideas but struggles to express them clearly (oral and/or written)	Has difficulty communicating and disrespects others' opinions (oral and written)

MAKE-UP ACTIVITIES

GENERAL ACTIVITIES to improve your work, applicable to everyone.

Make-up activities RUBRIC				
	4	3	2	1
TECHNICAL SKILLS				
Understanding and Follow-up results (product 1-3)	You have reached level 4. CONGRATULATIONS! Continue to repeat the materials regularly to keep your knowledge and skills up to date!	Further dept or exploration of patient perspectives could enhance the analysis	Ensure to review all relevant patient factors to minimize omissions and errors	Further analysis and additional effort is needed to address missing perspectives
Anatomy			Revisit key anatomical structures to reduce errors and ensure completeness	
Technical nursing interventions			Regular practice and feedback on protocol adherence can help reduce these errors	
Psychology		More consistent use of a transdisciplinary approach will enhance patient care perspectives		It is important to acknowledge and integrate psychological factors for a more holistic care approach
SOFT SKILLS				
Individual skills	You have reached level 4. CONGRATULATIONS! Continue to repeat the materials regularly to keep your knowledge and skills up to date!	More frequent contributions of ideas can improve initiative and team dynamics	Focus on building consistency in task completion and personal responsibility	attendance, time management needs improvement or respect for materials insufficient
Collaborative competence		Proactively manage conflicts or challenges to further enhance the team's cohesion	Focus on conflict resolution strategies to minimize tension and improve teamwork	Improving communication and team engagement will foster a more positive working dynamic
Communication skills		Address any minor issues with structure or clarity to improve overall communication (oral and written)	Practice communication techniques to enhance clarity and precision	Focus on respectful dialogue and clear communication techniques to engage more effectively

SPECIFIC ACTIVITIES to improve your work, activities on a personal level.

- ...
- ...

RESOURCES

Interesting links to solve the challenge:

- <https://www.desocialekaart.be/>
- <https://www.healthline.com/health/orif-surgery>
- <https://www.youtube.com/watch?v=30Wev9UqnfY&rco=1>
- <https://www.youtube.com/watch?v=Zqxi82oDyGA&t=661s> (first 11 minutes are the most important in this case study)
- <https://www.nationalelfservice.net/mental-health/ptsd/injury-physical-psychological-social-impact/>
- <https://www.mind.org.uk/information-support/types-of-mental-health-problems/trauma/effects-of-trauma/>

TIMING

Wednesday 20/11/2024					Thursday 21/11/2024		
Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Set & understand the challenge	Obtain & organise information	Generate & choose the best proposal	Pitch it!	Move into action!	Present the results!	Reflect & Evaluate to learn	Share it
Time per step							
60' challenge+arrow 30' dividing groups	45' Case study + questions + collect info	45'	2'/group 20' total time	100'	15'/group = 90' total time	10'/group 5' change group = 15'/group 30' general FB = 120' total time	

CLASS DIARY

Teachers should write a summary of what is done every session at the classroom.

DATE	CARRIED OUT ACTIVITY

ASSESSMENT OF THE CHALLENGE – AREAS FOR IMPROVEMENT

TIMING	
RESOURCES	
THE CHALLENGE	
TEACHING TEAM	
STUDENTS	