







| GENERAL INFORMATION | |
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| Module | 1. THINKER Project overview and first introduction to authentic learning and gender-inclusive practice |
| Unit | 1.2:  *Introduction to the authentic learning approach and gender inclusion in informatics education* |
| Target Group | Upper primary/lower secondary education teachers/trainers |
| Duration | 60 minutes |
| Prerequisites | / |
| ECTS | 0,04 |

| LEARNING OUTCOMES | |
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| 1 | Define and explain the main authentic learning concepts required to design an authentic learning environment |
| 2 | Provide examples of authentic learning practices in real classroom scenarios |
| 3 | Understand how authentic learning concepts can enhance gender inclusivity |
| 4 | Identify gender biases in informatics education and discuss their impact |
| 5 | Develop an authentic learning activity with an emphasis on gender inclusion |
| 6 | Reflect on their teaching practices and explore how to implement authentic learning concepts and reduce gender biases in informatics education |

| TEACHING METHODS (select all that apply) | | | | |
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| √ | Learning by doing | √ | Peer learning |
|  | Project-based learning | √ | Hands-on learning |
| √ | Active learning strategies | √ | Collaborative learning |
|  | Blended learning |  |  |

| LEARNING MATERIAL | |
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| Required material | * PowerPoint Presentation * THINKER Resources: * THINKER Framework and Toolkit available at: [https://thinker.ucd.ie/resources/framework-and-toolkit/](https://tinker-project.eu/resources/framework-and-toolkit/) |
| Additional resources | Here you can find some additional resources for authentic learning and gender inclusion:   * Videos for authentic learning practices available at: <https://www.youtube.com/@JanH119/videos> * Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development*, *48*(3), 23-48. <https://link.springer.com/article/10.1007/BF02319856> * Insights for Gender-sensitive pedagogy: * <https://www.brookings.edu/wp-content/uploads/2018/11/Hawah-Nabbuye-FOR-WEBSITE.pdf> |

| UNIT CONTENT | |
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| Introduction | *This unit will explore the following topics:*   * *the need for an authentic and gender-inclusive approach by highlighting the identification and effects of gender biases in education and informatics* * *examples of authentic learning and gender-inclusion practices* |
| Activities | 1. Welcome and ice-breaker (10 minutes) Slide 7  Purpose: This icebreaker will help teachers recall the information they have learned in Unit 1.1. regarding authentic learning.   * Warm welcome * Start with the following: “Think about what you have learned so far regarding authentic learning. Consider the main ways that you can implement authentic learning practices in your classroom”. * Ask the participants to share their insights, by recording their thoughts on a collaborative tool, such as Padlet. * Briefly highlight key takeaways (e.g. Looking at the Padlet, we can see the main topics learned so far.…). * Explain the main topic of this unit and its expected outcomes. |
| 2. Understanding authentic learning concepts and how they can enhance gender inclusion (20 min) Slide 8  Purpose: This activity will help teachers to better understand the authentic learning principles and how these can be implemented in real classroom settings to reduce gender biases.  **2.1. Introduction to the main concepts of authentic learning (slides 8, 9, 10, 11, 12, 13)**   * Explain the main concepts of authentic learning. * Provide examples of how each concept can be used to enhance gender inclusivity. * While presenting each authentic learning principle, engage participants in discussion. * Use **open-ended questions** as well as **personal reflection strategies** to engage the participants. * Example Slide 8: Question: "Looking at this definition of 'Authentic Context,' what immediately comes to mind for you in terms of your own teaching or learning experiences?" or “Think about a time when you learned something really effectively because it felt 'real' or relevant. What made that experience authentic for you?” * Example Slide 9: Question: “The text mentions that authentic practice 'builds confidence.' For which gender groups might this confidence-building be particularly crucial in your subject area, and why?” or “When we encourage students to 'think and act like practitioners,' what kind of diverse role models can we bring into the classroom (virtually or physically) to make these roles feel accessible to all genders?”. * Explain the need for applying authentic learning practices in informatics.   **2.1 Activity 1: Group Activity (slide 14)**   * Split the participants into groups. * Based on the examples of authentic learning concepts presented, each group will be assigned with 1 scenario card and try to describe initial strategies for integrating authentic learning experiences into informatics education to make learning more engaging and meaningful. * To facilitate a broader discussion, participants will form new, diverse groups, ensuring representation from each original group, to share and discuss their authentic learning principle examples. Each group shares one example on a collaborative tool, such as Padlet.   Outcome: Teachers start understanding authentic learning concepts and how these can be applied in practice. |
| **3. Understanding gender-inclusion biases (20 min)**  Purpose: This activity will help teachers to better understand gender-inclusion and gender-biases in education.  **3.1. Introduction to gender biases in education**   * Present the main gender inclusion & gender biases and explain how these could be addressed. (slides **15**, **16**) * Show common gender biases in informatics education. (slide **17**) * Present some initial strategies of how gender biases can be addressed in informatics education. (slide **18**)   **3.2. Activity 2: Self-reflection prompt** (slide **19**)   * Divide the teachers in small groups. * Have them to discuss the following: * How have you applied gender-inclusion in your classroom? * What do you think are some of the most important barriers in applying gender-inclusion strategies in your classroom and how these could be overcome? * Ask the groups to share their insights for overcoming barriers to gender inclusion, by recording their ideas on a collaborative tool, such as Padlet. |
| **4. Reflection and Conclusions (10 min)**  Slide 20  Participants reflect on how their teaching practices align with authentic and gender-inclusive practices. |
| Assessment | Evaluating understanding through discussions within the groups and the classroom during the lesson. At the end of the lesson, participants also prepare a draft plan of how one of their lessons could be enhanced by using authentic learning principles while ensuring gender-inclusion and have it ready for the next lesson. |

| KEY TAKEAWAYS | |
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| Reflection and Conclusion | In this lesson, we expanded our understanding of **authentic learning** and its role in promoting **gender-inclusive informatics education**. Through the **examples** presented, we explored **practical applications** of these principles.  Reflect on how **authentic learning approaches** can enhance your teaching. Consider questions like: **Are my teaching activities relevant and engaging for all students? Do they encourage diverse perspectives? How can I ensure gender inclusivity in my classroom?** Use the **self-reflection framework** available in the THINKER’s framework to guide your evaluation.  To consolidate your learning, apply one authentic learning approach in your classroom and assess its impact. Share your experiences and challenges in future discussions. Remember, the integration of **authentic** and **inclusive practices** is an ongoing process. |
| Homework/ Additional Tasks | / |