RO-Project-TEMP Intervention 'Recipe'

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Mathematical Concept(s):	Intersection of bisectors into a triangle
Digital Tool:	GeoGebra Resources
Preparation Time:	20 minutes
Lesson Time:	50 minutes

Purpose (Why do this intervention?)

Potential Outcomes for students and teachers:
Students will be able to discover the properties of the bisectors intersection in a triangle and learn the property of the centre of inscribed circle in a triangle.
Recorded Benefits for students and teachers:
Students will visualize better the intersection of bisectors and tangent points of inscribed circle with the sides of triangle...

Process (A step by step 'how to' implementation of this intervention)

Teacher 'How to'	Student 'How to'
- Review the notion of angle bisector and properties of points located on this bisector. The teacher presents the old Geogebra resources for these concepts. - Leads the students in a step by step demonstration about intersection of angles bisectors. Define the notion of centre of inscribed circle in a triangle. - Presents a Geogebra resource with a relevant drawings of inscribed circles and tangent points.	-Students notice and visualize the intersection point of bisectors in a triangle. -Students discover the property of centre of inscribed circle. -Students modify dynamically the triangle parameters and observe the circle radius in new cases. - Students build a demonstration for intersection of bisectors in a triangle, using the teacher' remarks. In their notebooks, students write the full demonstration of intersection of bisectors in a triangle.

Products (If applied what will the successful intervention look like?)

The teacher's job would be easier if he uses old and recent Geogebra resources. He can use the same resource for different parameters of triangle' angles in a short time.
The visualization of bisectors in different cases will facilitate the understanding of the inscribed circle. Most of the students would demonstrate easily step by step the property for this special point in a triangle.