“Good Problem” Criteria - 3D Designing and Printing

**Authenticity**

Not a real problem/3D Printed Solution Not Really Needed Someone Would be Helped by a 3D Printed Solution

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**Urgency and Time**

Must be solved Right Now! We Have Time to Solve This

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**Physical Constraints - Material**

Cannot be Solved with a Plastic device Can be Solved with a Plastic Device

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**Physical Constraints - Size**

Solution Will be Big, Take Lots of Material Solution Could be Small

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**Improvement of Student Designing**

Too Simple - Designer Won’t Grow, Improve Through Challenge Designer Could Grow, Improve Through Challenge

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**Difficulty**

Problem Seems Too Difficult to Solve Relatively Simple Solution Seems Possible

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**People**

Only the Designer Will be Involved Lots of Opportunities for Many Others to be Involved

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**Cycle of Improvement**

Difficult to Prototype and Improve Lots of Potential to Prototype and Improve Many Times

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**Use of Resources**

Not Really a Good Use of Printers, Material, Time, Energy An Excellent Use of Printers, Materials, Time, Energy

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**Impact**

Impact Will Likely Be Low/Little Pride in Solution Impact Could be High/Important Solution/Used by Many/Much Pride

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