## Main Criteria: Forward Education

Secondary Criteria: CSTA K-12 Computer Science Standards

Subjects: Mathematics, Science, Technology Education

Grades: 7, 8, Key Stage 3

## **Forward Education**

## Smart Farming with Hydroponics & LED Grow Lights

## CSTA K-12 Computer Science Standards

**Technology Education** Grade 7 - Adopted: 2017

LEVEL	CST A.2.	Level 2 (Ages 11-14)
STRAND / COURSE	2-AP.	Algorithms & Programming
LEARNING OUTCOME / STRAND		Algorithms

LEARNING OUTCOME

OUTCOME

2-AP-10. Use flowcharts and/or pseudocode to address complex problems as algorithms. (P4.4, P4.1)

LEVEL	CSTA.2.	Level 2 (Ages 11-14)
STRAND / COURSE	2-AP.	Algorithms & Programming
LEARNING OUTCOME / STRAND		Modularity

2-AP-13. Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs. LEARNING OUTCOME (P3.2)

LEVEL	CSTA.2.	Level 2 (Ages 11-14)
STRAND / COURSE	2-AP.	Algorithms & Programming
LEARNING OUTCOME / STRAND		Program Development

2-AP-15. Seek and incorporate feedback from team members and users to refine a solution that meets user needs. (P2.3, LEARNING OUTCOME P1.1)

LEVEL	CSTA.2.	Level 2 (Ages 11-14)
STRAND / COURSE	2-IC.	Impacts of Computing
LEARNING OUTCOME / STRAND		Social Interactions
LEARNING	2-IC-22.	Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a

CSTA K-12 Computer Science Standards

computational artifact. (P2.4, P5.2)

Technology Education

Grade 8 - Adopted: 2017

STRAND / COURSE	2-AP.	Algorithms & Programming
LEARNING OUTCOME / STRAND		Algorithms

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LEARNING
OUTCOME
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Z-AP-10

2-AP-10. Use flowcharts and/or pseudocode to address complex problems as algorithms. (P4.4, P4.1)

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STRAND / COURSE	2-AP.	Algorithms & Programming
LEARNING OUTCOME / STRAND		Modularity

LEARNING OUTCOME 2-AP-13. Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs. (P3.2)

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LEARNING OUTCOME / STRAND		Social Interactions
LEARNING	2-IC-22.	Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a

OUTCOME

computational artifact. (P2.4, P5.2)