Thoughts on Maker Education
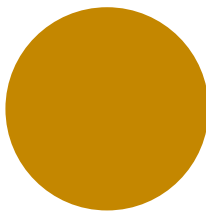
● KINDERGARTEN THROUGH GRADE 12   ● HIGHER EDUCATION

YOUR KNOWLEDGE OF MAKER EDUCATION

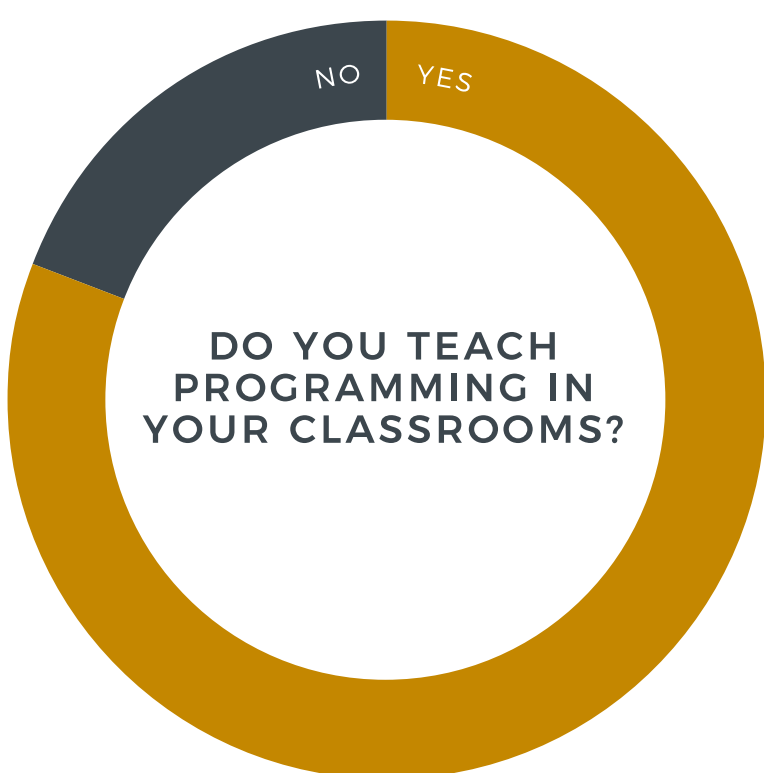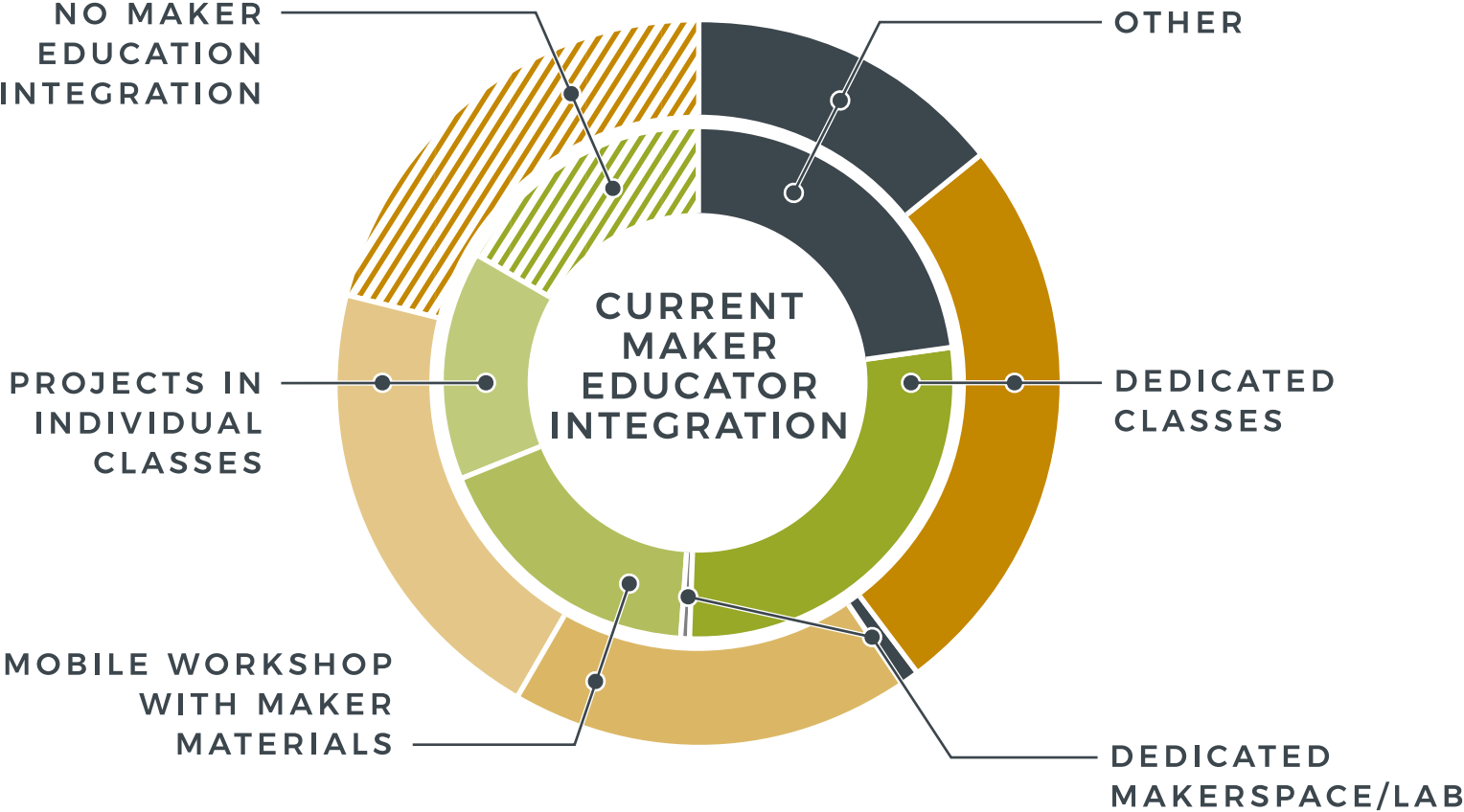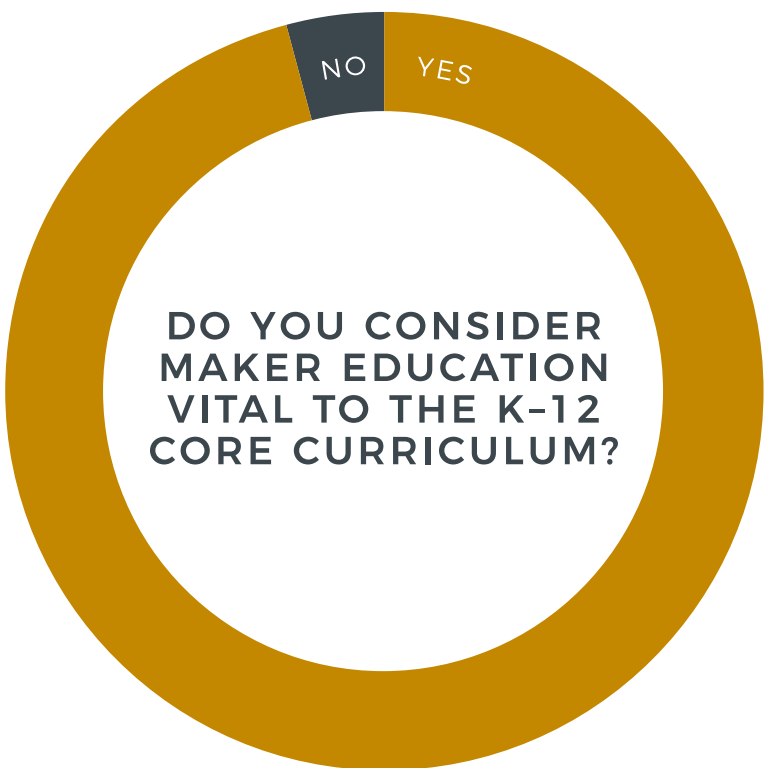EXPERT
PROFICIENT
BEGINNER
INTERMEDIATE

DO YOU CONSIDER MAKER EDUCATION VITAL TO THE K–12 CORE CURRICULUM?

NO   YES

CURRENT MAKER EDUCATOR INTEGRATION

NO MAKER EDUCATION INTEGRATION
PROJECTS IN INDIVIDUAL CLASSES
MOBILE WORKSHOP WITH MAKER MATERIALS
OTHER
DEDICATED CLASSES
DEDICATED MAKERSPACE/LAB

DO YOU TEACH PROGRAMMING IN YOUR CLASSROOMS?
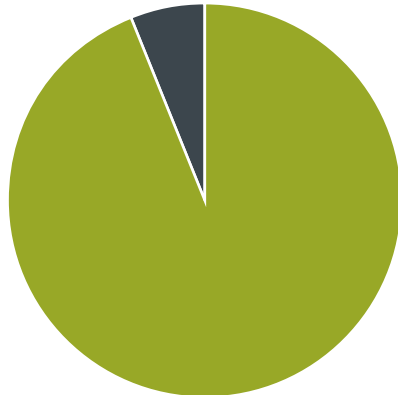
NO   YES

WHAT DO YOU THINK THE BIGGEST OBSTACLES ARE TO INTEGRATING MAKER EDUCATION?

- LACK OF EDUCATOR PREPAREDNESS
- LACK OF EDUCATOR INTEREST
- LACK OF ADMINISTRATOR PREPAREDNESS
- LACK OF ADMINISTRATOR SUPPORT
- LACK OF FUNDING
- LACK OF SPACE
- DEVELOPING A COMPREHENSIVE PLAN
- GENERATING PROJECT IDEAS
- OTHER (PLEASE SPECIFY)

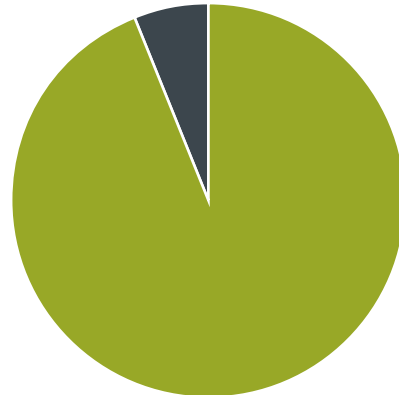0   30   60   90   120   150

(SURVEY RESPONDANTS)
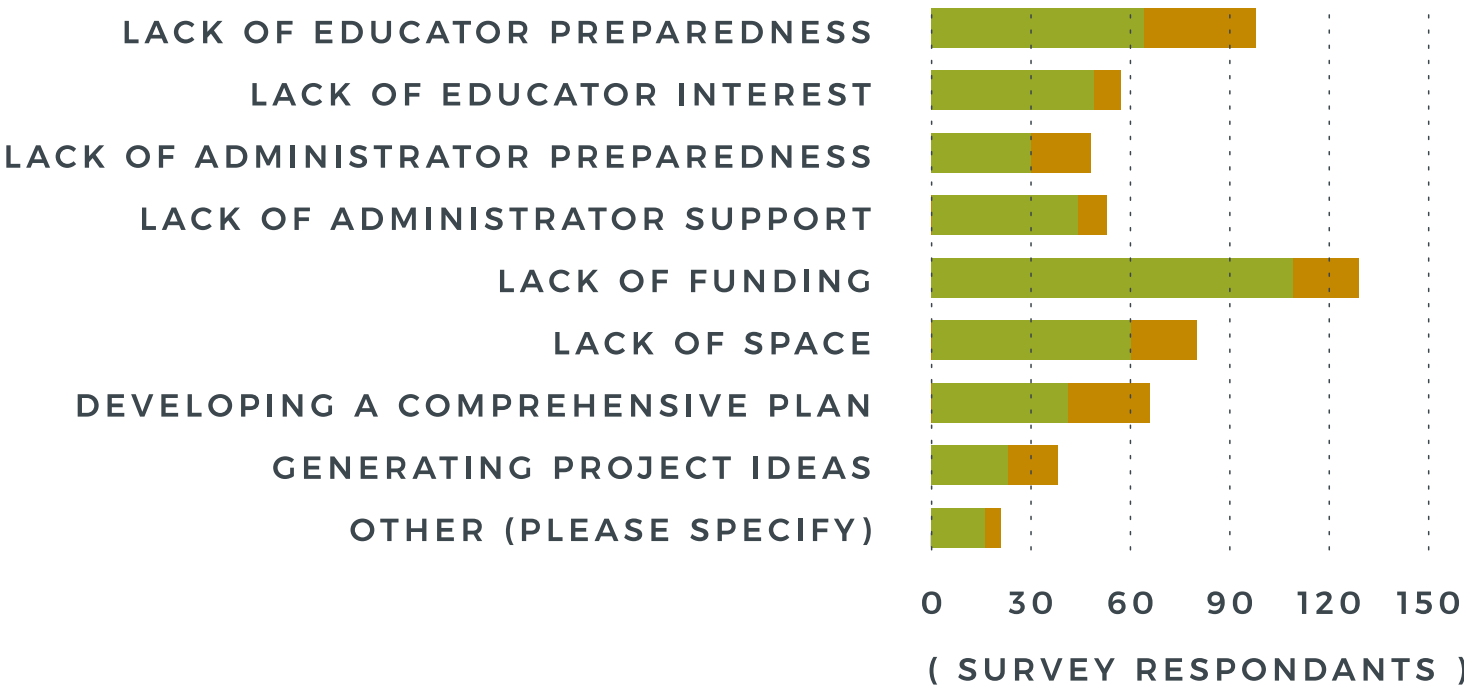
DO YOU BELIEVE…

…THAT MAKER EDUCATION CAN HELP DIVERSIFY THE STEM WORKFORCE?

94% YES
6% NO

…THAT MAKER EDUCATION CAN SUPPORT UNDERGRADUATE RETENTION?

93.9% YES
6.1% NO

TOP PROGRAMMING LANGUAGES USED IN K–12 CLASSROOMS

- Scratch (36%),
- Arduino (33%),
- Python (28%),
- Javascript (25%)

WHAT IS THE VALUE AND IMPACT OF "MAKING" ON COLLEGE CAMPUSES?

- Applications of theory/knowledge
- High
- Hands-On Learning
- Increased Student Engagement and Learning
- Provides Professional Skills

INTEREST IN ASPECTS OF MAKER EDUCATION

On a scale of 0–4

- CITIZEN SCIENCE/DATA COLLECTION AND ANALYSIS
- ROBOTICS
- PROGRAMMING/CODING/COMPUTER SCIENCE
- FABRICATION (3D PRINTERS, CAD, TOOLS)
- EMBEDDED ELECTRONICS
- E-CRAFTING/E-SEWING
- CONNECTING PROJECTS TO THE INTERNET/INTERNET OF THINGS

0   1   2   3   4

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