Engage, Educate, and Assess: Everyday Instructional Design Practices In Medical Schools

December 1, 2020

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Disclosures

The opinions, conclusions, and recommendations expressed or implied do not necessarily reflect the views of the Department of Defense or any other department or agency of the federal government.

The team members have no other disclosures.

Session Overview

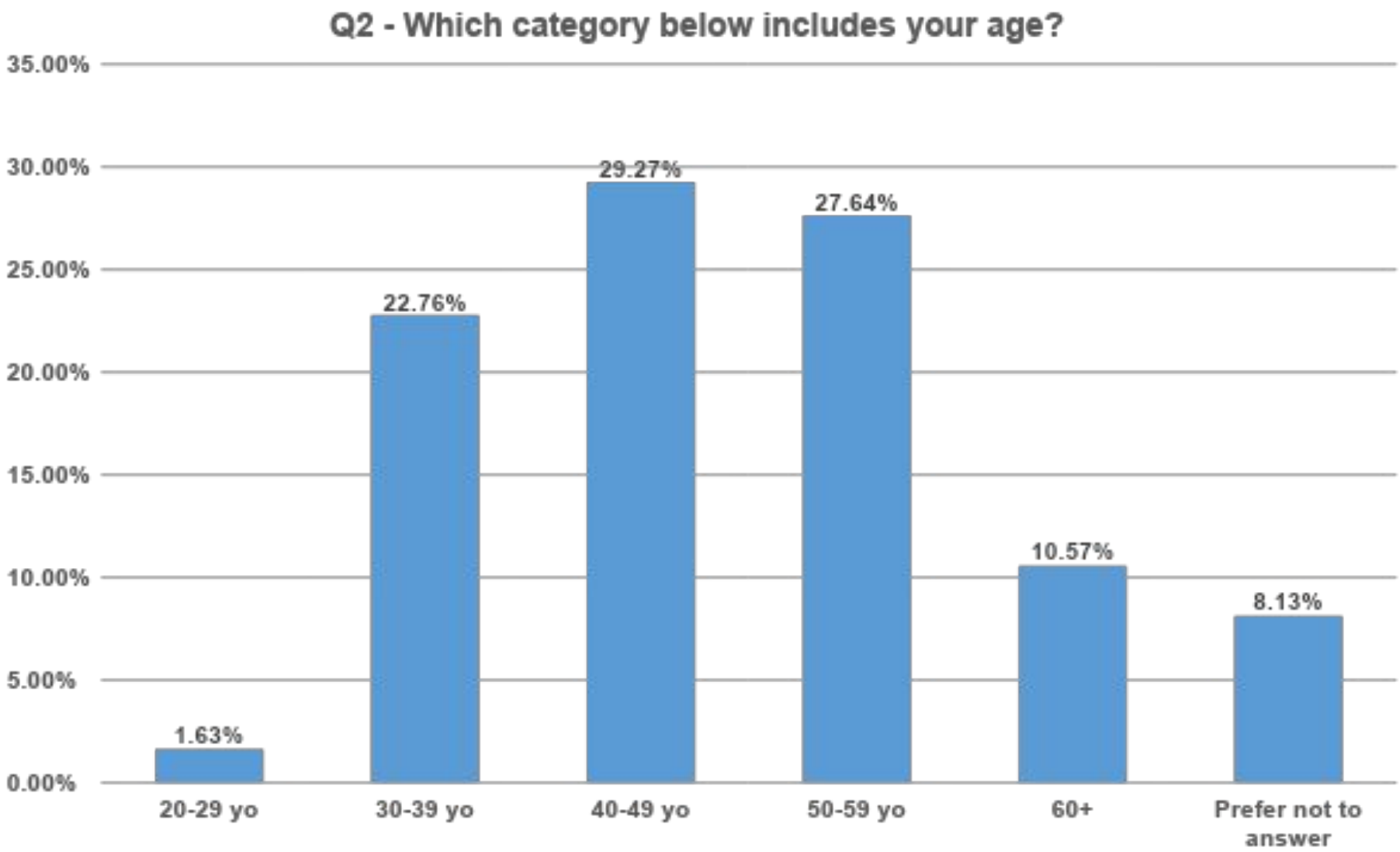
1. Demographics
2. LMS usage
3. Strategies & Tools
4. Challenges
5. Schools Best Practices
6. Q & A

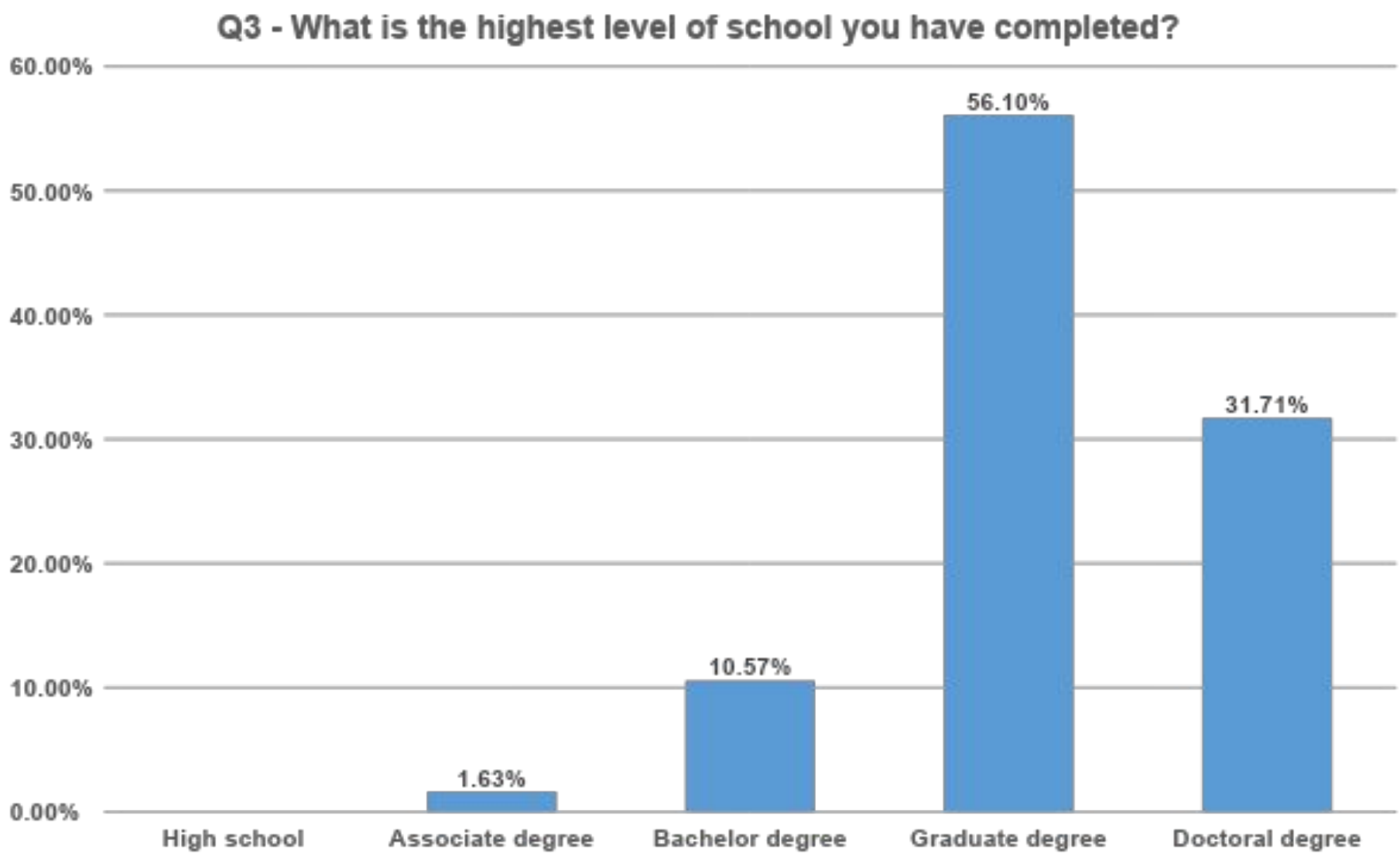
Session Objectives

After completion of this session participants in this webinar will be able to:

1. Describe strategies and tools used by instructional designers.
2. Consider the use of tools presented in survey within own context.
3. Compare current workflow practices to those highlighted.
4. Discuss the results of survey as applied to everyday practice.
5. Reflect on the role of instructional design in medical education.

1. Demographics


Q2 - Which category below includes your age?
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
1.63%
22.76%
29.27%
27.64%
10.57%
8.13%
20-29 yo
30-39 yo
40-49 yo
50-59 yo
60+
Prefer not to answer


Q3 - What is the highest level of school you have completed?
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
56.10%
31.71%
10.57%
1.63%
High school
Associate degree
Bachelor degree
Graduate degree
Doctoral degree

What is your job title?

Top

1	Educational Technologist
0	Instructional Designer

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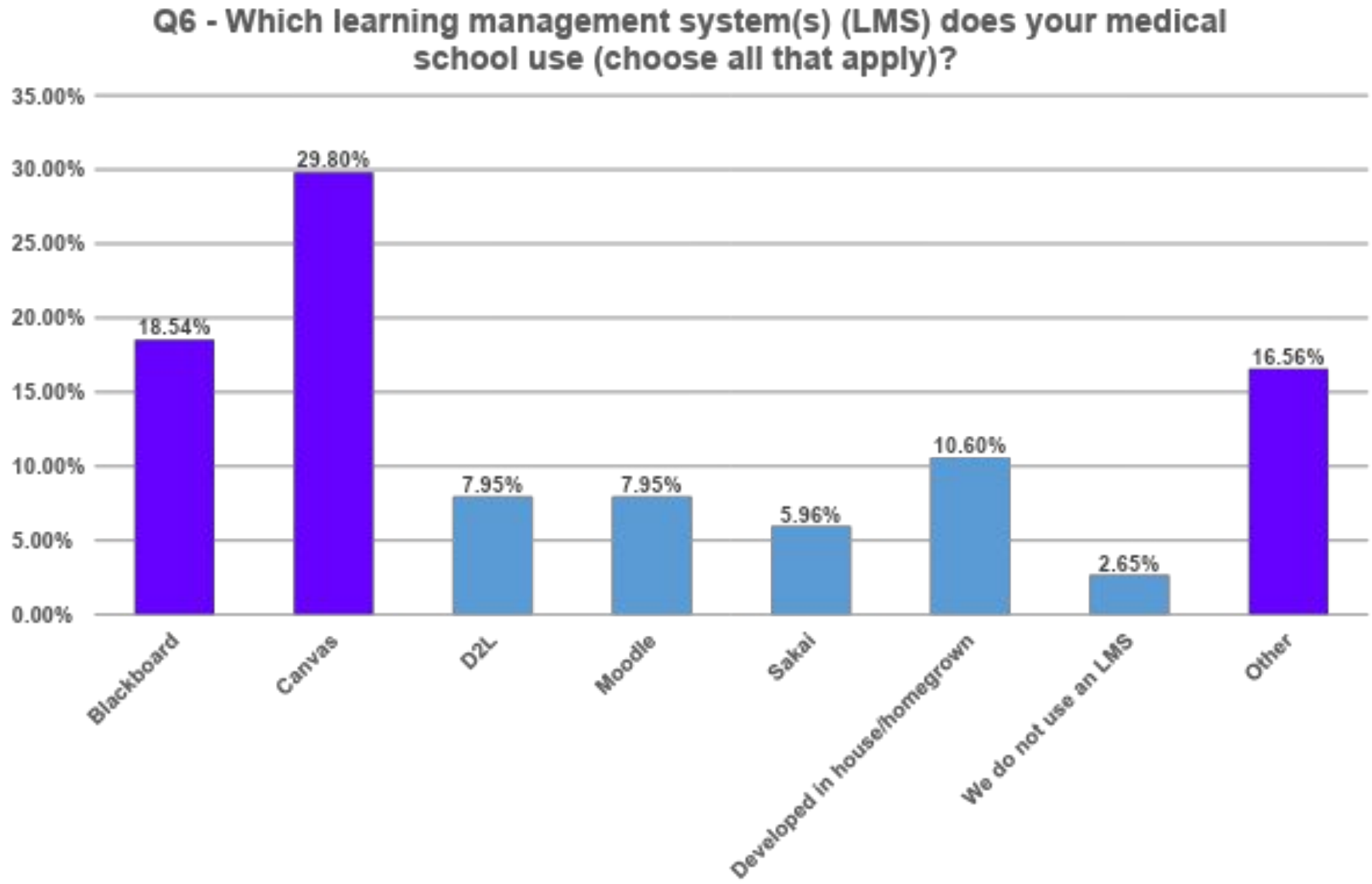
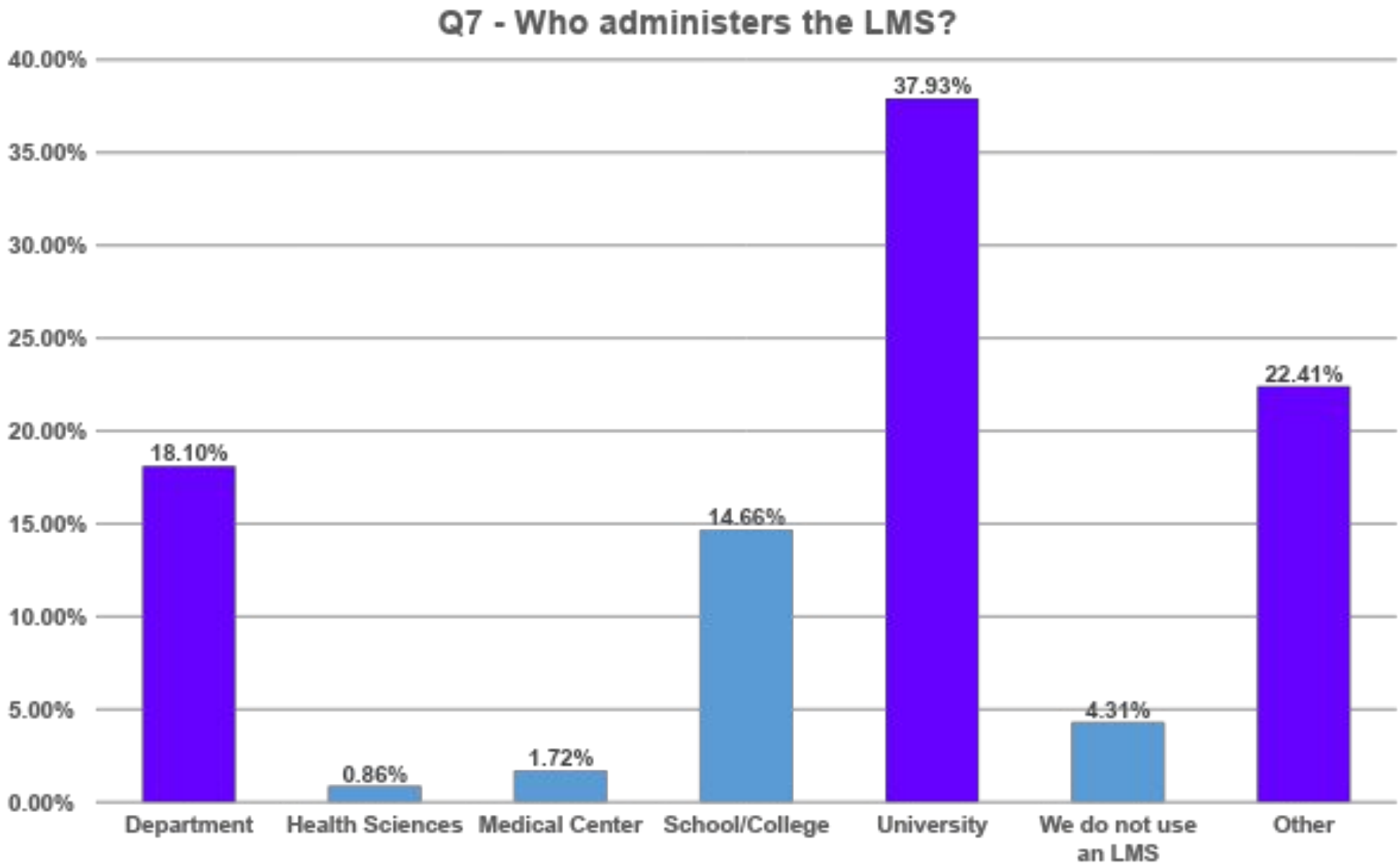
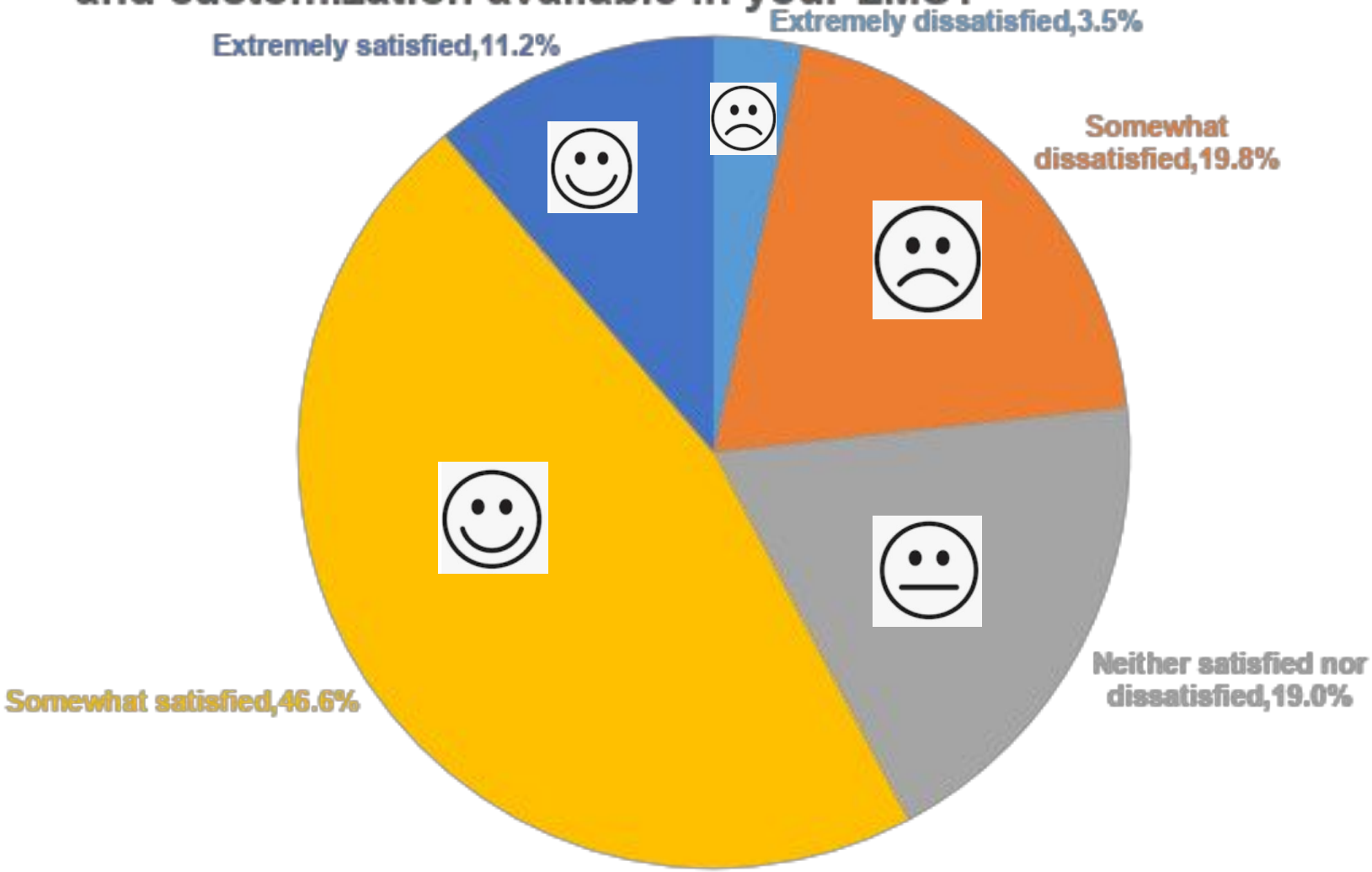
2. LMS

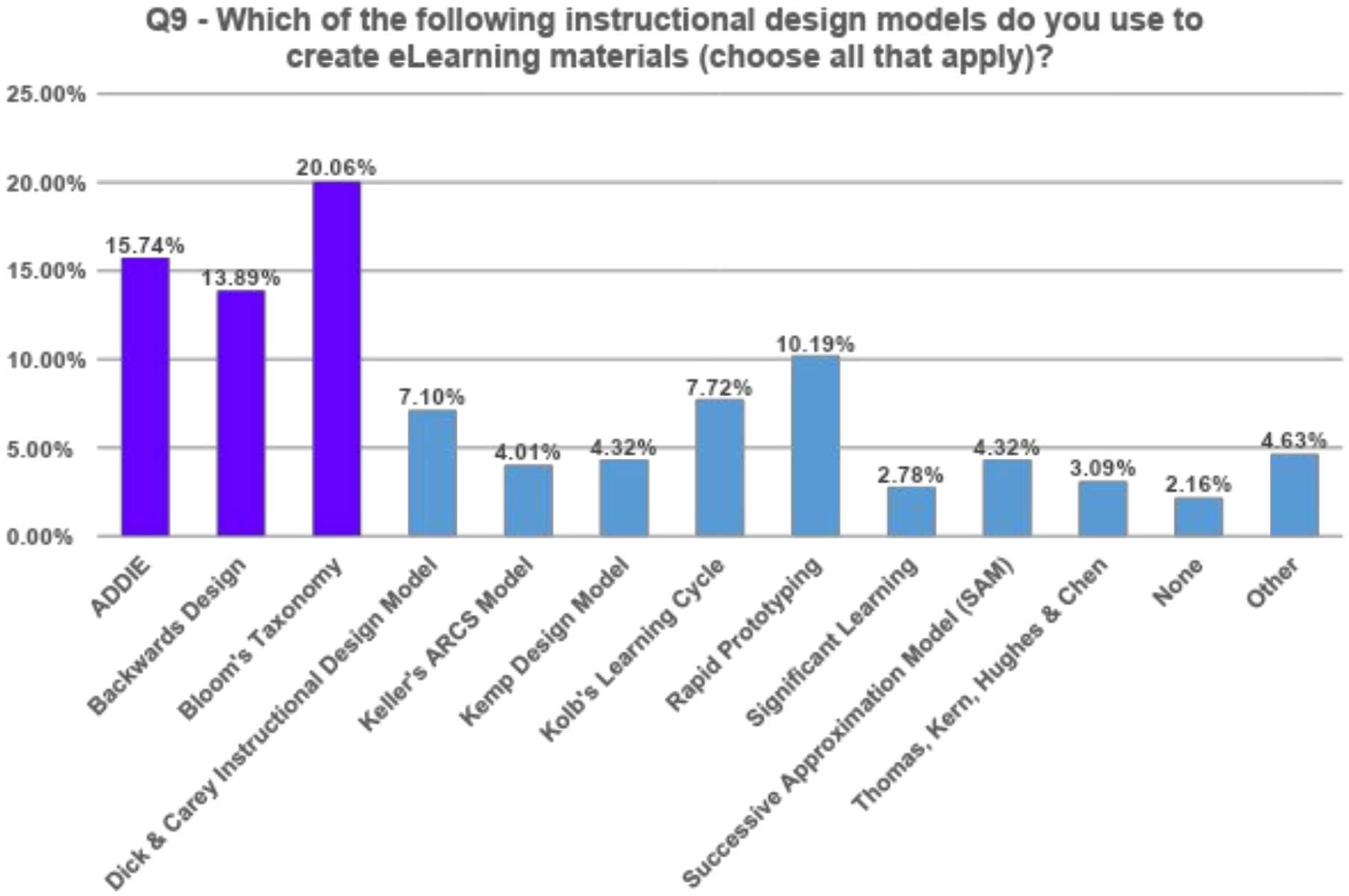

Q6 - Which learning management system(s) (LMS) does your medical school use (choose all that apply)?
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
18.54%
29.80%
7.95%
7.95%
5.96%
10.60%
2.65%
16.56%
Blackboard
Canvas
D2L
Moodle
Sakai
Developed in house/homegrown
We do not use an LMS
Other


Q7 - Who administers the LMS?
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
18.10%
0.86%
1.72%
14.66%
37.93%
4.31%
22.41%
Department
Health Sciences
Medical Center
School/College
University
We do not use an LMS
Other

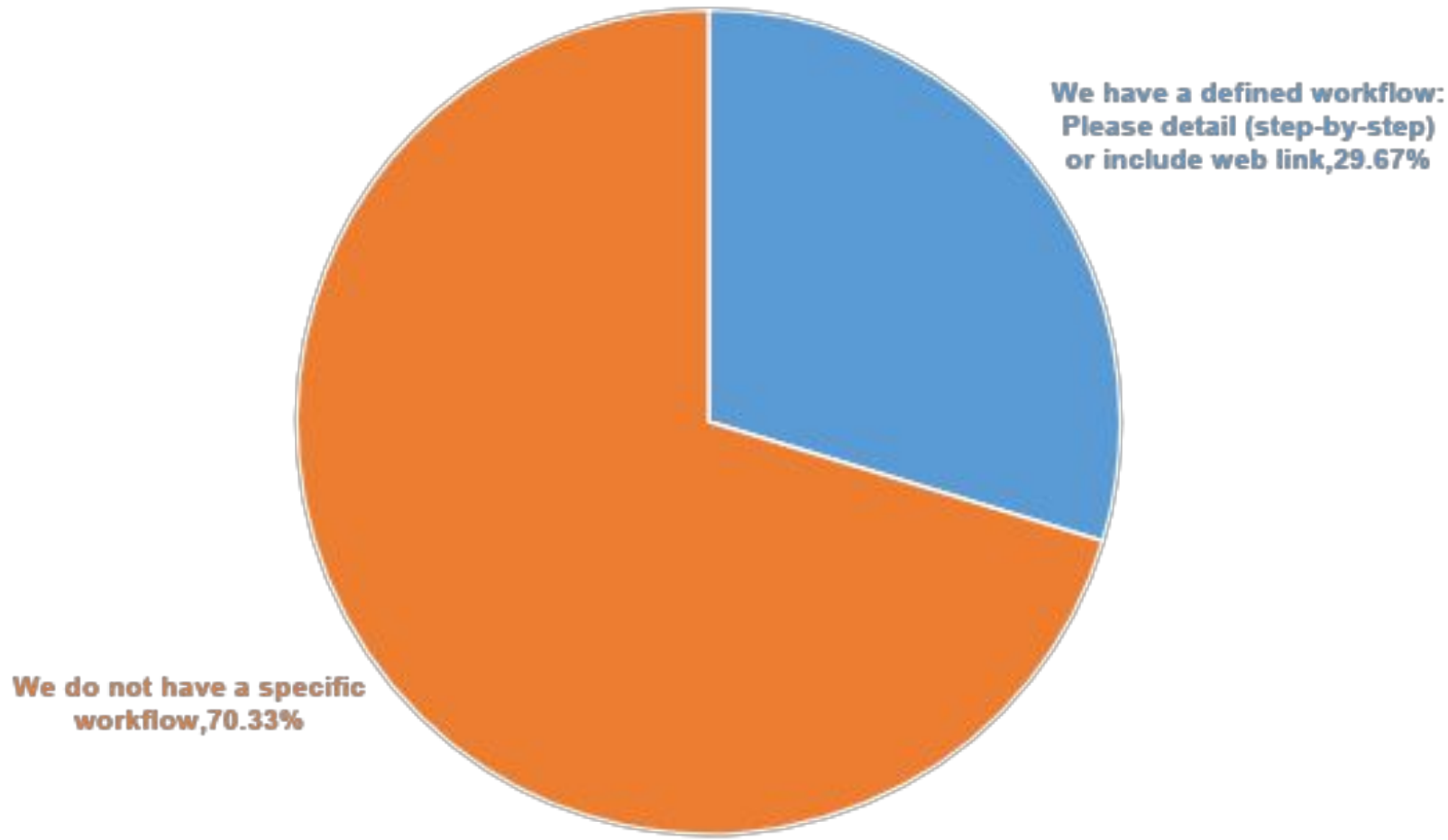
Q8 - How satisfied are you with the degree of configuration and customization available in your LMS?



3. Strategies & Tools


Q9 - Which of the following instructional design models do you use to create eLearning materials (choose all that apply)?
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
15.74%
13.89%
20.06%
7.10%
4.01%
4.32%
7.72%
10.19%
2.78%
4.32%
3.09%
2.16%
4.63%
ADDIE
Backwards Design
Bloom's Taxonomy
Dick & Carey Instructional Design Model
Keller's ARCS Model
Kemp Design Model
Kolb's Learning Cycle
Rapid Prototyping
Significant Learning
Successive Approximation Model (SAM)
Thomas, Kern, Hughes & Chen
None
Other

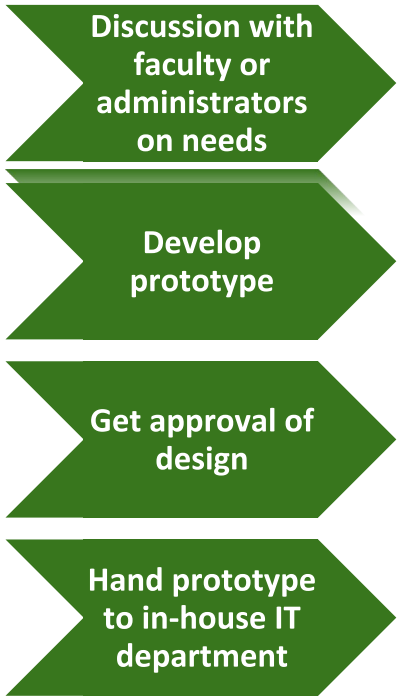
Q10 - Which of the following best describes the development process/workflow for creating eLearning materials in your medical school?

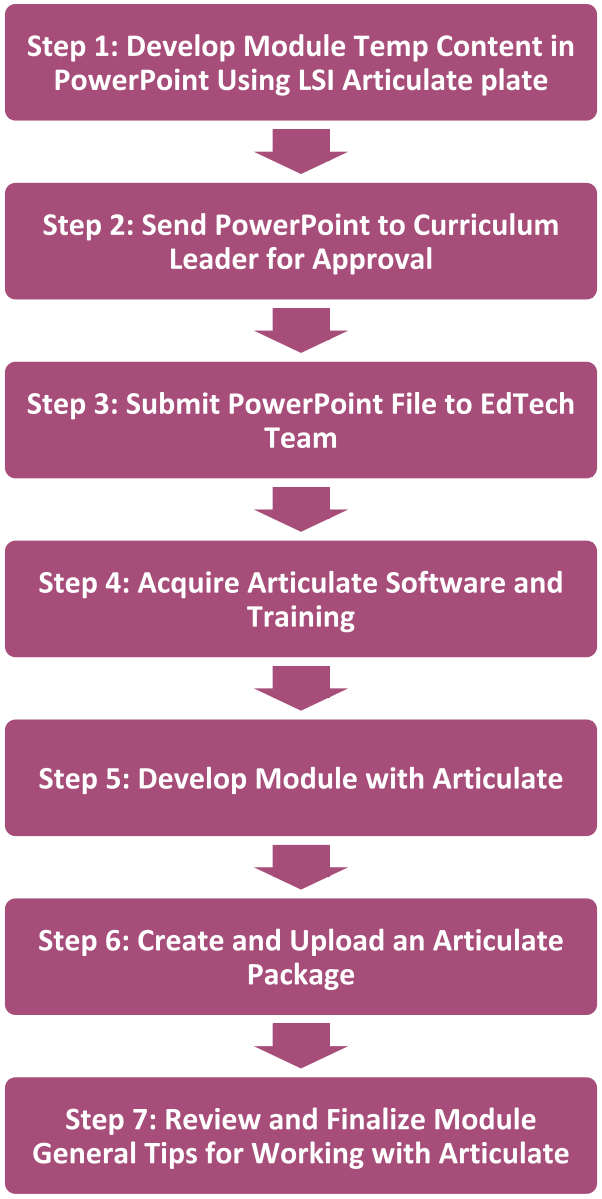


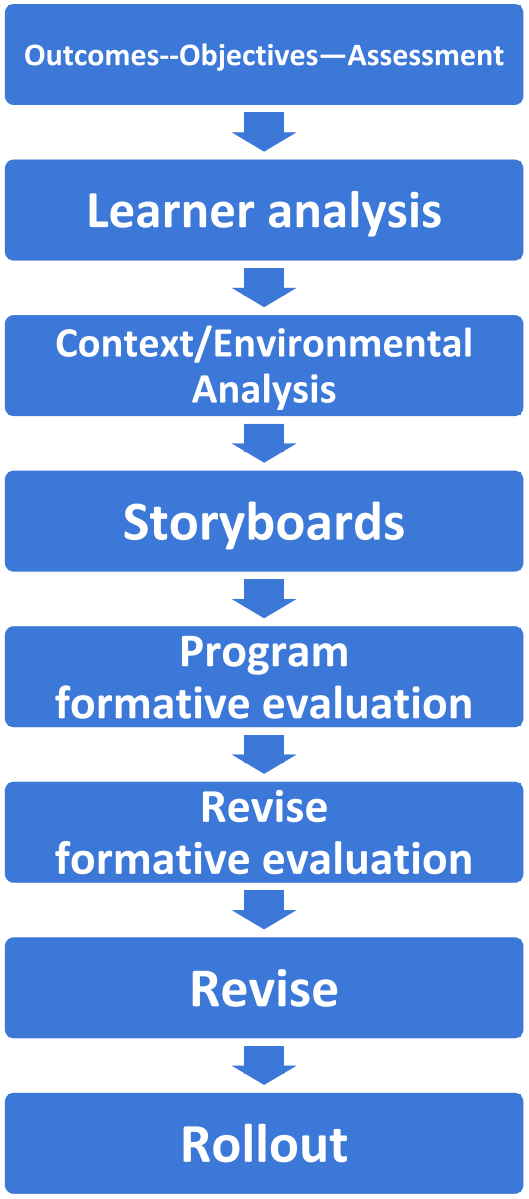
Identified Workflow

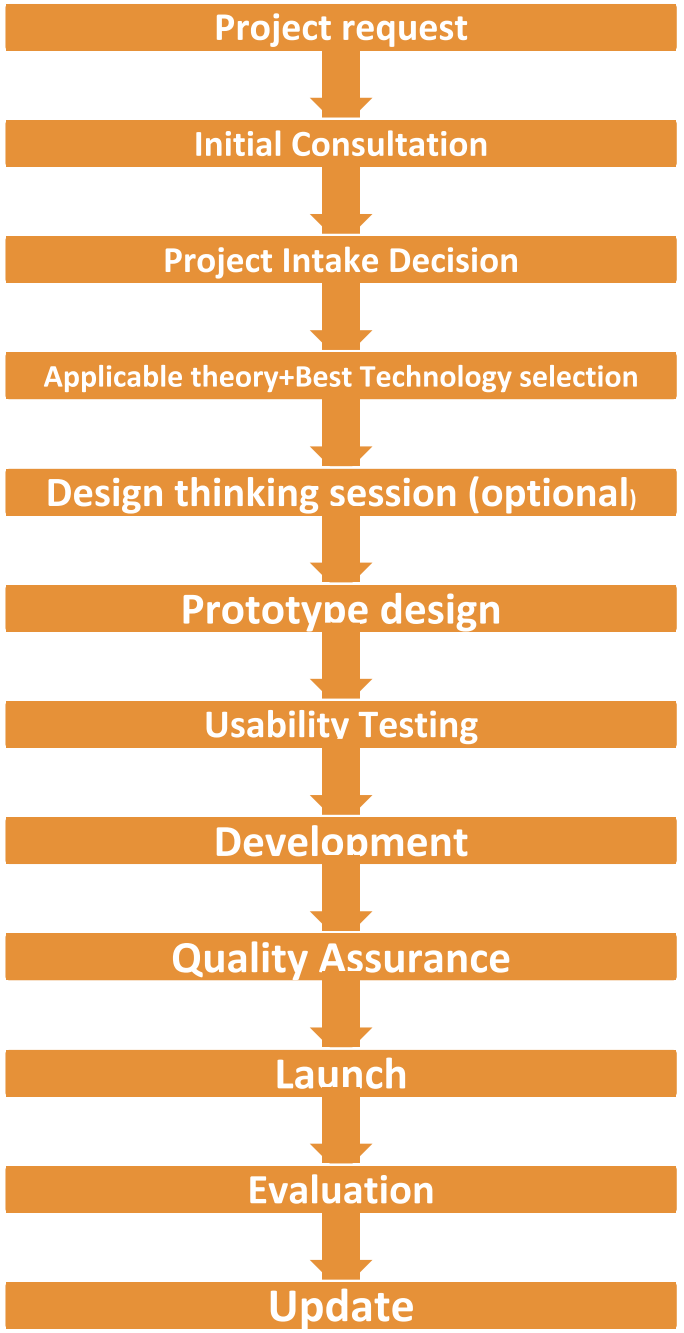
- Multi step approach specific to each institute
- Common themes
  - Consultation
  - Needs Assessment
  - Learner Assessment
  - Evaluation
  - Revise

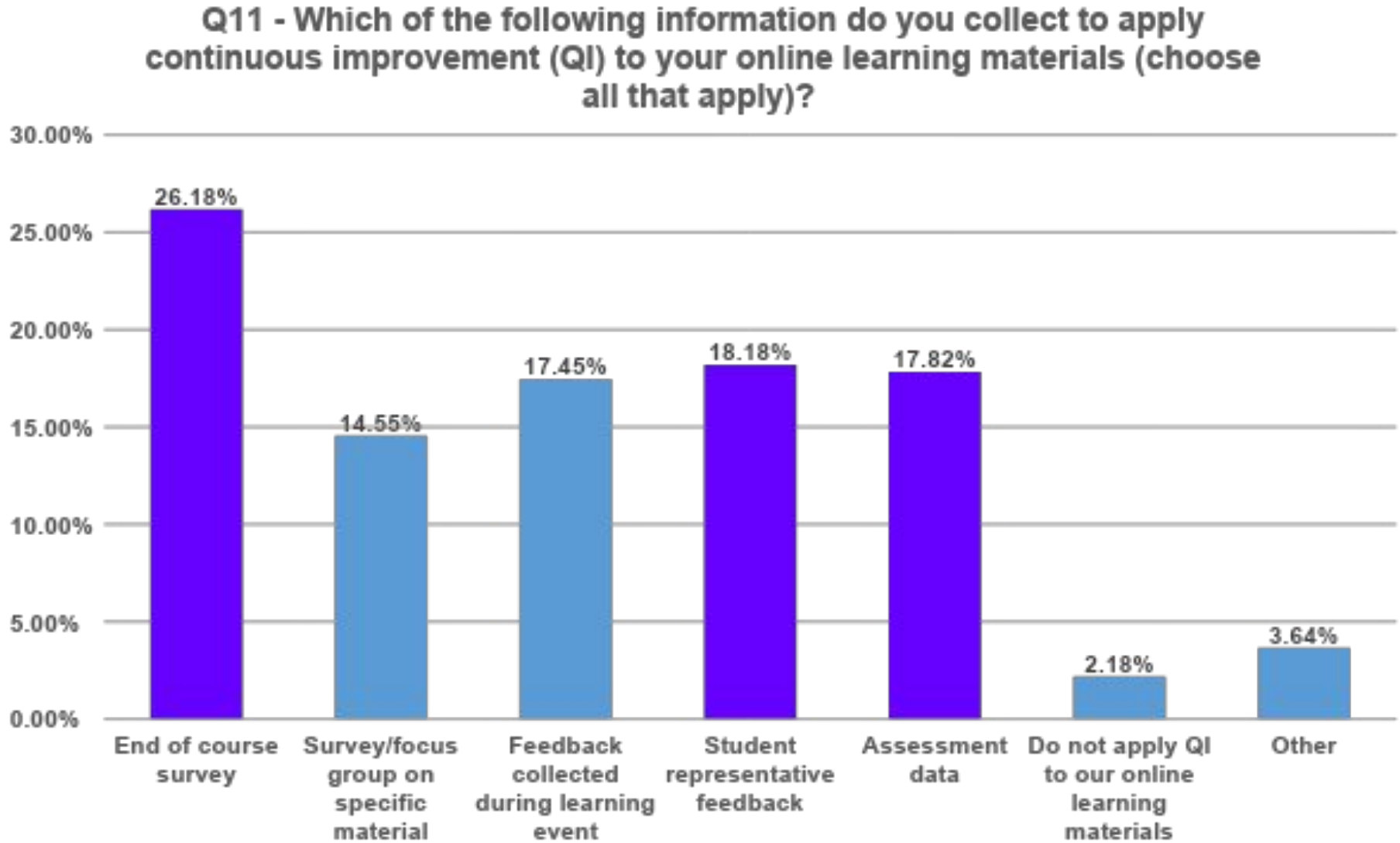
Identified Workflow Examples

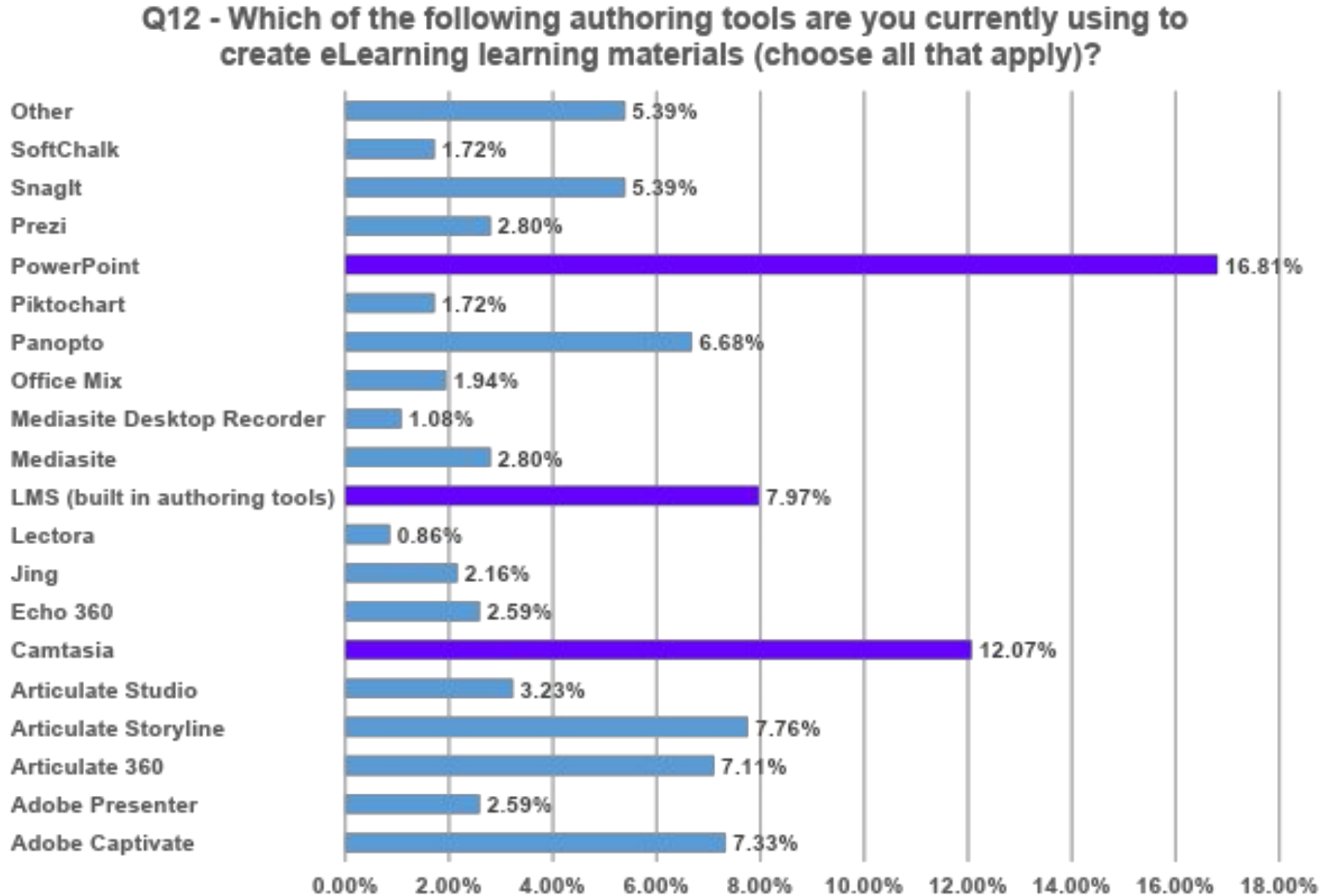








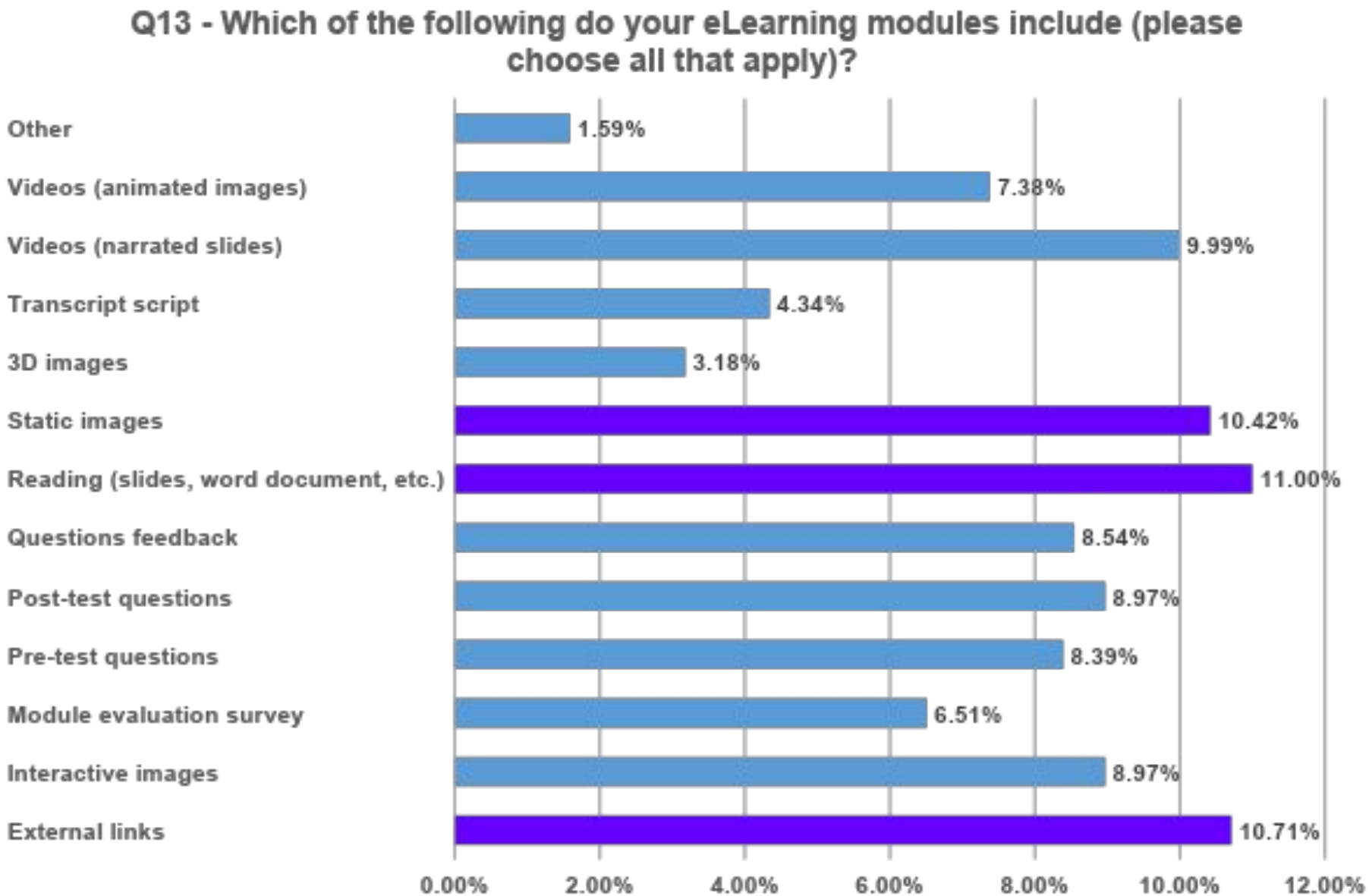

Q11 - Which of the following information do you collect to apply continuous improvement (QI) to your online learning materials (choose all that apply)?
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
26.18%
14.55%
17.45%
18.18%
17.82%
2.18%
3.64%
End of course survey
Survey/focus group on specific material
Feedback collected during learning event
Student representative feedback
Assessment data
Do not apply QI to our online learning materials
Other

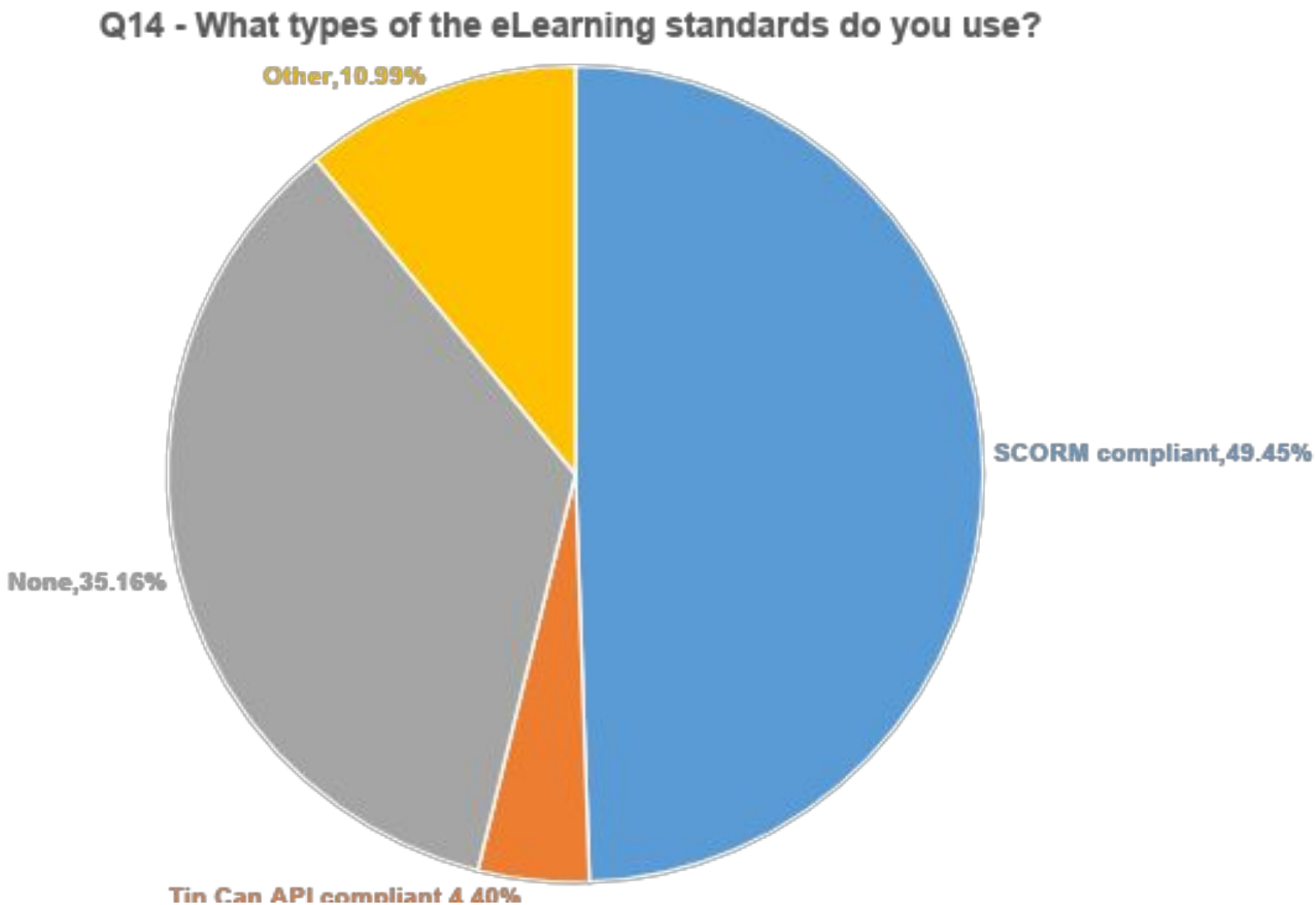

Q12 - Which of the following authoring tools are you currently using to create eLearning learning materials (choose all that apply)?
Other
SoftChalk
SnagIt
Prezi
PowerPoint
Piktochart
Panopto
Office Mix
Mediasite Desktop Recorder
Mediasite
LMS (built in authoring tools)
Lectora
Jing
Echo 360
Camtasia
Articulate Studio
Articulate Storyline
Articulate 360
Adobe Presenter
Adobe Captivate
5.39%
1.72%
5.39%
2.80%
16.81%
1.72%
6.68%
1.94%
1.08%
2.80%
7.97%
0.86%
2.16%
2.59%
12.07%
3.23%
7.76%
7.11%
2.59%
7.33%
0.00%
2.00%
4.00%
6.00%
8.00%
10.00%
12.00%
14.00%
16.00%
18.00%

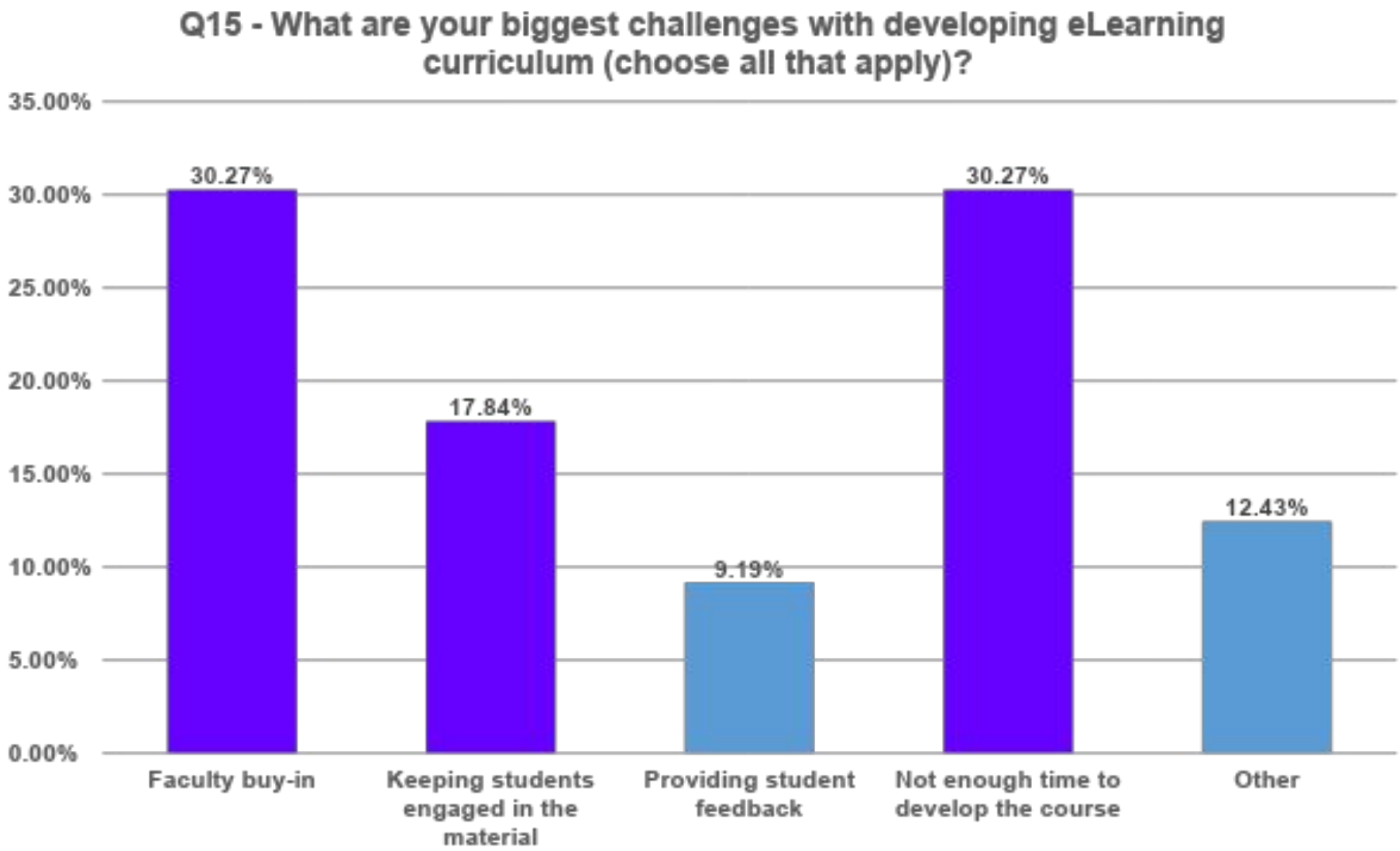
Other eLearning Authoring Tools

- Adobe products (other than Captivate)
- iBooks Author
- H5P, Evolve
- Kaltura

- The responses show that the term of “eLearning” could involve different media (image, video, lecture capture)

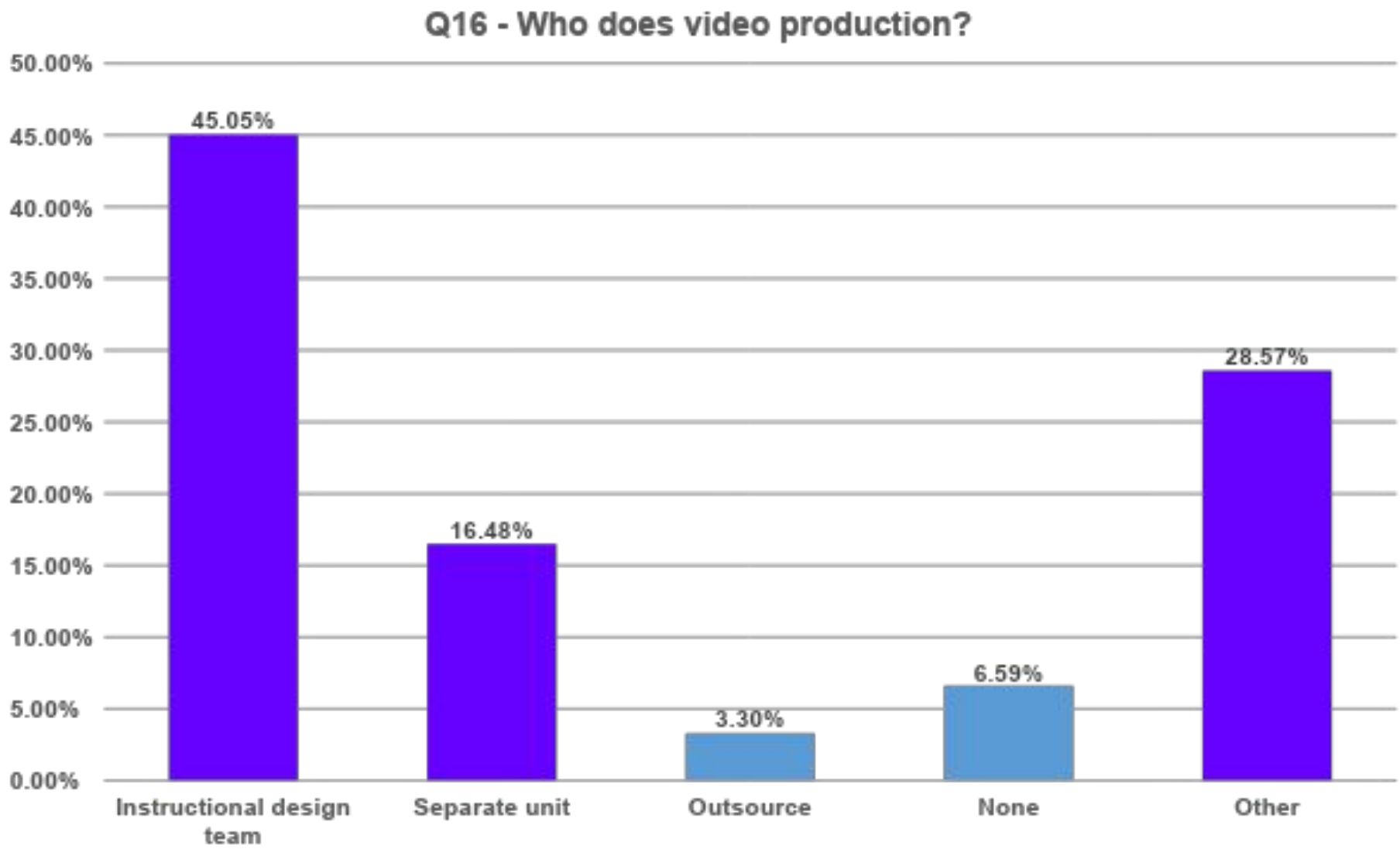

Q13 - Which of the following do your eLearning modules include (please choose all that apply)?
Other
1.59%
Videos (animated images)
7.38%
Videos (narrated slides)
9.99%
Transcript script
4.34%
3D images
3.18%
Static images
10.42%
Reading (slides, word document, etc.)
11.00%
Questions feedback
8.54%
Post-test questions
8.97%
Pre-test questions
8.39%
Module evaluation survey
6.51%
Interactive images
8.97%
External links
10.71%
0.00%
2.00%
4.00%
6.00%
8.00%
10.00%
12.00%

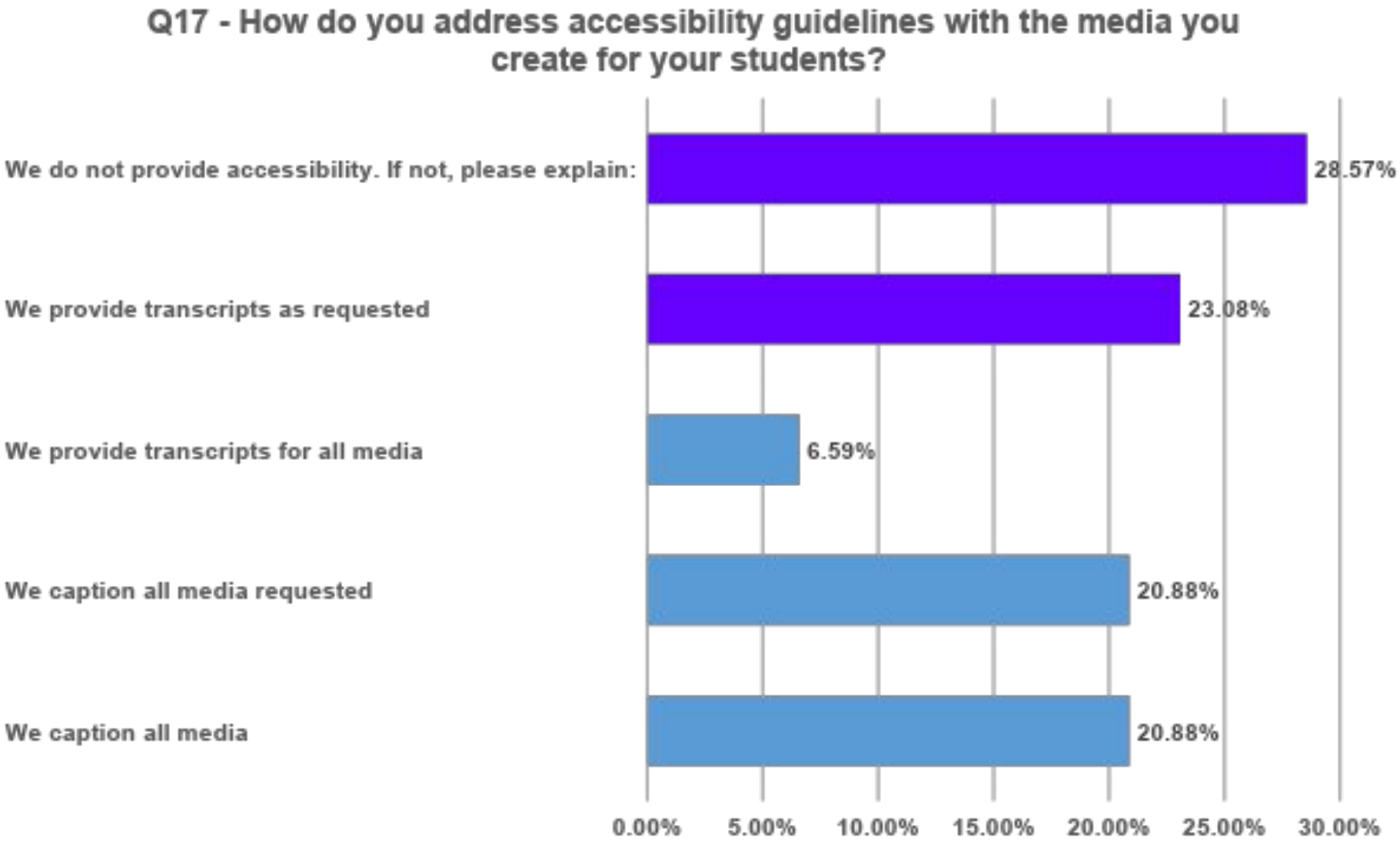

Q14 - What types of the eLearning standards do you use?
Other,10.99%
SCORM compliant,49.45%
None,35.16%
Tin Can API compliant 4.40%


Q15 - What are your biggest challenges with developing eLearning curriculum (choose all that apply)?
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
30.27%
17.84%
9.19%
30.27%
12.43%
Faculty buy-in
Keeping students engaged in the material
Providing student feedback
Not enough time to develop the course
Other

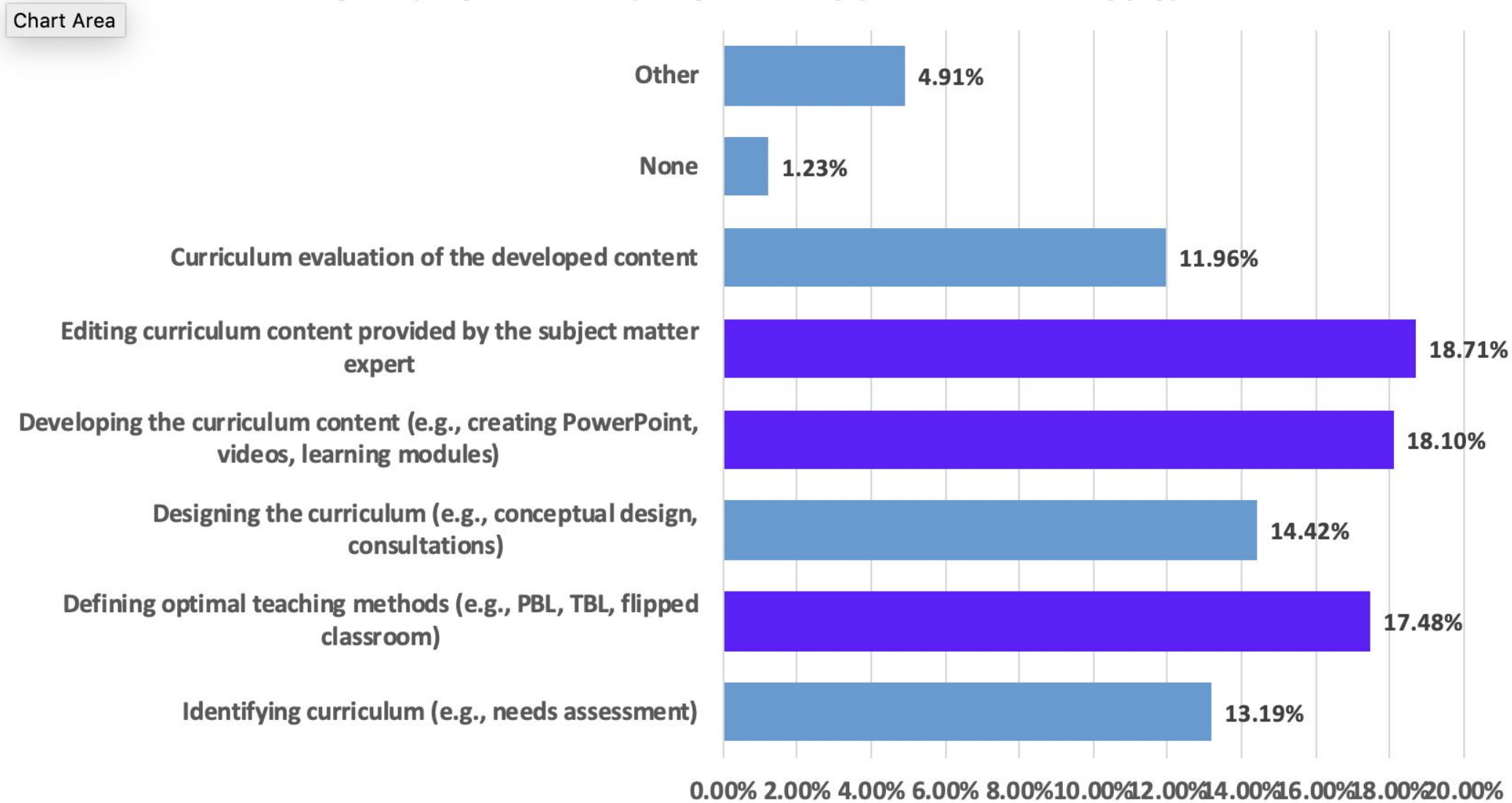
Other Challenges

- Many highlighted the Lack of recognition (from leadership or faculty) for the importance of the ID
- Some mentioned:
  - the Insufficient human resources or funding for ID
  - Faculty authors' time
  - Students engagement

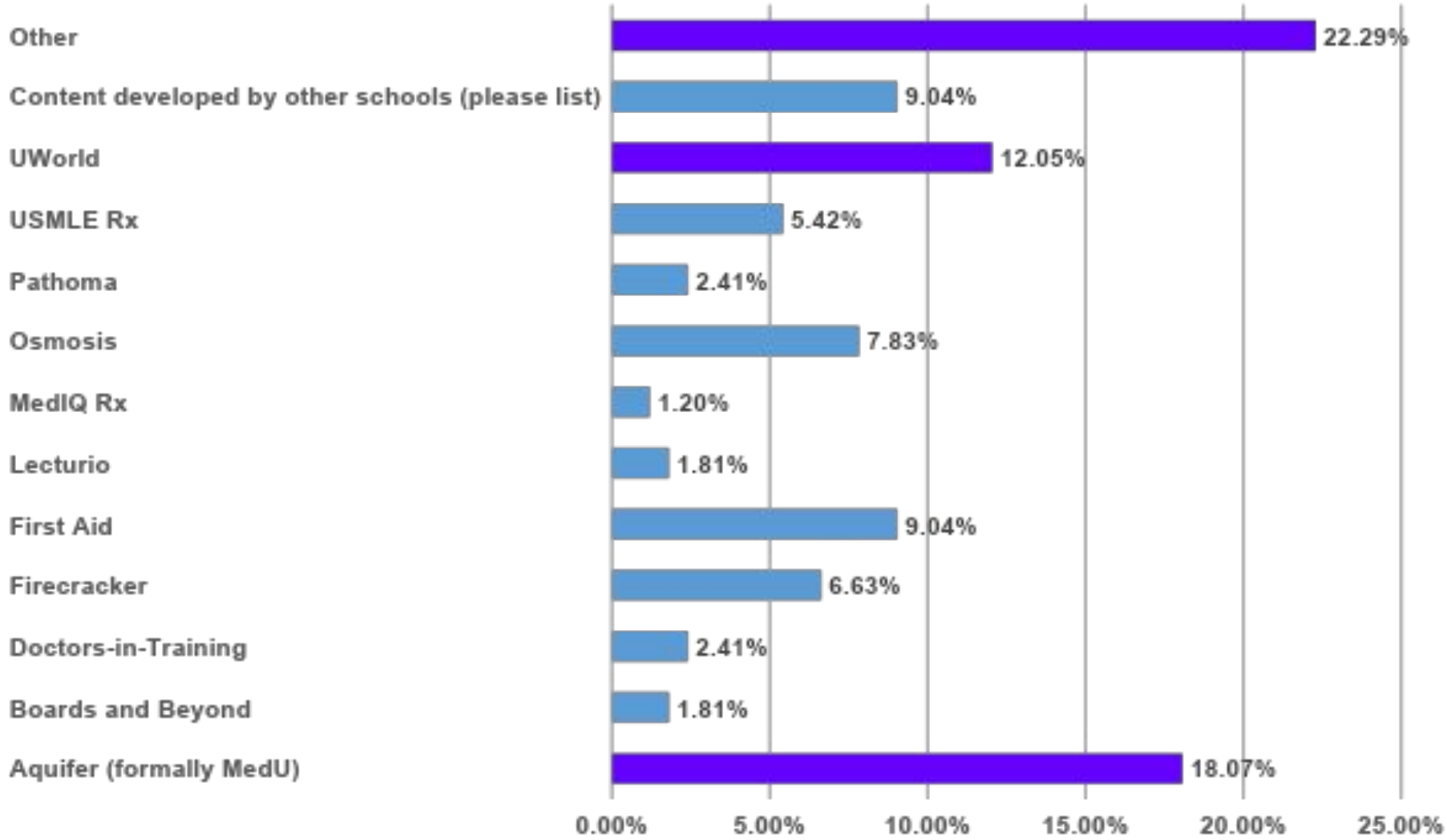

Q16 - Who does video production?
50.00%
45.00%
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
45.05%
16.48%
3.30%
6.59%
28.57%
Instructional design team
Separate unit
Outsource
None
Other


Q17 - How do you address accessibility guidelines with the media you create for your students?
We do not provide accessibility. If not, please explain:
28.57%
We provide transcripts as requested
23.08%
We provide transcripts for all media
6.59%
We caption all media requested
20.88%
We caption all media
20.88%
0.00%
5.00%
10.00%
15.00%
20.00%
25.00%
30.00%

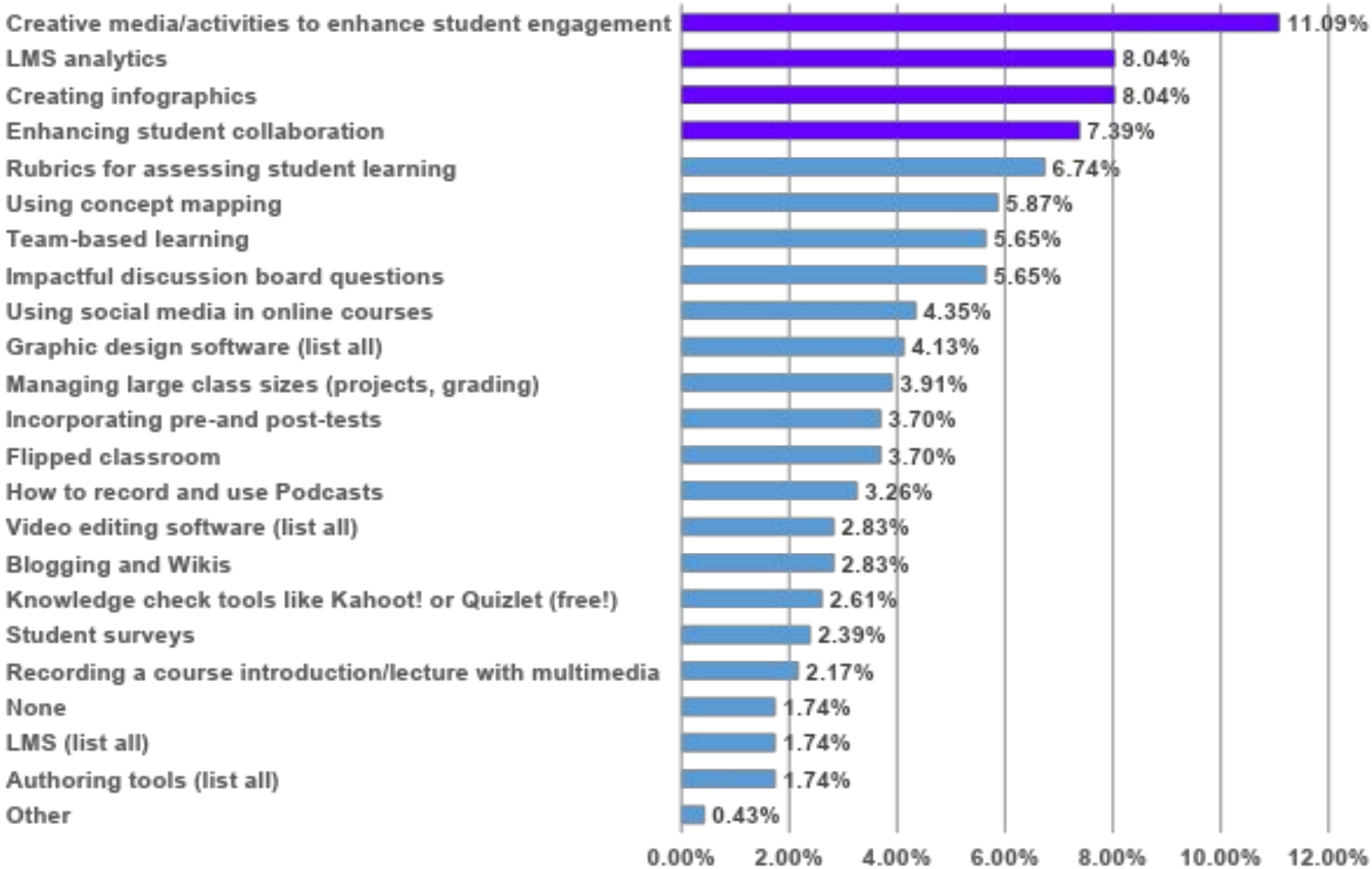
Q18 - When it comes to the curricular content, which of the following describe your (or your team's) responsibility (choose all that apply)?



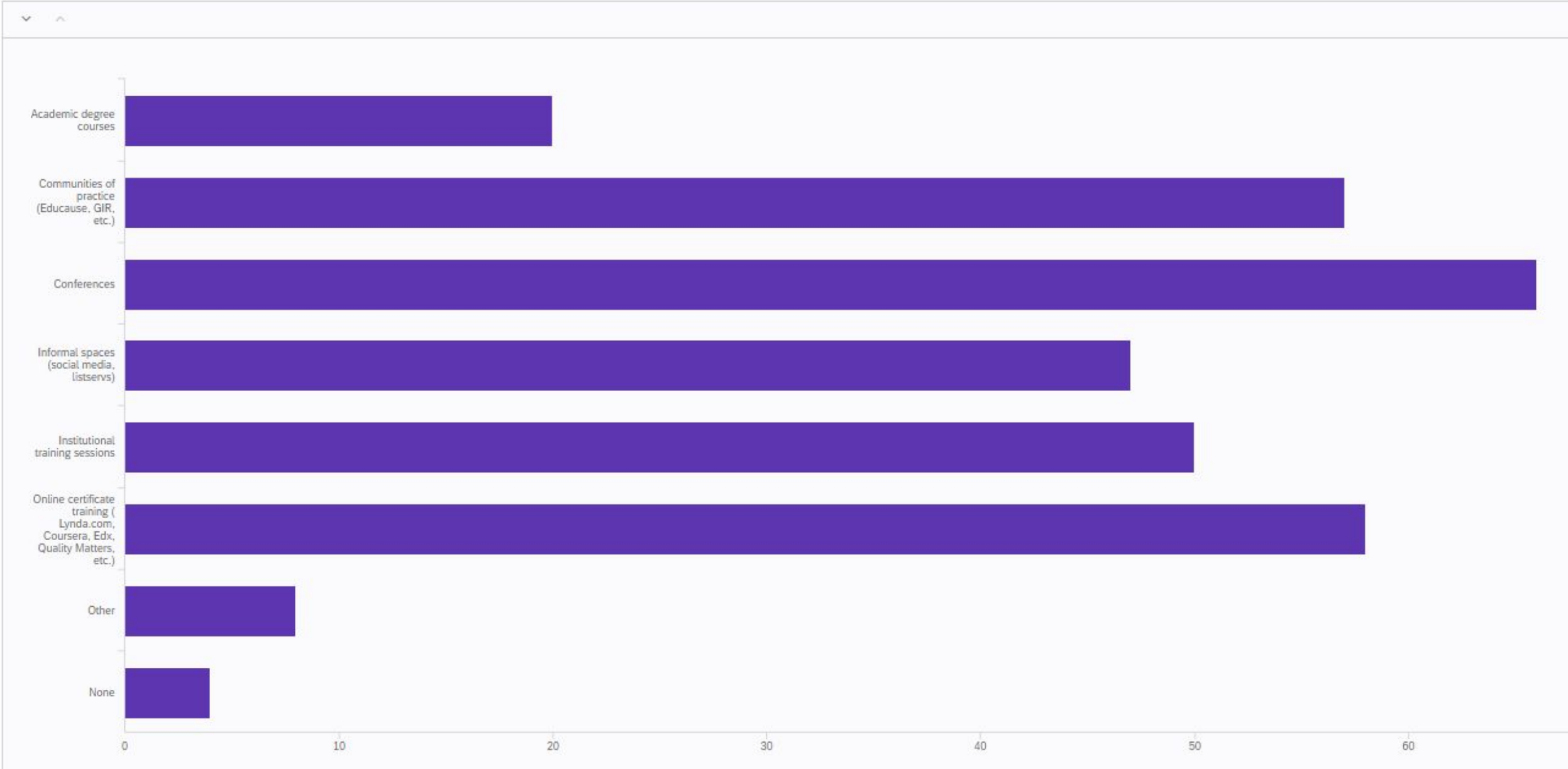
Q19 - Has your institution purchased third party content for your students at your medical school (choose all that apply)?

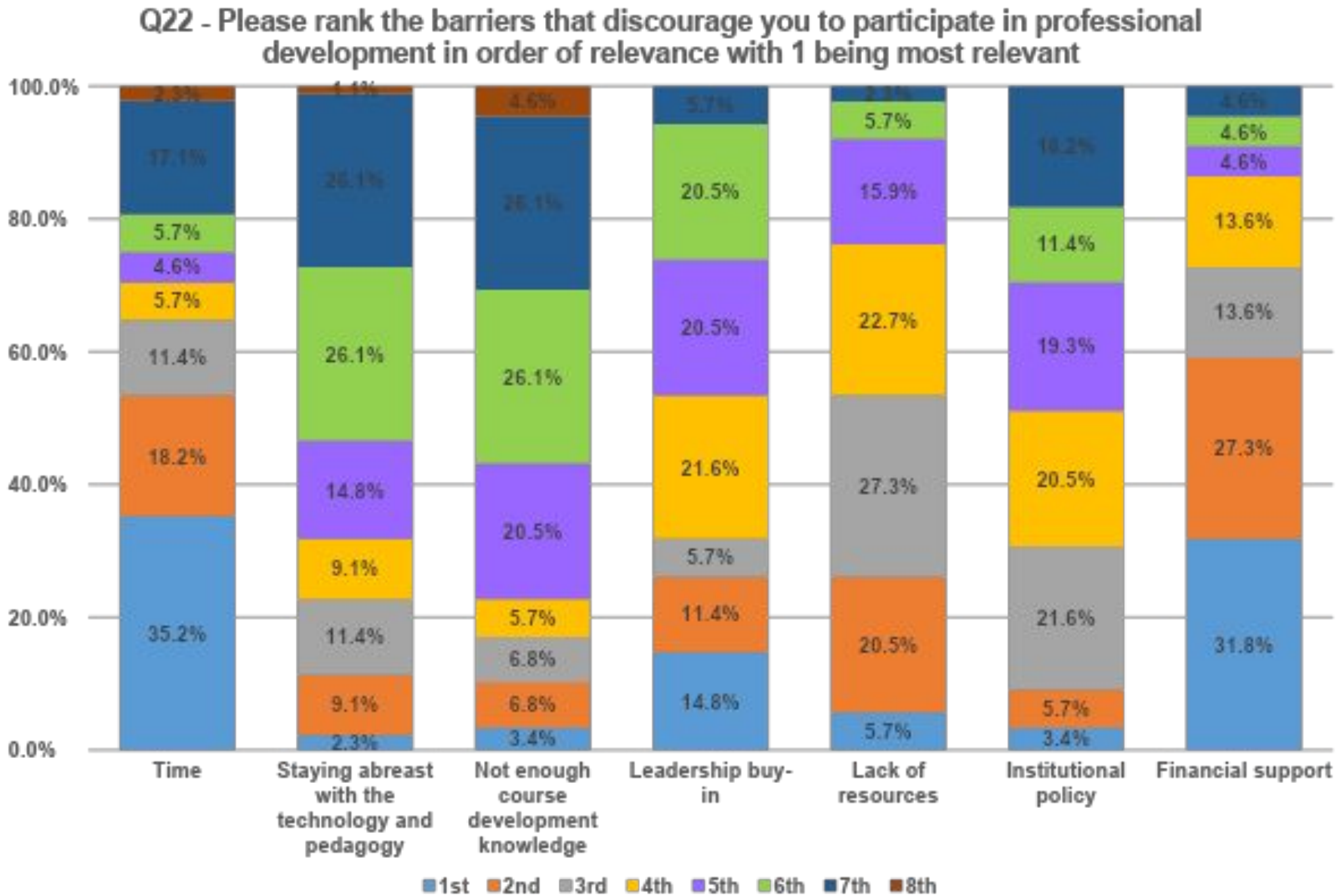


Q20 - You would like training in the following areas (choose all that apply):



Q21 - Which of the following professional development formats best fit your professional development needs (choose all that apply) ?




Q22 - Please rank the barriers that discourage you to participate in professional development in order of relevance with 1 being most relevant
100.0%
80.0%
60.0%
40.0%
20.0%
0.0%
Time
Staying abreast with the technology and pedagogy
Not enough course development knowledge
Leadership buy-in
Lack of resources
Institutional policy
Financial support
1st
2nd
3rd
4th
5th
6th
7th
8th

What department does your team work under?

Top

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6 Schools

NYU Grossman School of Medicine

NYU Langone Health

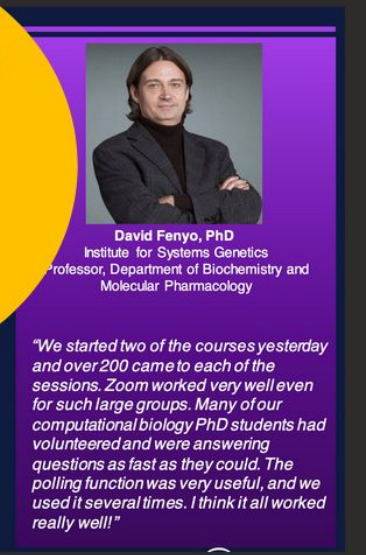
1000+ Remote Teaching Activities

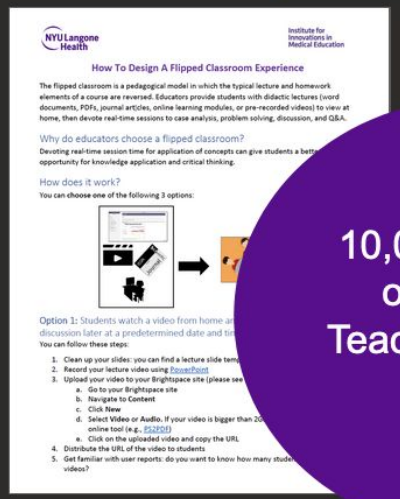
43 remote electives

Virtual Onboarding & Orientation Brightspace SIte for New Class with 1300+ views

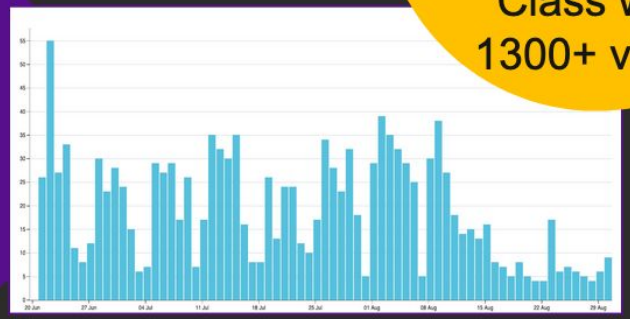
100+ Virtual Consultations

4 CME courses on Teaching w/ Technology

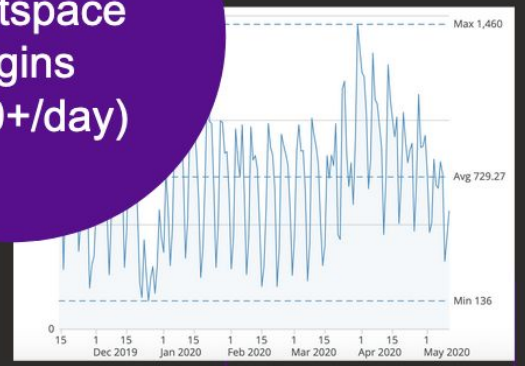




10,000 + Views of Remote Teaching Guides & Tips



Record-high Brightspace Logins (2300+/day)



Stanford School of Medicine

Pre-Covid Instructional Development Department

- Instructional Development linked with evaluations
- All small group and lecture sessions f2f (and recorded)
- Faculty Development typically F2F

Post-Covid

- Faculty Zoom Training/Training on asynchronous tools
- Changes in lecture capture platform (using recordings in Zoom)
- Researched 3rd Party content and platforms (to supplement clerkships)
- Clerkships condensed
- Most exams switched to remote (open book)
- All faculty development online
- Few changes to LMS workflow

Stanford MEDICINE

Uniformed Services University (USU) of the Health Sciences

Pre-COVID to COVID

- Movement to Stop Movement
- Help Desk
- In processing
- Space
- Lecture Capture
- Proctoring
- VPN
- Training/Development

USU
Uniformed Services University

McGovern Medical School, UTHealth Houston

Amidst The Pandemic -- Perseverance and Innovation

Synchronous Learning vs. Asynchronous Learning

Backward Design Model

Innovations (Trends to Stay)

- Virtual TBL and PBL Sessions (InteDashboard + Zoom + Webex)
- Virtual Rounding (Webex)
- Virtual Scholarly Research Presentation Sessions
- Online faculty development
- Booming of online learning modules

University of Illinois College of Medicine

Pre-COVID:

- Idyllic and charmed.
- Revamped curriculum but still focused on face-to-face delivery.
- Hundreds of faculty-developed video content created in the past few years.
- Lecture capture.

During COVID:

- Increased reliance on faculty-developed video content.
- Repurpose lecture capture from previous years.
- Tri-campus live sessions.
- Much more visible and broader impact of instructional design on the curriculum.

Indiana University School of Medicine

Pre-COVID to COVID Rapid Response

Faculty

Curriculum (re)Design Bootcamp Program

Curriculum Cohort (Canvas)

Individual Faculty Consulting

Technology Support

Students

Pre-recorded lectures

Online Independent Learning Modules

“Flipped” Clinical Experience

Zoom Grand Rounds

Questions

Thank you for attending

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